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LIFE AND WORKS

OF

HORACE MANN.

EDITED BY

MRS. MARY MANN.

IN FIVE VOLUMES.

VOL. III.

BOSTON:
HORACE B. FULLER,
(SUCCESSOR TO WALKER, FULLER, & CO.,)
245 WASHINGTON STREET.
1868.

ANNUAL REPORTS

ON

EDUCATION.

BY

HORACE MANN.

BOSTON:
HORACE B. FULLER,
(Successor to Walker, Fuller, & Co.,)
No. 245, WASHINGTON STREET.
1868.

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PREFACE.

THE present volume consists of only such portions of the ten remaining Reports of the Secretary as are now of universal interest. If published entire, they would fill two such volumes as the present. The statistics omitted give the condition of Massachusetts, in an educational point of view, between the years 1837 and 1848, and are not of general interest at the present time. The people of the State can find them, when needed, in the public archives. The portions selected contain the views of Mr. Mann upon great points which concern all societies alike.

The appropriations made by the towns for public schools increased, under the administration of the Board of Education, from $400,000 in 1837 to $749,943.45 in 1848. This sum was exclusive of the cost of school-houses, school-books, libraries, apparatus, &c., and was expended solely for the compensation of teachers, for their board, and for fuel for the schools.

In 1837, there were three thousand five hundred and ninety-one female teachers in the common schools. In

1850958

Those which stood near the bottom of the list one year rose immediately (except in a few benighted corners of the State) to a higher point. Somerville and Brighton ranked above all the other towns. Boston never stood first on the list, but at times was second, then third, sixth, fifteenth. The abstracts of school-returns made from the reports of the school-committees of each town occupied Mr. Mann for four or five months of the year. A mass of documents, sometimes amounting to six thousand written pages, were thoroughly read, sifted, and selected from. The character of these reports rose in value under his earnest appeals to the committees, upon whom, in the last resort, the welfare of the schools depends; and the abstracts have been considered the most valuable body of information ever contributed to the cause of education, and have been sought by all the States and by all countries. The mode of teaching and governing in each school is given, and thus all parts of the State were enabled to compare notes, and profit by each other's wisdom, or be warned by each other's failures. Some of these yearly abstracts make volumes of five hundred pages, and were a very laborious work to prepare, in order not to contain repetitions; but their value compensated for the labor to one who was so earnest in the prosecution of his work. It was all done by his own hand, as the small salary of the office made it impossible to hire assistance.

The Graduated Tables were at one time prepared at the State House, but so inaccurately, that Mr. Mann was

obliged to resume the preparation of them; and for that work he hired assistance at his own expense.

In each Annual Report, he discussed some special topic to which he had given prominence in the labors of the year. These discussions alone are selected for the present volume.

The Tenth Report was republished by the State after Mr. Mann left the office. It states all the provisions of law in regard to the schools, and these are amply commented upon by Mr. Mann. But they are omitted here, as many alterations in the provisions have since been made. Their interest now lies chiefly in their historical value. The best history of a State or country is the history of its ideas. To the moralist and the legislator, therefore, this Report has an indestructible value, because it yields up the secret of the strength of Massachusetts. The only selection made from it is the general view given of the common-school system of Massachusetts.

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ANNUAL REPORTS

OF THE

SECRETARY OF THE BOARD OF EDUCATION.

REPORT FOR 1839.

GENTLEMEN, —

. . . I FEEL fully justified in affirming that the prospects of the rising generation are daily growing brighter by means of the increasing light which is shed upon them from our Common Schools. I refer here, more particularly, to such proofs as are hardly susceptible of being condensed into statistical tables, or even of being presented as isolated facts: these speak for themselves. But I refer to such indications of returning health as prove to the watchful attendant that the crisis of the malady has passed. Stronger feelings and firmer convictions of the importance of our Common Schools are taking possession of the public mind; and, where they have not yet manifested themselves in any outward and visible improvement, they are silently and gradually working to that end.

In determining the rate of annual advancement, however, which the friends of this cause are authorized reasonably to expect, it should not be forgotten that all improvements in the system depend ultimately upon the people themselves, and upon the school officers, whom, in their several towns

and districts, they see fit to elect. All improvements in the schools, therefore, suppose and require a simultaneous and corresponding improvement in public sentiment, and in the liberality of the citizens, who, by a major vote, from year to year, measure out the pecuniary means for their support, and elect the officers who are to superintend the application of those means. Progress which must be so thorough must necessarily be slow. But the thoroughness is a compensation for the slowness; for, when a revolution is once wrought, it will be enduring. The Legislature, having conferred upon the Board of Education no authority as to the amount of money to be raised, the teachers to be employed, the books, apparatus, or other instruments of instruction to be used, the condition of the houses in which the schools are taught, nor, indeed, as to any other subject, which can, in the slightest degree, abridge the power or touch the property of towns or districts, the responsibility, in all these respects, continues to rest, where it always has rested, and where, it is to be hoped, it always will rest, with the towns and districts themselves. On these points, encouragement may be highly beneficial: compulsion would counterwork its own purposes.

Hence, it is obvious, that if the Board or the Legislature should devise and promulgate the wisest system imaginable, and define the exact processes by which it could be executed, and all its fruits realized, the administration of that system must still be left with the local authorities. In the last stage of the process, and at the very point where the means are applied to the objects, they must pass through the hands of the town and district officers, and of the teachers whom they employ. In our system of public instruction, therefore, it is emphatically true, that the influences flowing from the Legislature, or from any advisory body, may have their quality entirely changed by being assimilated to the character and views of the men through whose hands they eventually pass; just as the nutritious juices which ascend from the roots of a tree may lose their original properties, and be made

to produce fruits of various flavor, according to the nature of the ingrafted scions through whose transforming pores they flow. Wherever, therefore, we find improvements in the schools, it is a gratifying proof that higher views are prevailing in the community in which those improvements originate.

I advert to these facts respecting the authority, or rather the want of authority, in the Board, and their entire dependence upon the efficient co-operation of the public, because I occasionally meet with misapprehensions respecting their office and powers and consequent duties; some persons looking to the Board for action in matters of which they have not the slightest official cognizance, and others deploring their possession of powers, of which there is no trace nor indication to be found, either in the law which created them, or in any of their official or unofficial proceedings.

. . . To those whose views of public and private duty can never be satisfied by any thing short of a universal education for the people, it will be gratifying to be informed, that a new interest has been excited, during the last year, in behalf of the children of persons employed upon our public works. This class of children, heretofore, has not shared in the provisions for education made by our laws, and has rarely been embraced in any of the numerous plans for moral improvement, devised and sustained by private charity; and hence they have been growing up in the midst of our institutions, uninstructed even in those rudiments of knowledge, without which self-education is hardly practicable. During the last year, a few inhabitants of the town of Middlefield (which is situated in the western part of Hampshire County), commiserating the destitute condition of the children along the line of the railroad in their vicinity, took active measures to supply them with the means of instruction. A gentleman of that town, Mr. Alexander Ingham, was the first to engage in, and has been most active in carrying on, this Samaritan enterprise. The good example extended; and a considerable

number of children along the line of work were soon gathered, either into the public schools, or, where that was impracticable, into schools established expressly for them, at private expense. At the Common-school Convention in the county of Hampden, held in the month of August last, the condition of these children, and the necessity of some further measures in their behalf, constituted one of the topics of inquiry and discussion. A committee was appointed, of which Mr. Ingham was chairman, to collect the facts of the case. From this committee, I have learned that there were, in the month of September last, more than three hundred children, between the ages of four and sixteen, belonging to the laborers on the railroad west of Connecticut River, who were not considered as entitled to the privileges of the public schools, or were in such a local situation as not to be able to attend them. A pregnant fact also, in relation to the subject, is, that, in the enumeration of all the children of all ages, belonging to that class of people, "a large proportion of them are under the age of four years." Owing to efforts since made by private individuals, a very large majority of all these children, who are of a suitable age, are now enjoying the benefits of Common-school education.

Another subject, respecting which I have sought for information from all authentic sources, and to which I have given especial attention in my circuit through the State, is the observance or non-observance of the law "for the better instruction of youth employed in manufacturing establishments." This law was enacted in April, 1836, and was to take effect on the first day of April, 1837. The substance of its provisions is, that no owner, agent, or superintendent of any manufacturing establishment, shall employ any child, under the age of fifteen years, to labor in such establishment, unless such child shall have attended some public or private day school, where instruction is given by a legally qualified teacher, at least three months of the twelve months next preceding any and every year in which such child shall be

so employed. The penalty for each violation is fifty dollars. The law has now been in operation sufficiently long to make manifest the intentions of those to whom its provisions apply, and whether those humane provisions are likely to be observed or defeated. From the information obtained, I feel fully authorized to say, that, in the great majority of cases, the law is obeyed. But it is my painful duty also to say, that, in some places, it has been uniformly and systematically disregarded. The law is best observed in the largest manufacturing places. In several of the most extensive manufacturing villages and districts, all practicable measures are taken to prevent a single instance of violation. Some establishments have conducted most generously towards the schools; and, in one case (at Waltham), a corporation, besides paying its proportion of taxes for the support of the public schools in the town, has gratuitously erected three school-houses, — the last in 1837, a neat, handsome, modern stone building, two stories in height, — and maintained schools therein, at a charge, in the whole, upon the corporate funds, of a *principal* sum of more than seven thousand dollars. It would be improper for me here to be more particular than to say, that these generous acts have been done by the "*Boston Manufacturing Company;*" though all will regret that the identity of the individual members who have performed these praiseworthy deeds should be lost in the generality of the corporate name.

Comparatively speaking, there seems to have been far greater disregard of the law by private individuals and by small corporations, especially where the premises are rented from year to year, or from term to term, than by the owners or agents of large establishments. Private individuals, renting an establishment for one or for a few years, — intending to realize from it what profits they can, and then to abandon it, and remove from the neighborhood or town where it is situated, — may be supposed to feel less permanent interest in the condition of the people who are growing up around

them; and they are less under the control of public opinion in the vicinity. But, without seeking an explanation of the cause, there cannot be a doubt as to the fact.

It is obvious that the consent of two parties is necessary to the infraction of this law, and to the infliction of this highest species of injustice upon the children whom it was designed to protect. Not only must the employer pursue a course of action by which the godlike powers and capacities of the human soul are wrought into thorough-made products of ignorance and misery and vice with as much certainty and celerity as his raw materials of wool or cotton are wrought into fabrics for the market by his own machinery, but the parent also must be willing to convert the holy relation of parent and child into the unholy one of master and slave, and to sell his child into ransomless bondage for the pittance of money he can earn. Yet, strange to say, there are many parents, not only of our immigrant, but of our native population, so lost to the sacred nature of the relation they sustain towards the children whom they have brought into all the solemn realities of existence, that they go from town to town, seeking opportunities to consign them to unbroken, bodily toil, although it involves the deprivation of all the means of intellectual and moral growth; thus pandering to their own vicious appetites by adopting the most efficient measures to make their offspring as vicious as themselves.

If, in a portion of the manufacturing districts in the State, a regular and systematic obedience is paid to the law, while, in other places, it is regularly and systematically disregarded, the inevitable consequences to the latter will be obvious upon a moment's reflection. The neighborhood or town where the law is broken will soon become the receptacle of the poorest, most vicious, and abandoned parents, who are bringing up their children to be also as poor, vicious, and abandoned as themselves. The whole class of parents who cannot obtain employment for their children at one place,

but are welcomed at another, will circulate through the body politic, until at last they will settle down as permanent residents in the latter; like the vicious humors of the natural body, which, being thrown off by every healthy part, at last accumulate, and settle upon a diseased spot. Every breach of this law, therefore, inflicts direct and positive injustice, not only upon the children employed, but upon all the industrious and honest communities in which they are employed; because its effect will be to fill those communities with paupers and criminals, or, at least, with a class of persons, who, without being absolute, technical paupers, draw their subsistence in a thousand indirect ways from the neighborhood where they reside; and, without being absolute criminals in the eye of the law, still commit a thousand injurious, predatory acts, more harassing and annoying to the peace and security of a village than many classes of positive crimes.

While water-power only is used for manufacturing purposes, a natural limit is affixed, in every place, to the extension of manufactories. The power being all taken up in any place, the further investment of capital, and the employment of an increased number of operatives, must cease. While we restrict ourselves to the propulsion of machinery by water, therefore, it is impossible that we should have such an extensive manufacturing district as, for instance, that of Manchester in England, because we have no streams of sufficient magnitude for the purpose. But Massachusetts is already the greatest manufacturing State in the Union. Her best sites are all taken up; and yet her disposition to manufacture appears not to be checked. Under such circumstances, it seems not improbable that steam-power will be resorted to. Indeed, this is already done to some extent. Should such improvements be made in the use of steam, or such new markets be opened for the sale of manufactured products, that capitalists, by selecting sites where the expense of transportation, both of the raw material and of the

finished article, may be so reduced as, on the whole, to make it profitable to manufacture by steam, then that agency will be forthwith employed; and, if steam is employed, there is no assignable limit to the amount of a manufacturing population that may be gathered into a single manufacturing district. If, therefore, we would not have, in any subsequent time, a population like that of the immense city of Manchester, where great numbers of the laboring population live in the filthiest streets, and mostly in houses which are framed back to back, so that, in no case, is there any yard behind them, but all ingress and egress, for all purposes, is between the front side of the house and the public street, — if we would not have such a population, we must not only have preventive laws, but we must see that no cupidity, no contempt of the public welfare for the sake of private gain, is allowed openly to violate or clandestinely to evade them. It would, indeed, be most lamentable and self-contradictory, if, with all our institutions devised and prepared on the hypothesis of common intelligence and virtue, we should rear a class of children to be set apart, and, as it were, dedicated to ignorance and vice.

After presenting to the Board one further consideration, I will leave this subject. It is obvious that children of ten, twelve, or fourteen years of age may be steadily worked in our manufactories, without any schooling, and that this cruel deprivation may be persevered in for six, eight, or ten years, and yet, during all this period, no very alarming outbreak shall occur to rouse the public mind from its guilty slumber. The children are in their years of minority, and they have no control over their own time or their own actions. The bell is to them what the water-wheel and the main shaft are to the machinery which they superintend. The wheel revolves, and the machinery must go; the bell rings, and the children must assemble. In their hours of work, they are under the police of the establishment: at other times, they are under the police of the neighborhood. Hence this state of things

may continue for years, and the peace of the neighborhood remain undisturbed, except, perhaps, by a few nocturnal or sabbath-day depredations. The ordinary movements of society may go on without any shocks or collisions; as, in the human system, a disease may work at the vitals, and gain a fatal ascendency there, before it manifests itself on the surface. But the punishment for such an offence will not be remitted because its infliction is postponed. The retribution, indeed, is not postponed, it only awaits the full completion of the offence; for this is a crime of such magnitude, that it requires years for the criminal to perpetrate it in, and to finish it off thoroughly in all its parts. But when the children pass from the condition of restraint to that of freedom, from years of enforced but impatient servitude to that independence for which they have secretly pined, and to which they have looked forward, not merely as the period of emancipation, but of long-delayed indulgence; when they become strong in the passions and propensities that grow up spontaneously, but are weak in the moral powers that control them, and blind in the intellect which foresees their tendencies; when, according to the course of our political institutions, they go, by one bound, from the political nothingness of a child to the political sovereignty of a man, — then, for that people who so cruelly neglected and injured them, there will assuredly come a day of retribution. It scarcely needs to be added, on the other hand, that if the wants of the spiritual nature of a child, in the successive stages of its growth, are duly supplied, then a regularity in manual employment is converted from a servitude into a useful habit of diligence, and the child grows up in a daily perception of the wonder-working power of industry, and in the daily realization of the trophies of victorious labor. A majority of the most useful men who have ever lived were formed under the happy necessity of mingling bodily with mental exertion.

But by far the most important subject respecting which I have sought for information during the year remains to be

noticed. While we are in little danger of over-estimating the value of Common Schools, yet we shall err egregiously if we regard them as ends, and not as means. A forgetfulness of this distinction would send the mass of our children of both sexes into the world scantily provided either with the ability or the disposition to perform even the most ordinary duties of life. Common Schools derive their value from the fact that they are an instrument more extensively applicable to the whole mass of the children than any other instrument ever yet devised. They are an instrument by which the good men in society can send redeeming influences to those children who suffer under the calamity of vicious parentage and evil domestic associations. The world is full of lamentable proofs that the institution of the family may exist for an indefinite number of generations without mitigating the horrors of barbarism. But the institution of Common Schools is the offspring of an advanced state of civilization, and is incapable of co-existing with barbarian life, because, should barbarism prevail, it would destroy the schools; should the schools prevail, they would destroy barbarism. They are the only civil institution capable of extending its beneficent arms to embrace and to cultivate in all parts of its nature every child that comes into the world. Nor can it be forgotten that there is no other instrumentality which has done or can do so much to inspire that universal reverence for knowledge which incites to its acquisition. Still, these schools are means, and not ends. They confer instruments for the acquisition of an object, but they are not the object itself. As they now are, or, indeed, are ever likely to become, our young men and young women will be most insufficiently prepared to meet the various demands which life will make upon them, if they possess nothing but what these schools bestow.

. . . .

Libraries. — After the rising generation have acquired habits of intelligent reading in our schools, *what shall they read?*

for, with no books to read, the power of reading will be useless; and, with bad books to read, the consequences will be as much worse than ignorance as wisdom is better. What books, then, are there accessible to the great mass of the children in the State, adapted to their moral and intellectual wants, and fitted to nourish their minds with the elements of uprightness and wisdom?

Let any person go into one of our country towns or districts of average size, consisting, as most of them do, of an agricultural population, interspersed with mechanics, and here and there a few manufacturers, and inquire from house to house what books are possessed, and he will probably find the Scriptures and a few school-books in almost every family. These are protected by law, even in the hands of an insolvent; so that the poor are as secure in their possession as the rich. In the houses of professional men, — the minister, the lawyer, the physician, — he would find small professional libraries, intermixed with some miscellaneous works not of a professional character; in the houses of religious persons, a few religious books of this or that class, according to the faith of the owner; in the houses of the more wealthy, where wealth is fortunately combined with intelligence and good taste, some really useful and instructive books; but where the wealth is unfortunately united with a love of display, or with feeble powers of thought, he would find a few elegantly-bound annuals, and novels of a recent emission. What he would find in other houses — and these the majority — would be few, and of a most miscellaneous character; books which had found their way thither rather by chance than by design, and ranging in their character between very good and very bad. Rarely, in such a town as I have supposed, will a book be found which treats of the nature, object, and abuses of different kinds of governments, and of the basis and constitution and fabric of our own; or one on economical or statistical science; or a treatise on general ethics and the philosophy of the human mind; or popular or intelligible expla-

nations of the applications of science to agriculture and the useful arts, or the processes by which the latter are made so eminently serviceable to man. Rarely will any book be found partaking of the character of an encyclopædia, by a reference to which, thousands of interesting questions, as they daily arise, might be solved, and great accessions to the stock of valuable knowledge be imperceptibly made; quite as rarely will any books containing the lives of eminent British or American statesmen be found, or books treating of our ante-Revolutionary history; and, most rarely of all, will any book be found on education, — education at home, physical, intellectual, and those rudiments of a moral and religious education in which all agree, — the most important subject that can possibly be named to parent, patriot, philanthropist, or Christian. And in the almost total absence of books adapted to instruct parents how to educate their children, so there are quite as few which are adapted to the capacities of the children themselves, and might serve, in some secondary degree, to supply the place of the former. Some exceptions would, of course, be expected where so many particulars are grouped under so few heads; but from all I have been able to learn, after improving every opportunity for inquiry and correspondence, I am led to believe, that, as it regards the *private* ownership of books, the above may be taken as a fair medium for the State. In small towns, almost wholly rural in their occupation, the books, though fewer, may generally be better; while in cities and large towns, though more numerous, yet a larger proportion of them is worse. Whatever means exist, then, either for inspiring or for gratifying a love of reading in the great mass of the rising generation, are mainly to be found, if found at all, in public libraries.

As the tastes and habits of the future men and women, in regard to reading, will be only an enlargement and expansion of the tastes and habits of the present children, it seemed to me one of the most desirable of all facts, to learn, as far as practicable, under what general influences those tastes and

habits are now daily forming. For who can think, without emotion, and who can remain inactive under the conviction, that every day which now passes is, by the immutable law of cause and effect, predestinating the condition of the community twenty, thirty, or forty years hence; that the web of their character and fortunes is now going through the loom, to come out of it, at that time, of worthy or of worthless quality, beautified with colors and shapes of excellence, or deformed by hideousness, just according to the kind of the woof which we are daily weaving into its texture? Every book which a child reads with intelligence is like a cast of the weaver's shuttle, adding another thread to the indestructible web of existence.

In the general want of private libraries, therefore, I have endeavored to learn what number of public libraries exist; how many volumes they contain, and what are their general character, scope, and tendency; how many persons have access to them, or, which is the most material point, how many persons do *not* have access to them; and, finally, how many of the books are adapted to prepare children to be free citizens and men, fathers and mothers, even in the most limited signification of those vastly comprehensive words. It seemed to me, therefore, that nothing could have greater interest or significance than an inventory of the means of knowledge, and the encouragements to self-education, possessed by the present and the rising generation.

Simultaneously with this inquiry I have pursued a collateral one, not so closely, although closely, connected with the main object. A class of institutions has lately sprung up in this State, universally known by the name of Lyceums, or Mechanics' Institutes, before some of which courses of Popular Lectures, on literary or scientific subjects, are annually delivered, while others possess libraries and reading-rooms, and in a very few cases both these objects are combined. These institutions have the same general purpose in view as public libraries, viz. that of diffusing instructive and enter-

taining knowledge, and of exciting a curiosity to acquire it; though they are greatly inferior to libraries in point of efficiency. As the proportion of young persons who attend these lectures and frequent these reading-rooms, compared with the whole number of attendants, is much greater than the proportion they bear to the whole people, the institutions may justly be regarded as one of the means now in operation for enlightning the youth of the State. At any rate, an inventory of the means of general intelligence which did not include these institutions would justly be regarded as incomplete.

For the purpose of obtaining authentic information on the above-mentioned subjects, I addressed to school committees and other intelligent men residing, respectively, in every town in the Commonwealth, a few inquiries, by which I ascertained that, omitting the ten Circulating Libraries, containing about twenty-eight thousand volumes, it appears that the aggregate of volumes in the public libraries of all kinds in the State is about three hundred thousand. This is also exclusive of the Sabbath-school Libraries, which will be adverted to hereafter. To these three hundred thousand volumes but little more than one hundred thousand persons, or one-seventh part of the population of the State, have any right of access, while more than six hundred thousand have no right therein.

Of the towns heard from, there are one hundred (almost one third of the whole number in the State) which have neither a town, social, nor district school library therein. What strikes us with amazement, in looking at these facts, is the inequality with which the means of knowledge are spread over the surface of the State; a few deep, capacious reservoirs, surrounded by broad wastes. It has long been a common remark that many persons read too much; but here we have proof how many thousands read too little. For the poor man and the laboring man the art of printing seems hardly yet to have been discovered.

The next question respects the character of the books composing the libraries, and their adaptation to the capacities and mental condition of children and youth. In regard to this point there is, as might be expected, but little diversity of statement. Almost all the answers concur in the opinion that the contents of the libraries are not adapted to the intellectual and moral wants of the young; an opinion which a reference to the titles in the catalogues will fully sustain. With very few exceptions the books were written for adults, for persons of some maturity of mind, and possessed already of a considerable fund of information; and, therefore, they could not be adapted to children, except through mistake. Of course, in the whole collectively considered there is every kind of books; but probably no other kind, which can be deemed of a useful character, occupies so much space upon the shelves of the libraries as the historical class. Some of the various histories of Greece and Rome; the History of Modern Europe, by Russell; of England, by Hume and his successors; Robertson's Charles V.; Mavor's Universal History; the numerous histories of Napoleon, and similar works, constitute the staple of many libraries. And how little do these books contain which is suitable for children! How little do they record but the destruction of human life, and the activity of those misguided energies of men which have hitherto almost baffled the beneficent intentions of Nature for human happiness! Descriptions of battles, sackings of cities, and the captivity of nations, follow each other with the quickest movement, and in an endless succession. Almost the only glimpses which we catch of the education of youth present them as engaged in martial sports, and in mimic feats of arms, preparatory to the grand tragedies of battle; exercises and exhibitions, which, both in the performer and the spectator, cultivate all the dissocial emotions, and turn the whole current of the mental forces into the channel of destructiveness. The reader sees inventive genius, not employed in perfecting the useful arts, but exhausting itself in

the manufacture of implements of war; he sees rulers and legislators, not engaged in devising comprehensive plans for universal welfare, but in levying and equipping armies and navies, and extorting taxes to maintain them; thus dividing the whole mass of the people into the two classes of slaves and soldiers, enforcing the degradation and servility of tame animals upon the former, and cultivating the ferocity and bloodthirstiness of wild animals in the latter. The highest honors are conferred upon men in whose rolls of slaughter the most thousands of victims are numbered; and seldom does woman emerge from her obscurity, indeed, hardly should we know that she existed, but for her appearance to grace the triumphs of the conqueror. What a series of facts would be indicated by an examination of all the treaties of peace which history records! they would appear like a grand index to universal plunder. The inference which children would legitimately draw from reading like this would be, that the tribes and nations of men had been created only for mutual slaughter, and that they deserved the homage of posterity for the terrible fidelity with which their mission had been fulfilled. Rarely do these records administer any antidote against the inhumanity of the spirit they instil. In the immature minds of children, unaccustomed to consider events under the relation of cause and effect, they excite the conception of magnificent palaces or temples for bloody conquerors to dwell in, or in which to offer profane worship for inhuman triumphs, without a suggestion of the bondage and debasement of the myriads of slaves, who, through lives of privation and torture, were compelled to erect them; they present an exciting picture of long trains of plundered wealth, going to enrich some city or hero, without an intimation, that, by industry and the arts of peace, the same wealth could have been earned more cheaply than it was robbed; they exhibit the triumphal return of warriors, to be crowned with honors worthy of a god, while they take the mind wholly away from the carnage of the battle-field, from desolated

provinces and a mourning people. In all this, it is true, there are many examples of the partial and limited virtue of patriotism, but few only of the complete virtue of philanthropy. The courage held up for admiration is generally of that animal nature which rushes into danger to inflict injury upon another; but not of that divine quality which braves peril for the sake of bestowing good, — attributes, than which there are scarcely any two in the souls of men more different, though the baseness of the former is so often mistaken for the nobleness of the latter. Indeed, if the past history of our race is to be much read by children, it should be rewritten; and while it records those events which have contravened all the principles of social policy, and violated all the laws of morality and religion, there should, at least, be some recognition of the great truth, that among nations, as among individuals, the highest welfare of all can only be effected by securing the individual welfare of each : there should be some parallel drawn between the *historical* and the *natural* relations of the race; so that the tender and immature mind of the youthful reader may have some opportunity of comparing the right with the wrong, and some option of admiring and emulating the former instead of the latter. As much of history now stands, the examples of right and wrong, whose nativity and residence are on opposite sides of the moral universe, are not merely brought and shuffled together, so as to make it difficult to distinguish between them, but the latter are made to occupy almost the whole field of vision; while the existence of the former is scarcely noticed. It is as though children should be taken to behold, from afar, the light of a city on fire, and directed to admire the splendor of the conflagration, without a thought of the tumult and terror and death reigning beneath it.

Another very considerable portion of these libraries, especially where they have been recently formed or replenished, consists of novels, and all that class of books which is comprehended under the familiar designations of "fictions,"

"light reading," "trashy works," "ephemeral," or "bubble literature," &c. This kind of books has increased immeasurably within the last twenty years. It has insinuated itself into public libraries, and found the readiest welcome with people who are not dependent upon libraries for the books they peruse. Aside from newspapers, I am satisfied that the major part of the *unprofessional* reading of the community is of the class of books above designated. Amusement is the object, — mere *amusement*, as contradistinguished from instruction in the practical concerns of life; as contradistinguished from those intellectual and moral impulses, which turn the mind, both while reading and after the book is closed, to observation and comparison and reflection upon the great realities of existence.

That reading merely for amusement has its fit occasions and legitimate office, none will deny. The difficulty of the practical problem consists in adhering to that line of reasonable indulgence, which lies between mental dissipation on the one hand, and a denial of all relaxation on the other. Life is too full of solemn duties to be regarded as a long playday; while incessant toil lessens the ability for useful labor. In feeble health, or after sickness, or severe bodily or mental labor, an amusing, captivating, enlivening book, which levies no tax upon the powers of thought for the pleasure it gives, is a delightful resource. It is medicinal to the sick, and recuperative to the wearied mind. Especially is this the case where a part only of the faculties have been intensely exerted. Then, to stimulate those which have lain inactive brings the quickest relief to those which have been laboring. It is not repose to them, merely; but repose, as it were, tranquillized by music. But the difference is altogether incalculable and immense between reading such books as an amusement only, and reading them as restorers from fatigue or as soothers in distress; between indulging in them as a relaxation or change from deep mental engrossment, and making their perusal a common employment or business. One ener-

vates, the other strengthens and restores; one disables from the performance of duty, the other is one of the readiest preparations for a return to it. In reading merely for amusement, the mind is passive, acquiescent, recipient merely. The subjects treated are not such as task its powers of thought. It has no occasion to bring forth and re-examine its own possessions; but it is wafted unresistingly along, through whatever regions the author chooses to bear it. It is this passiveness, this surrendering of the mind, that constitutes the pernicious influence of reading for amusement, when carried to excess; because a series, a reiteration, of efforts is just as indispensable, in order to strengthen any faculty of the intellect, as a series of muscular exercises is to strengthen any limb of the body: and, in reading for amusement, these efforts are not made. Even when we read the most instructive books, and transfer to our own minds the knowledge they contain, the work is but half done. Most of their value consists in the occasions they furnish to the reader to exert all his own vigor upon the subject, and, through the law of mental association, to bring all his own faculties to act upon it. A stream of thought from his own mind should mingle with the stream that comes from the book. Such reading creates ability, while it communicates knowledge. The greatest accumulation of facts, until the comparing and the foreseeing faculties have acted upon them, is as useless as a telescope or a watch would be in the hands of a savage. Single ideas may be transferred from an author to a reader; but habits of thinking are intransferable: they must be formed within the reader's own mind, if they are ever to exist there. Actual observation, within its field, is better than reading; but the advantage of reading consists in its presenting a field almost infinitely larger and richer than any actual observation can ever do: yet if the reader does not take up the materials presented, and examine them one by one, and learn their qualities and relations, he will not be able to work them into any productions of his own; he will be like a savage who

has passed through the length of a civilized country, and just looked at its machinery, its ships and houses, who, when he returns home, will not be able to make a better tool, or build a better canoe, or construct a better cabin, than before. It is his own hand-work, on the materials of his art, which, after thousands of trials and experiments, at last turns the rude apprentice into such an accomplished artisan, that his hand instantaneously obeys his will, and, in executing the most ingenious works, he loses the consciousness of volition; and so it is by energetic, long-continued mental application to the elements of thought, that the crude and meagre conceptions of a child are refined and expanded and multiplied into the sound judgment and good sense of a man of practical wisdom. Something, without doubt, is referable to the endowments of Nature; but with the mass of men much more is attributable to that richest of all Nature's endowments, the disposition to self-culture through patient, long-sustained effort. No man, therefore, who has not made these efforts times innumerable, and profited in each succeeding case by the error or imperfection of the preceding, has any more right to expect the possession of wisdom, discretion, foresight, than the novice in architecture or in sculpture has to expect that, in his first attempt, he shall be able to equal the Church of St. Peter's, or chisel a perfect statue of Apollo. Now the bane of making amusement the sole object of one's reading, and the secret of its influence in weakening the mind, consist in its superseding or discarding all attendant exertion on the part of the reader. Without this exertion, the power of clear, orderly, coherent thought, the power of seeing whether means have been adapted to ends, becomes inactive, and at length withers away like a palsied limb; while, at the same time, — the attention being hurried over a variety of objects, between which Nature has established no relations, — a sort of volatility or giddiness is inflicted upon the mind, so that the general result upon the whole faculties is that of weakness and faintness combined.

What gives additional importance to this subject is the fact, that by far the most extensive portion of this reading for amusement consists of the perusal of fictitious works. The number of books and articles, which, under the names of romances, novels, tales in verse or prose, — from the elaborate work of three volumes to the hasty production of three chapters or three pages, — is so wide-spread and ever-renewing, that any computation of them transcends the power of the human faculties. They gush from the printing-press. Their authors are a nation. When speaking of the reading public, we must be understood with reference to the subject-matter of the reading. In regard to scientific works on government, political economy, morals, philosophy, the reading public is very small. Hardly one in fifty, amongst adults, belongs to it. For works of biography, travels, history, it is considerably larger. But in reference to fictitious works, it is large and astonishingly active. It requires so little acquaintance with our language, and so little knowledge of sublunary things and their relations, to understand them; and the inconvenience of failing to understand a word, a sentence, or a page, is so trivial; so exactly do they meet the case of minds that are ignorant, indolent, and a little flighty, that they are welcomed by vast numbers. Other books are read slowly, commenced, laid aside, resumed, and perused in intervals of leisure. These are run through with almost incredible velocity. Take a work on morals, of the same size with a novel; the reading of the former will occupy a month, the latter will be despatched without intervening sleep. Of works unfolding to us the structure of our own bodies, and the means of preserving health, and of the constitution of our own minds, and the infinite diversity of the spiritual paths, which the mind can traverse, each bringing after it, its own peculiar consequences; of works laying open the complicated relations of society, illustrative of the general duties belonging to all, and of the special duties arising from special positions; of works making us acquainted with the beneficent laws and properties of Nature, and their adaptations to supply

our needs and enhance our welfare, — of works of these descriptions, editions of a few hundred copies only are printed, and then the types are distributed, in despair of any further demand; while of fictitious works, thousands of copies are thrown off at first, and they are stereotyped in confidence that the insatiable public will call for new supplies. It was but a few years after the publication of Sir Walter Scott's poems and novels, that fifty thousand copies of many of them had been sold in Great Britain alone. Under the stimulus which he applied to the public imagination, the practice of novel-reading has grown to such extent, that his imitators and copyists have overspread a still wider field, and covered it to a greater depth. In this country, the reading of novels has been still more epidemic, because, in most parts of it, so great a portion of the people can read, and because, owing to the extensiveness of the demand, they have been afforded so cheaply, that the price of a perusal has often been less than the value of the light by which they were read.

To give some idea of the difference in the sales of different kinds of works, it may be stated, that of some of Bulwer's and Marryatt's novels, from ten to fifteen thousand copies have been sold in this country; while of that highly valuable and instructive work, Sparks's "American Biography," less than two thousand copies, on an average, have been sold; and of Prescott's "Ferdinand and Isabella," only about thirty-six hundred. The latter is considered a remarkably large sale, and is owing, in no inconsiderable degree, to the superior manner in which that interesting history was written.

No discerning person who has arrived at middle age, and has been at all conversant with society, can have failed to remark the effect upon mind and character of reading frivolous books, when pursued as a regular mental employment, and not as an occasional recreation; the lowered tone of the faculties, the irregular sallies of feeling, the want of a power of continuous thought on the same subject, and the imperfect views taken of all practical questions, — an imperfection compounded

by including things not belonging to the subject, and by omitting things which do. Any such person will be able to give his attestation to the fact, and be willing to advance it into an axiom, that *light reading makes light minds.*

So far as it respects fictitious writings, the explanation of their weakening and dispersive influence is palpable to the feeblest comprehension. All men must recognize the wide distinction between *intellect* and *feeling*, between *ideas* and *emotions.* These two classes of mental operations are inherently distinct from each other in their nature; they are called into activity by different classes of objects; they are cultivated by different processes; and as one or the other predominates in the mental constitution, widely different results follow both in conduct and character. All sciences are the offspring of the intellect. On the other hand, there cannot be poetry or eloquence without emotion. From the intellect come order, demonstration, invention, discovery; from the feelings, enthusiasm, pathos, and sublime sentiments in morals and religion. The attainments of the greatest intelleet are gathered with comparative slowness, but each addition is a permanent one. The proeess resembles that by whieh material structures are reared, which are laboriously built up, brick by brick, or stone by stone, but, when once erected, are steadfast and enduring. But the feelings, on the other hand, are like the unstable elements of the air or ocean, which are suddenly roused from a state of tranquillity into vehement commotion, and as suddenly subside into repose. When rhetoricians endeavor to exeite more vivid conceptions of truth by means of sensible images, they liken the productions of the intellect to the solidity and stern repose of time-defying pyramid or temple; but they find symbols for the feelings and passions of men in the atmosphere, which obeys the slightest impulse, and is ready to start into whirlwinds or tempest at once. To add to the stock of practical knowledge, and to increase intellectual ability, requires voluntary and long-sustained effort; but feelings and impulses are often spontaneous, and always susceptible of being roused into action by

a mere glance of the eye, or the sound of a voice To become master of an exact, coherent, full set, or complement of ideas, on any important subject, demands fixed attention, patience, study; but emotions or passions flash up suddenly, and while they blaze they are consumed. In the mechanical and useful arts, for instance, a knowledge of the structure and quality of materials, of the weight and motive power of fluids, of the laws of gravitation, and their action upon bodies in a state of motion or rest, is acquired by the engineer, the artisan, the machinist, — not by sudden intuition, but by months and years of steady application. Arithmetic, or the science of numbers; geometry, or the science of quantities; astronomy, and the uses of astronomical knowledge in navigation, must all have been profoundly studied, — the almost innumerable ideas which form these vast sciences must have been discovered and brought together, one by one, — before any mariner could leave a port on this side of the globe, and strike, without failure, the smallest town or river on the opposite side of it. And the same principle is no less true in regard to jurisprudence, to legislation, and to all parts of social economy, so far as they are worthy to be called sciences. But that part of the train of our mental operations which we call the emotions or affections, those powers of our spiritual constitution denominated the propensities and sentiments, which give birth to appetite, hope, fear, grief, love, shame, pride, at the very first, produce a feeling, which is perfect or complete of its kind. An infant cannot reason, but may experience as perfect an emotion of fear as an adult. Mankind, for thousands of years, have been advancing in the attainments of intellect; but the fathers of the race had feelings as electric and impetuous as any of their latest descendants. In every intellectual department, therefore, there must be accurate observation in collecting the elementary ideas, — these ideas must be compared, arranged, methodized, in the mind, — each faculty, which has cognizance of the subject, taking them up individually, and, as it were, handling, assorting, measuring, weighing them, until each one is marked at its

true value, and arranged in its right place, so that they may stand ready to be reproduced, and to be embodied in any outward fabric or institution, in any work of legislation or philosophy, which their possessor may afterwards wish to construct. Such intellectual processes must have been performed by every man who has ever acquired eminence in the practical business of life, or who has ever made any great discovery in the arts or sciences, except, perhaps, in a very few cases, where discovery has been the result of happy accident. It is this perseverance in studying into the nature of things, in unfolding their complicated tissues, discerning their minutest relations, penetrating to their centres, that has made such men as Lord Bacon, Sir Isaac Newton, Dr. Franklin, Watt, Fulton, Sir Humphry Davy, and Dr. Bowditch, — men, the light of whose minds is now shed over all parts of the civilized world as diffusively and universally as the light of the sun, and as enduring as that light. And so it is in all the other departments of life, whether higher or humbler; not more in the case of the diplomatist, who is appointed an ambassador to manage a difficult negotiation at a foreign court, than in that of the agent who is chosen by a town, because of his good sense and thorough knowledge of affairs, to conduct a municipal controversy. It is to such habits of thought and reflection upon the actual relations of things as they exist, and as God has constituted them, that we are indebted for the men who know how to perform each day the duties of each day, and, in any station, the duties of that station; men, who, because of their clear-sightedness and wisdom, are nominated as arbitrators or umpires by contending parties, or whose appearance in the jury-box is hailed by the counsellors and suitors of the court; men whose work has not to be done over again, and whose books or reports do not need *errata* as large as themselves. But the feelings or emotions, so far from being dependent on these intellectual habits for their vividness and energy, are even more vivid and energetic when freed from control and direction. The intellect hems in the feelings by boundaries of probability and natural-

ness. It opposes barriers of actual and scientific truth to their devious wanderings and flights. It shows what things can be, and what things cannot be, and thus arrests the imagination when it would otherwise soar or plunge into the impossible and the preternatural. The savage, with his uncultivated intellect, has fields for the roamings of fancy, which can have no existence to the philosopher; just as an idolater has an immensity for the creations of his superstition, which to the enlightened Christian is a nonentity.

Now, it is the feelings, and not the intellect, — the excitable or spontaneously-active powers of the mind, and not its steady, day-laboring faculties, — which the great body of fictitious works appeals to and exercises. Were the whole mass of these works analyzed, and reduced to its component elements, nineteen parts in every twenty would be found addressed to the emotions and feelings, and not to the reason and judgment. Their main staple and texture are a description of the passions of love, jealousy, hope, fear, remorse, revenge, rapture, despair, — the whole constituting a dark ground of guilt and misery, occasionally illumined by a crossing beam of ecstatic joy or almost superhuman virtue. But the trials and temptations described are rarely such as any human being will fall into; and the virtues celebrated are such as few will ever have an opportunity to achieve. Hence sympathy and aversion, desire and apprehension, are kept at the highest tension; but it is upon incidents and scenes outside of actual life, not in this world, and often not capable of being transferred to it. In the mean time, the understanding sleeps; the intellect is laid aside. Those faculties by which we comprehend our position in life and our relations to society, — by which we discover what our duty is, and the wisest way to perform it, — have nothing to do. The mind surrenders itself to the interest and excitement of the story, while the powers by which we discern tendencies and balance probabilities are discarded; nay, those sober thoughts are unwelcome intruders which come to break the delusion, and to repress an insane exhilaration of the feel-

ings, — until, at last, the diseased and infatuated mind echoes that pagan saying, so treasonable to truth, that it would prefer to go wrong with one guide rather than right with another, — as though, in a universe which an all-wise Being has formed, any thing could be as well as to go right. In the reports of some of the French hospitals for lunatics, *the reading of romances* is set down as one of the standing causes of insanity.

It is the perusal of this class of works as a regular or principal mental employment, of which I am speaking; and it is easy for any one acquainted with the laws of the human mind, and with the causes which foster or stint its growth, to predict the effect of such reading both upon the will and the capacity to perform the every-day duties and charities of life. Could all temporal duties be written down in a catalogue, we should find that private, domestic, in-door duties would constitute vastly the greatest number. The social duties, growing out of relationship, friendship, and neighborhood, would make up the next largest and most important class; for, while all others only call upon us occasionally, the demands of these are perpetual. Now, for the appropriate and punctual discharge of these numerous and ever-recurring duties, a knowledge of all the scenes and incidents, the loves and hates, the despairs and raptures, contained in all the fictions ever written, is about as fit a preparation, as a knowledge of all the "castles in the air," ever built by visionaries and dreamers, would be to the father of a houseless family, who wished to erect a dwelling for their shelter, but was wholly ignorant both of the materials and the processes necessary for the work. And the reason is, that, in the region of fiction, the imagination can have every thing in its own way; it can arrange the course of events as it pleases, and still bring out the desired results. But in actual life, where the law of cause and effect pervades all, links all, determines all, the appropriate consequences of good or evil follow from their antecedents with inevitable certainty. The premises of sound or false judgments, of right or wrong actions, being given, the

course of Nature and Providence predestines the conclusions of happiness or misery, from which we cannot escape. Hence the mind — which, in the world of imagination, has been relieved from all responsibility for consequences, being rigorously held to abide by consequences whenever it descends to sublunary affairs, and being ignorant of the connection between causes and effects — finds all its judgments turned into folly, and all its acts terminating in disaster or ruin.

Nor are the *moral* effects of this kind of reading, when systematically pursued, less pernicious than the intellectual; for it will be found that those who squander their sympathies most prodigally over distresses that were never felt are the firmest stoics over calamities actually suffered. The inveterate novel-reader will accompany heroes and heroines to the ends of the earth, and in tears bewail their fancied misfortunes; while he can command the serenest equanimity over sufferings in the next street or at the next door. The continued contemplation of pain, without any accompanying effort to relieve it, forms the habit of dissociating feeling from action, and presents the moral anomaly of one who professes to feel pity, but withholds succor. In all healthy minds, judicious action follows virtuous impulse. Nor do the splendid heroes of romance ever earn their greatness and their honors by a youth of study and toil, by contemning the seductions of inglorious ease; and thus they never hold out to the young mind the example of industry and perseverance and self-denial as the indispensable prerequisites to greatness. Far more baneful are the effects, when characters whose lives are immersed in secret profligacy are varnished to the eye of the world by wealth and elegance; or when audacious criminals are endowed with such shining attractions of wit, talent, and address, as cause the sympathy of the reader to outweigh his abhorrence.

But if it is unfortunate that so many people should addict themselves to the reading of fiction, because their minds are immature and unbalanced, and have no touchstone whereby

they can distinguish between what is extravagant, marvellous, and supernatural, and what, from its accordance to the standard of nature, is simple, instructive, and elevating; it is doubly unfortunate that so many excellent young persons should be misled into the same practice, either from a laudable desire to maintain some acquaintance with what is called the literary world, and to furnish themselves with materials for conversation, or from a vague notion that such reading alone will give a polish to the mind, and adorn it with the graces of elegance and refinement. In endeavoring to elucidate the manner in which this indulgence entails weakness upon the understanding, and unfits it for a wise, steady, beneficent course of life, in a world so abounding as this is in solemn realities and obligations, I would most sedulously refrain from uttering a word in disparagement of a proportionate and measured cultivation of what are called polite literature and the polite arts in all their branches. While we have sentiments and affections, as well as thoughts and ideas; while, in the very account of the creation of the world, it is said that some things were made to be *pleasant to the sight*, and others good for sustenance; and while our spiritual natures are endowed with susceptibilities to enjoy the former, as well as with capacities to profit by the later, — any measures for the elevation of the common mind, which do not recognize the existence and provide for the cultivation of the first class of powers, as well as for the second, would form a community of men, wholly uncouth and rugged in their strength, and almost unamiable, however perfect might be their rectitude. The mind of every man is instinct with capacities above the demands of the workshop or the field, — capacities which are susceptible of pure enjoyments from music and art, and all the embellishments of civilized life, and whose indulgence would lighten the burden of daily toil. All have susceptibilities of feeling too subtile and evanescent to find any medium of utterance, except in the language of poetry and art, and too refined to be called into being, but by the creations

of genius. The culture of these sensibilities makes almost as important a distinction between savage and civilized man, as the training of the intellect; and without such cultivation, though the form of humanity may remain, it will be disrobed of many of its choicest beauties. Still, in a world, where, by the ordinations of Providence, utility outranks elegance; where harvests to sustain life must be cultivated before gardens are planted to gratify taste; where all the fascinations of regal courts are no atonement for the neglect of a single duty, — in such a world, no gentility or gracefulness of mind or manners, however exquisite and fascinating, is any substitute for practical wisdom and benevolence. Without copious resources of useful knowledge in our young men and young women; without available, applicable judgment and discretion, adequate to the common occasions and ready for the emergencies of life, — the ability to quote poetic sentiments, and expatiate on passages of fine writing, or a connoisseurship in art, is but mockery. Hence it is to be regretted that so many excellent young persons, emulous of self-improvement, should commit the error of supposing that an acquaintance with the institutions of society, with the real wants and conditions of their fellow-men, and with the means of relieving them, can be profitably exchanged for a knowledge of the entire universe of fiction; or that it is wise, in their hours of study, to neglect the wonderful works of the Creator, in order to become familiar with the fables of men. Intellect must lay a foundation, and rear a superstructure, before taste can adorn it. Without solid knowledge and good sense, there is no substance into which ornament or accomplishment can be inwrought. It is impossible to polish vacuity, or give a lustre to the surface of emptiness.

One other general remark is applicable to a large portion of this class of works. Most of them were written in Great Britain for British readers. Hence they suppose and represent a state of society where wealth outranks virtue, and birth takes precedence of talent, except in extraordinary cases

of mental endowment or attainment. They describe two classes of men, which we never ought to have, — one class, whose distinction and elevation are founded on the adventitious circumstances of birth or fortune, and another class who are the ignorant, degraded dependants upon the former, — but they do not describe any class of industrious, intelligent, exemplary, just, and benevolent men, so alive to the rights of others, that under no temptation would they become lords, and so conscious of their own, that under no force would they remain slaves, — a class of men which we ought to have, and, with a proper use of the blessings Heaven has given us, we may have. Surely, such books do not contain the models according to which the youth of a Republic should be formed.

I should have felt myself wholly unwarranted in thus commenting upon the prevalence of *amusing* and *fictitious*, compared with *useful* reading, and upon the pernicious consequences of indulgence in it, were it not that the children of the State are now growing up in this very condition of things, and under circumstances, too, which will lead them to commit the same error, and, of course, to suffer the same evil, except some new inducements can be found to win them from it. The number of these works, with the number of their readers, is now rapidly increasing, — not absolutely only, but relatively, and in proportion to other and useful works. The materials of which they are composed have now been so often wrought over, that moderately imitative powers are amply sufficient for recasting them in slightly modified forms: originality and invention have ceased to be necessary. The cheapness, too, of this class of works, gives them a preference, not only for circulating, but for town and social libraries. I have been surprised at finding such numbers of them in the catalogues of the latter. I have heard of but one town or social library from which they have been peremptorily excluded by an article in the constitution. The by-laws of one other library set up a certain standard for books, and empower a committee to burn all the nonconformists; that is, the noncon-

forming books. In other places, authority to dispose by sale of trivial or pernicious books is given; and this leads me to another subject in regard to the reading of the community, not less important than the preceding.

This subject is presented by the question, What do those persons read, who have not yet risen to the point of appreciating and admiring the better class of fictions and of recent literary works? A taste for the better kinds of light reading presupposes a preference, in the reader's mind, of what belongs to the spiritual over what belongs to the merely animal part of our nature, — of mental over sensual gratifications. A knowledge, too, of some of the more obvious phenomena of the material world, and of the operations of the human mind, has made many books ridiculous and contemptible, which once were consulted as oracles, and filled their readers with terror and reverential awe. The fictions of the last century, whose texture consists of events monstrous and supernatural, whose machinery is ghosts, hobgoblins, demons, and demi-gods, — written from one end to the other in defiance not merely of experience, but of possibility, and adapted to the lowest ignorance, — these, in rare instances only, have been republished. They have been driven from shelves and tables upon which the feeblest ray of the light of science has been cast. Yet, even within the last year, large editions of dream-books and fortune-tellers have been published. But there is a kind of reading in the community, wholly unknown to the publishers of fashionable novels and of the better sort of ephemeral literature. To those who have not been in the way of knowing, nor in the habit of reflecting, what kind of reading is most congenial and welcome to the least educated portion of the people, and through what channels they are supplied, the facts which have existed and still exist must be a source of alarm. Numerous itinerant booksellers are constantly on the circuit of the country, offering from door to door such books as, in the advancing knowledge and changing tastes of the times, are no longer salable at the bookstore, nor inquired for at the circulating

library. The precise extent of this traffic it is impossible to determine; yet, from all I can learn, I am satisfied it is carried on to a very considerable degree, especially in inland towns and in the purlieus of populous places. One gentleman informed me, that, in the vicinity of a manufacturing village where he lived, he had seen half a dozen of these book-peddlers in a fortnight. In communications received on the subject of established libraries, mention of similar facts has occasionally been made, although that was not one of the subjects on which information was sought. During the last autumn, I saw in a beautiful, inland town the contents of a peddler's vehicle, unladen, and arranged in a stall by the side of the street. I took occasion carefully to examine the books thus exposed for sale. Amongst several hundred volumes, there were not more than two or three books which any judicious person would ever put into the hands of a child after he could read. The rest consisted of the absurdest novels of the last century, of stories of buccaneers, of pirates and murderers, of shipwrecks, of Newgate calendars, and accounts of other exciting and extraordinary trials, of different sizes and prices to meet the ability of purchasers. On a temporary counter were spread out bundles of songs, in single sheets, some patriotic, some profane, and some obscene, — to be sold for a cent apiece. Amongst the books were Volney's "Ruins" and Paine's "Age of Reason." At the time of this exposition for sale, a literary festival, occupying two days, was held in the same village; on which occasion, profound, philosophical, literary, and religious discourses were delivered to intelligent and gratified audiences. The stall where the books were sold was within a stone's-throw of the church where the anniversary was celebrated. Both exercises went on together. The thought, irrepressible on the occasion, was, how much of that immense difference between those who listened with delight to the eloquence of the discourses and appreciated the instruction they gave, and those who purchased the moral venom to satisfy the cravings of a natural appetite, to which no entertainment of better things had ever been

offered, — how much of this immense difference was perfectly within the power, and therefore within the responsibility, of society. Surely such taste, and such books at once to gratify and aggravate it, are not the means wherewith the children in a free government, and of a Christian people, are to lay the ever-during foundations of conduct and character.

How few parents there are, who, in looking back to the days of their own childhood and minority, find no occasion to lament, — now when the injury is irreparable, — the want of early opportunities for laying up a store of valuable knowledge, and the loss of time, — now irrecoverable, — consequent upon that want! How many feel, daily, that their power of thinking, and especially of expressing their thoughts in speech or in writing, has, all their life long, been obstructed and deadened, from an absence of facilities for information and of incitements to study in early life. For the parents themselves, these regrets come too late. The losses belong to a class for which even repentance brings no remedy. And the question is, whether these same parents shall suffer their own children to grow up under a similar privation, to be doomed in their turn, when they become men and women, to the same melancholy retrospect and to the same unavailing regrets.

The people of this State are, and must of necessity continue to be, an *industrious* people, or they cannot subsist. Wealthy as the State is justly supposed to be, yet if all the property in it, both real and personal, were equally divided amongst all its inhabitants, it would not amount to more than four hundred dollars apiece. How soon would all this be gone, even to the very soil we tread on, without the annual replenishings of industry! Our soil furnishes nothing of spontaneous growth, and its unrelenting ruggedness can be propitiated only by the offerings of industry. Our people, therefore, as a people, cannot go abroad for information, — for that enlargement of mind and that acquaintance with affairs which comes from foreign travel, when pursued with an inquiring spirit and an

open eye. If the necessity of their condition debars them from visiting other states or countries in quest of knowledge, then knowledge must be brought to them, — to their own doors and fire-sides, — or ignorance is the only alternative, — the ignorance of childhood darkening into the deeper ignorance of manhood, with all its jealousies and its narrow-mindedness, and its superstitions, and its penury of enjoyments, — poor amid the intellectual and moral riches of the universe, blind in the splendid temple which God has builded, and famishing amid the profusions of Omnipotence. The minds, then, of our people, should travel, though their bodies remain at home; and, for these journeyings and voyages, books are an ever-ready and costless vehicle.

With a rugged and unproductive soil, Massachusetts is also by far the most densely populated State in the Union. Hence, for the temporal and material prosperity of her people, — for their subsistence even, — they are obliged to form an alliance with the great agencies of Nature, as auxiliaries in their labor. But Nature bestows her mighty forces of wind and water and steam, only upon those who seek them through intelligence and skill. The same circumstances, therefore, which seem to have marked out this State as a place of great mechanical, manufacturing, and commercial industry, draw after them the necessity of such a wide range of knowledge, as, though always valuable, would not otherwise be so indispensable. To fit the people for prosecuting these various branches of business with success — or even to rescue them from making shipwreck of their fortunes — they must become acquainted with those mechanical laws that pervade the material world. They must become intelligent machinists, millwrights, shipwrights, engineers — not craftsmen merely, but men who understand the principles upon which their work proceeds; so that, by the skilful preparation and adjustment of machinery, the sleepless and gigantic forces of Nature may perform their tasks. They must know the nature and action of the elements. They must know the properties of the bodies used in their respective

branches of business, and the processes by which rude materials can most cheaply be converted into polished fabrics. They must know the countries whence foreign products are imported, whither domestic products are exported, the course of trade, the laws of demand and supply, what articles depend on the permanent wants of mankind, and therefore will always be in demand, and what depend upon caprice or fashion, and therefore are certain to be discarded soon, for the very reason that they are now in vogue. Now, all these lead out, by imperceptible steps, into mechanical philosophy, the applications of science to the useful arts, civil geography, navigation, commerce, political economy, and the relations which nations bear to each other. Although an individual might learn to perform a task or execute an agency in one of these departments, empirically, that is, by a knowledge of the modes of proceeding, but in ignorance of the principles on which the process depends, yet such individuals never originate improvements or inventions. Like the Chinese, the end of a hundred years, or of a hundred generations, finds them in the spot they occupied at the beginning.

Of those engaged in agriculture, — an interest intrinsically important and elevated, — it may be said, that just in proportion as the soils they cultivate are more sterile should the minds of the cultivators be more fertile; for, in a series of years, the quantity of the harvests depends quite as much upon the knowledge and skill of the cultivator as upon the richness of the soil he tills. Take the year round, and the farmer has as many leisure hours as any class of men; and he has this advantage over many others, that his common round of occupations does not engross all his powers of thought, so that, were his mind previously supplied with a fund of facts, he might be meditating as he works, and growing wiser and richer together.

In fine, there is not, and the constitution of things has made it impossible that there should be, any occupation or employment whatever, where an extended knowledge of its principles,

or of its kindred departments, would not improve products, abridge processes, diminish cost, and impart dignity to the pursuit.

And how without books, as the grand means of intellectual cultivation, are the daughters of the State to obtain that knowledge on a thousand subjects, which is so desirable in the character of a female, as well as so essential to the discharge of the duties to which she is destined? Young men, it may be said, have a larger circle of action; they can mingle more in promiscuous society, — at least, they have a far wider range of business occupations, — all of which stimulate thought, suggest inquiry, and furnish means for improvement. But the sphere of females is domestic. Their life is comparatively secluded. The proper delicacy of the sex forbids them from appearing in the promiscuous marts of business, and even from mingling, as actors, in those less boisterous arenas, where mind is the acting agent, as well as the object to be acted upon. If, then, she is precluded from these sources of information, and these incitements to inquiry; if, by the unanimous and universal opinion of civilized nations, when she breaks away from comparative seclusion and retirement, she leaves her charms behind her; and if, at the same time, she is debarred from access to books, by what means, through what channels, is she to obtain the knowledge so indispensable for the fit discharge of maternal and domestic duties, and for rendering herself an enlightened companion for intelligent men? Without books, except in cases of extraordinary natural endowment, she will be doomed to relative ignorance and incapacity. Nor can her daughters, in their turn, escape the same fate; for their minds will be weakened by the threefold cause of transmission, inculcation, and example. Steady results follow from steady causes; under such influences, therefore, if not averted, the generations must deteriorate from the positive to the superlative in mental feebleness and imbecility.

But far above and beyond all special qualifications for special pursuits is the importance of forming to usefulness and

honor the capacities which are common to all mankind. The endowments that belong to all are of far greater consequence than the peculiarities of any. The practical farmer, the ingenious mechanic, the talented artist, the upright legislator or judge, the accomplished teacher, should be only modifications or varieties of the original *man*. The man is the trunk; occupations and professions are only different qualities of the fruit it should yield. There are more of the same things to be taught to all, and learned by all, than there are of different things to be imparted, distributively, to classes consisting of a few. The development of the common nature; the cultivation of the germs of intelligence, uprightness, benevolence, truth, that belong to all, — these are the principal, the aim, the end; while special preparations for the field or the shop, for the forum or the desk, for the land or the sea, are but incidents.

In the first place, it is requisite that every man, considered merely as a man, and without reference to station or occupation, should know something of his own bodily structure and organization, of whose marvellous workmanship it is said, that it is fearfully and wonderfully made, — *wonderfully*, because the infinite wisdom and skill, manifested in the adjustment and expansion of his frame, tend to inspire the mind with devotion and a religious awe; and *fearfully*, because its exquisite mechanism is so constantly exposed to peril and destruction from all the objects and elements around him, that precaution or fear is the hourly condition of his existence.

Did each individual know, — what, with a few suitable books, he might easily learn, — on what observances and conditions the Creator of the body has made its health and strength to depend; did he know that his corporeal frame is a general system, made up by the union of many particular systems, — the nervous, the muscular, the bony, the arterial, the venous, the pulmonary, the digestive; that all these bear certain fixed relations to each other, and to the objects and elements of the external world, — it is inconceivable how much of

disease and pain and premature death would be averted, — from how much imposition he would be saved, and how much the powers of useful labor, and the common length of life, would be increased. Even from the extension of knowledge on these subjects within the last century, the average length of life has increased one quarter; and yet it now reaches to but little more than half of threescore years and ten. How many persons, annually, are killed by the carbonic gas of burning charcoal, when, did they know of its existence, or how it is formed, they would as soon swallow arsenic as inhale it! How much property is annually destroyed by spontaneous combustion, through an ignorance of the circumstances that cause it! What a population of spectres and ghosts and apparitions has been driven from the abodes of all intelligent men, and might be annihilated with regard to all mankind, by a knowledge of the reflection and refraction of light, and of a few other simple laws of Nature! Those terrific races, that once swarmed the earth, have ceased their visits where a few of those principles of science are understood, which every child, if supplied with the means, might easily learn. How pertinaciously have the most diffusive blessings been resisted, — such as the use of lightning conductors, and vaccination, — because devout but ignorant people supposed, that to ward off death, when it came under violent forms, was an impious defiance of the will of Heaven! as though it were not the primary will of Heaven that we should use the means of self-preservation which it has graciously given us. It is not long since, that, in one of our most intelligent cities, a splendid granite church took fire; and when it was found impossible to extinguish the flames in its interior, the chief-engineer forbade the engine-men to play upon the walls, because he well knew that water thrown upon heated granite would decompose it, and he wished to save the materials; but hundreds of others, ignorant of this fact, but only knowing that the engineer belonged to a different religious denomination from the worshippers at the church, attributed the prohibition to his spite against an

opposing sect of Christians; and, while he took the measure which alone could save the property, they supposed he was maliciously delighting himself with the sight of its destruction. In Scotland, during the last century, the introduction of mills for winnowing grain was violently opposed. The whole argument took a theological cast. It was urged, on one side, that the use of a winnowing mill was a resistance of the Divine Will, because it prevented the wind from "blowing where it listeth." But, on the other side, it was gravely answered, that to prevent the wind from "blowing where it listeth," only contravened the will of the "Prince of the power of the air," and was therefore not only lawful, but laudable. Profit and convenience coming to the support of the latter argument, it prevailed. These are specimens only of the most gross and sottish ignorance. Its less palpable forms are indefinitely more numerous, and their consequences, in the aggregate, indefinitely more disastrous. Let any one read such a work as that of Dick "On the Diffusion of Useful Knowledge," and he will be able to form some idea how intimately the private, personal happiness of a people is connected with its intelligence.

But these illustrations are endless. The real fact to be pondered is, that, without diffusing information amongst the people, we shall go on in the same way, smiling at the follies of the last generation, and furnishing anecdotes for the next. There are innumerable ways in which a knowledge of the material world would gladden the obscurest dwelling in the land, and disburden the heart of the humblest individual of fears, anxieties, and sorrows. There are innumerable ways in which an instructed and enlightened man turns the course of Nature to his profit and delight and daily comfort, which an ignorant man would no more think of than a savage would think of burning anthracite coal in the winter to warm him, and of preserving ice over summer to cool him.

All children might learn something of Natural History. This department presents an immense variety of objects, cal-

culated to develop their observing and comparing faculties, at a period of life when these faculties are more active than ever afterwards, and to store the mind with an abundance of materials for the judging and reasoning powers to act upon. To portions of this class of objects, divines and moralists are perpetually referring, in order to illustrate the power and wisdom and perfections of God; and yet, how nearly lost are all such illustrations upon minds that know nothing of those laws of vegetable life which clothe "the lilies of the field" in a beauty beyond the regal glory of Solomon, nor of that animal mechanism that saves the "sparrow" from falling!

The biography of great and good men is one of the most efficient of all influences in forming the character of children; for, as they are prone to imitate what they admire, it unconsciously directs, while it delights them. Let the mind be supplied with definite, exact ideas on any subject, and we all know by experience, that, when an analogous case arises, the related ideas with which we were familiar before will instantaneously spring up in the mind by the law of association. And when correct ideas present themselves spontaneously in this way, they are, to say the least, far more likely to be embodied in action, than if they had first to be laboriously sought out. Especially is this true in emergencies; and how many of the follies and imprudences of men are first committed on emergencies, so sudden as to exclude reflection! On such occasions, to have prototypes of moral excellence in the mind is something like having precedents or examples in the practical concerns or business of life. Although it is a great truth, that all minds have the capacity of distinguishing between right and wrong, yet life presents innumerable instances where the application of these principles is attended with serious difficulty: in such cases, mere ignorance is always the source of error, and often of ruin. And how many excellent men have lived, how many illustrious examples have been set, of which only a very few of the more favored children of this State have ever heard! all others, therefore, being not so

much as invited to follow in the same radiant paths. Why should the examples of benevolence, of probity, of devotion to truth, be lost to so many of our children, whom they might fire with a corresponding love of excellence? Here are real examples of real men, and are, therefore, possible and imitable; and, to the unsophisticated mind of a child, there is as great a difference between real and fictitious personages as there is to a merchant between real and fictitious paper. There never was such an argument in favor of furnishing biographical and scientific truth for children, and against that mass of fictions which are given them for true stories, and not as media or illustrations merely, as the simple question, which ingenuous children so often ask, when reading or hearing a narrative, *Is it true?* It ought to be remembered, that in all the objects and operations of Nature, and in the lives of genuine men, we converse with God and with the course of his providence *at first hand*, and not with mock-shows and counterfeits and hearsays.

There is another kind of reading, which all must admit to be of the very highest importance to our citizens, and of which they are almost universally ignorant; I mean our ante-Revolutionary history. Few, even of our educated men, can claim any familiarity with it; yet there our free institutions germinated. Never, in any other place, nor at any other time, have the great principles of civil and religious liberty been so ably discussed, or been sustained by such heroic trials and sacrifices, as between the first colonization of this country and the peace of 1783. Our country's independence, the birth of a free people, — one of the greatest epochs in the history of the human race, — was the result. Every boy who is not ruined by a false course of instruction passes through a state of mind, between the ages of sixteen and twenty-one, when a study of the principles and deeds recorded in that history would give him some adequate idea what liberty and law are, what they have cost, and what they are worth.

But, when we turn from the outward and material world to

the inward and spiritual life, a wider field for improvement opens before us; for out of the invisible recesses of the mind come all the mighty changes wrought by human power. When an uninstructed person looks upon the outward form of a man, he thinks nothing of the skilfully-adjusted organs, nor of the mysterious functions of vitality, within it. The vibrating nerves, which convey sensation and volition, the contracting muscle, the flowing blood, the health and strength giving processes of nutrition, the dilating lungs, with their adaptations to each other, are all hidden from his untaught gaze. So, when an ignorant man regards the operations of the mind, he discerns only a tumultuary, conflicting tide of wishes and terrors, of pleasures and pains, of doubts and purposes, rising, contending, and subsiding, without order or law. He takes no cognizance of the different powers and faculties with which he has been endowed, of their relative supremacy, of their different spheres of action, nor of their adaptations to his temporal condition; and hence, when he obeys their impulses, it is without the approval of conscience; and when he commands them, it is without the discriminations of reason. Every child, towards the close of his minority, has time and capacity enough, could he be furnished with the means, to acquire much of the knowledge enjoined in that ancient precept, so universally celebrated and sanctioned, "Know thyself."

But, after all, those blessings of knowledge, combined with well-directed feelings, which cannot be enumerated, are infinitely more than any language can express. The greater proportion of the stream of every man's life is hidden in the silent breast, and never emerges into utterance or action. Much as any one may be in the company of the world, he is much more in the company of his own consciousness only. It is the perpetual inflowing of his secret reflections and emotions that mingles sweet or bitter waters in the stream of every man's existence. Whatever reaches the fountains of this stream, is, as far as possible, to be remembered in plans for human amelioration. Few men have battles to fight, or senates to per-

suade, or kingdoms to rule; but all have a spirit to be controlled, and to be brought into subjection to the social and divine law. The intellect forces the great problems of existence and futurity and destiny upon all; and none will question that much depends upon human means, whether a man shall go through the world and out of it, elated by delusive hopes, or tormented by causeless fears.

Among the agencies that operate to these momentous ends, books, certainly, occupy a conspicuous place. Whoever has read modern biography, with a philosophic eye to the causes of the extraordinary characters it records, must have observed the frequent references that are made to some *book*, as turning the stream of life at some critical point in its course. In one of Dr. Franklin's letters, he says, that, when a boy, he met with a book entitled "Essays to do Good," which led to such a train of thinking, as had an influence on his conduct through life. Sir Walter Scott, in his writings and letters, makes repeated and repeated mention of the fact, that he owed his power of painting past times to the books which he read when young. The notorious Stephen Burroughs, a native of a neighboring State, relates in his autobiography, that he was inflamed with military ardor by the perusal of "Guy, Earl of Warwick;" that he ran away from his father three times, — once before he was fourteen years of age, — and enlisted in a regiment of artillery. Twice he was reclaimed, but, at last, he succeeded in escaping, and in the camp, it has been sometimes said, commenced his life of ignominy. Whoever looks deeper, sees that that ignominious life commenced when he was reading a pernicious book. It would be easy to fill pages with similar facts. "When I see a house," says Dr. Franklin, "well furnished with books and newspapers" (of course he meant instructive, and not mere partisan ones), "there I see intelligent and well-informed children; but, if there are no books nor papers, the children are ignorant, if not profligate." It has been frequently remarked by observing men, that towns in which good libraries have been established show a population of intelli-

gence superior to that of towns where none has existed. In a number of towns, recent attempts to establish libraries for grown people have utterly failed. The men and women, not having acquired a taste for useful reading when children, have lost it for life. Let the same course be followed in regard to the present children, and time is not more certain to bring the day when they shall be men and women, than it is to bring the same feelings of indifference towards mental improvement. On the other hand, I have never heard of a well-selected library for children which has failed from their want of interest in it.

And in what way, except by furnishing good libraries to the people at large, can the reading of frivolous and useless books, of novels of the baser sort, and of that contaminating and pestilential class of works which is now hawked around the country, creating moral diseases, or inflaming and aggravating where it finds them, be prevented? These books no law can destroy or reach. No power of persuasion can ever induce those who have acquired a love of reading them to abandon what gives them pleasure, without some equivalent of pleasure is proffered in its stead. But a supply of good books would confer far more than an equivalent. It would prove a remedy where the disease exists, and an antidote where it threatens. Let good books be read, and the taste for reading bad ones will slough off from the minds of the young, like gangrened flesh from a healing wound. Nor will any severity of legislative enactment, nor any vigilance in the administration of the law, ever succeed in the extirpation of gaming, shows, circuses, theatres, and many low and gross forms of indulgence, without the introduction of some moral and intellectual substitutes.

For the purpose of carrying out a plan of improvement, coextensive with the wants of the community, and with the limits of the State, no system can be devised at all comparable with the existing arrangement of school districts. Here are corporate bodies, known to the law, already organized and in ope-

ration. The schoolhouses are central points of minute subdivisions of territory, which, in the aggregate, embrace every inch of ground in the State. There are but few districts in the State which comprise more than a space of two miles square. On an average, they include less than that extent of territory. Here, then, are central points, at convenient distances, distributed with great uniformity all over the Commonwealth; each one with a little group of children — the hope and treasure of the State — dependent upon it for all the means of public instruction they are ever to enjoy. And these points, though now emitting so dim and feeble a light, may be made luminous and radiant, dispelling the darkness, and filling the land with a glory infinitely above regal splendor. Could the children, who are so widely scattered over the surface of the State, laboring, even in their tender years, upon its hills and by its water-falls, — could they assemble, and present themselves before their rulers, and be, for a moment, endued with a vision of their coming fortunes, and speak of the life of toil to which most of them have been born, of their poverty in the means of self-cultivation, or, what is worse than poverty, of their indifference to it; could they proclaim that every passing day is uttering the irreversible oracles of their fate, who could resist the appeal? And can the thought of such an appeal penetrate the heart with less electric swiftness because they cannot make it?

Were any mode to be now devised or discovered by which the soil of the State could be made to yield fourfold its present harvests, with no additional labor or expense; or by which, in some new mode of applying water or steam power, a given expenditure of time and money would return quadruple products in value or in quantity, — could there be found a dissenting voice against its immediate adoption? Yet who will venture to say that one-fourth, or even one-fortieth, part of the mental and moral energies of our children is now put forth and expended in the wisest direction, or for the highest objects? Were the earth beneath us found to be a rich magazine of

mineral treasures, how speedily would the spirit of enterprise invest its capital and ply its enginery in bringing those treasures to light, and in appropriating them to their uses! Why a more contented wastefulness of moral resources than of mineral wealth? Were there wide tracts of the richest soils in the State unreclaimed, how soon would the hand of skilful husbandry enter and till them, and make them teem with luxuriant harvests! Yet, in the obscurest corners of the land, along the by-ways, and under the humblest roofs, there is buried talent, and the suppressed power of extended and godlike benevolence. Could a library containing popular, intelligible elucidations of the great subjects of art, of science, of duty, be carried home to all the children in the Commonwealth, it would be a magnet to reveal the varied elements of excellence now hidden in their souls.

The State, in its sovereign capacity, has the deepest interest in this matter. If it would spread the means of intelligence and self-culture over its entire surface, making them diffusive as sunshine, causing them to penetrate into every hamlet and dwelling, and, like the vernal sun, quickening into life the seeds of usefulness and worth, wherever the prodigal hand of Nature may have scattered them, it would call into existence an order of men who would establish a broader basis for its prosperity, and give a brighter lustre to its name, — who would improve its arts, impart wisdom to its counsels, and extend the beneficent sphere of its charities. Yet not for its own sake only should it assume this work. It is a corollary from the axioms of its constitution, that every child born within its borders shall be enlightened. In its paternal character, the government is bound, even to those who can make no requital. Sacredly is it bound to develop all the existing capacities, and to insure the utmost attainable welfare, of that vast crowd and throng of men, who, without being known, during life, beyond their neighboring hills, — without leaving any enduring name behind them after death, still, by their life-long industry, fill up, as it were, drop by drop, the mighty stream

of the country's prosperity. In the heart of this multitude dwell capacities of good, and possibilities of evil, wholly transcending the power of finite imagination to conceive. Here are an inconceivable extent and magnitude of interests, sympathies, obligations; here are all the great instincts of humanity, working out their way to a greater or less measure of good, according to the light they enjoy; and, compared with this wide and deep mass of unrecorded life, all that emerges into history and is seen of man is as nothing. To a superior being, to whom the world appears as it really is, — whose eye can see through it and round it, — the substance of its weal and woe lies here; and ought not the means of knowledge, and the incitements and the aids to virtue, to be co-extensive with this vast expanse and depth of wants and responsibilities?

Again: it is believed that no barbarous nation has ever been known to history, — amongst whom any form of government had been established, — which had not adopted specific measures to educate the heir of sovereignty for the discharge of his regal duties. And can the obligation to prepare for the responsibilities attendant upon power be less, where all the citizens, instead of one, are born to the inheritance of sovereignty? By our institutions, the political rights of the father descend to his sons in course of law. But the intellectual and moral qualifications necessary for the discreet use of those rights are intransmissible by virtue of any statute. These are personal, not hereditary; and are, therefore, to be taught anew and learned anew by each successive generation. Hence, as the work of education is never done, the means of education should never be withheld; as the former must be continually renewed, the latter must as continually be supplied.

The instruction and pleasure which the parents themselves would experience from the establishment of a good library in their respective districts are too important to be forgotten, and yet are so obvious as to need only a passing reference.

It seems to be the unanimous opinion of the teachers of all schools, whether public or private, that a School Library would

be a most valuable auxiliary in interesting children in their studies. It would inspire the young with the desire to learn, that they might prepare themselves to enjoy what they saw was prized by others. Several of the rudimental studies could be invested, to the eye of the pupil, with new interest and usefulness by its means. If the facts or sentiments contained in the reading-lessons could be illustrated or enlivened by some explanation or anecdote from the library, it would often convert a mechanical routine into a living exercise. If, when the scholars come to the name of Socrates or Luther or Howard, they could turn to a Biographical Dictionary, and find a summary of the lives and deeds of these men, and ascertain their place in chronology and in geography, it would give a sense of reality to the business of the school, while, at the same time, it would acquaint them with important facts. And so of ancient or foreign customs and manners, of memorable events, of remarkable phenomena in Nature, &c. Pupils, who, in their reading, pass by names, references, allusions, without searching, *at the time*, for the facts they imply, not only forego valuable information, which they may never afterwards acquire, but they contract a habit of being contented with ignorance. Under the influence of such a habit, the ardent desire for knowledge, which Nature kindles in the breast of children, will soon be extinguished, and they will come to resemble the irrational creation, which, without thought or emotion, passes by objects of the greatest curiosity and wonder.

Again: access to some library seems indispensable, in all schools where any attention is paid to composition. The ability to express ideas in writing, with vigor and perspicuity, is now deemed so valuable, that, in many places, Composition has been added to the list of Common-school studies. But the earlier exercises of children, in composing (however it may be with the later), can consist of little more than rendering other men's thoughts in their own language. If the most distinguished authors desire to consult books before they attempt the discussion of great subjects, then to require children to write compo-

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sition, without supplying them with some resources whence to draw their materials, is absurdly to suppose, not only that they are masters of a select and appropriate diction in which to clothe their thoughts and feelings, but also that they possess a degree of originality which even the ablest writers do not claim.

For these and other reasons, some of the most judicious and successful teachers have carried into school any little collection of books belonging to themselves, and have realized great benefit from it. Such collections, however, must generally be scanty, and can rarely, if ever, be the most appropriate and useful; besides, such a practice is, at least, liable to misuse. But a well-selected library, — such as that which is now in a course of preparation under the auspices of the Board, — in which all possible respect is paid to the right of private judgment on questions concerning which an unhappy difference of opinion prevails amongst the best men in the community, — such a library would avoid all danger, and increase every benefit. Every legitimate excitement or encouragement brought to bear upon our children in the schools, not only quickens progress, but diminishes the occasion for discipline.

Finally, from all I have heard and learned, it is my belief that the Legislature can do no one thing which shall be so acceptable to the friends of Common-school education in Massachusetts, as to devise some plan by which a school library shall be placed in every district school in the State. By the accomplishment of an object so permanently useful, they will win not only a sincere, but a lasting gratitude. Many of the districts are small; and without some assistance, they may not, for a long time, perhaps never, obtain a library by their own means. When we consider that the average number of all the scholars, in all the public schools, is less than fifty for each, and also how many large schools there are in Boston and other cities, and in the central districts of large towns, we shall at once perceive how many small schools there must be. In the majority of instances, the small schools are in the exterior districts of the

towns. They draw but little money, because of the small number of scholars which they contain. Hence, they have short schools, and seldom give large compensation to teachers. The fact that the schools are small proves that the lands of the district are not very fertile, and also that it is not a place of much trade or business; otherwise the population would be denser and the schools larger. Their means, therefore, cannot be very abundant; and hence the necessity for assistance. There is another consideration which must have great weight with all, who desire, as far as practicable, to furnish equivalents for natural disadvantages. The project of libraries for schools has lately been so much discussed, and has found such general favor with the public, that rich and populous school districts will not long remain without them. This class of large and wealthy districts have much the largest schools; they are able to offer more liberal compensation to teachers; and if, in addition to these advantages, they possess libraries also, while the districts less favorably circumstanced in point of wealth and population are destitute of them, the inequality of condition and privileges already existing will be still further increased. Every well-wisher of his kind will more cordially co-operate in measures which bring forward those who are in the rear, than with measures which still carry farther onward those already in advance. Poverty ought never to be a bar against the attainment of that degree of knowledge which is necessary for the intelligent performance of every duty in life.

After the munificent endowment by the State of two of its colleges, and many of its academies, it is thought that the time has arrived when something should be done for the broader institution of the schools. Whatever claims may be made by the friends of colleges and academies in their behalf, they cannot deny that the Common School is still more important, because on this basis the welfare of the whole people more immediately rests. When the State endowed its first university, and visited it from time to time, for almost two centuries, with substantial proofs of its liberality, it surely did not mean to establish a law

of primogeniture in its favor, and to disinherit the younger members of the family, that is, the Common Schools. It is expected, too, by the friends of the schools throughout the State, that those who have received benefits and enjoyed the honors of a university education, — which is claimed to exert a harmonizing and liberalizing effect upon the mind and character, — will not themselves refute the claim by a want of liberality towards the only institutions where the masses can be benefited.

Amongst all the letters which I have received on the subject of libraries, not one man in his individual capacity, and but one board of school-committee men, has questioned their desirableness and utility. And the reason assigned in the latter case was, that the town to which the committee belonged already possessed a sufficient number of books accessible to all its inhabitants. The conventions held in the different counties have approved and recommended the plan by votes, which, with two exceptions, had not a dissenting voice; and in neither of the excepted cases was there more than half a dozen negative votes. Probably so entire a unanimity would not be found to exist on any other subject whatever.

In view of these facts and considerations, I cannot close this Report without suggesting to the Board the expediency of inviting the special attention of the Legislature to this subject, as one which has an important bearing upon the welfare of the present age, and a bearing still more important upon the welfare of coming generations.

. . . On inspecting the laws of the Commonwealth which provide for public instruction, two grand features stand conspicuously forth; viz., that the benefits of a Common-school education shall be brought within the reach of every child in the State, however poor; and that the property of the State shall support a system of schools adequate to confer this universal education. These provisions are fundamental and organic. They have been in existence from the very infancy of the colony, — a period of about two centuries, — during all

which time the statute-book furnishes no instance of their repeal or modification. The mode of administration has been changed, but not the original basis of the system. The principles have reigned supreme throughout, that the property of the citizens, whether it represented children or not, should support the schools; and that all children, whether they represented property or not, should possess the means of education.

. . . The advantages of Union Schools may be briefly stated under the following heads: — 1. Economy of the plan. 2. Management and Discipline.

. . . The plan of Union Districts commends itself, on the score of economy, to every man who desires to make a given amount of money accomplish more good, or to derive an equal amount of good from less money. In my Report on Schoolhouses, pp. 30, 31, it is arithmetically proved, that, where four districts can be united for this purpose, a given sum of money, which now sustains four summer schools taught by females, and four winter schools taught by males, only four months each, would, under the proposed arrangement, maintain the four summer schools six months each, and a winter school eight months instead of four; would give the master $35 a month instead of $25, and would still leave in the treasury an unexpended balance of $20. The demonstration as to the economy of the plan being there wrought out, and open to the inspection of any one who will examine it, I leave this topic with a single statement illustrative of the necessity of adopting some immediate and efficient remedy. In my circuit last autumn through a part of the State which I had not visited before, I saw six schoolhouses all situated on the same road, the extreme ones of which were but a mile and a half apart, and of course only three-fourths of a mile from a central point. In these the uniform practice had been to employ six females in summer and six males in winter. And thus, as it regards the winter schools, the wages and board of six men had been paid, and fuel for six fires provided, when one male principal, who might have received and been

worthy of the most liberal salary, — with suitable female assistants if necessary, — might have accomplished ten times the good at a greatly reduced expense. All this was acknowledged as soon as pointed out, and assurances of a change gratefully given. How great would be the gain, if the spirit of economy, which is so often active at the town-meeting when the money for schools is granted, could be transferred to its expenditure by a wiser mode of appropriation!

In regard to management and discipline, a more trying situation, to a person of judgment and good feelings, cannot well be conceived, than that of having the sole charge of a school of sixty, seventy, or eighty scholars, of all ages, where he is equally exposed to censure for the indulgences that endanger good order, and for the discipline that enforces it. One of the inquiries contained in the circular letter to the school committees, in 1838, was respecting the ages of the children attending our public schools. By the answers, it appeared, that, in very many places, the schools were attended by scholars of all ages, between four years and twenty, and, in some places, by those between two years and a half and twenty-five; and thus the general regulations of the school, as to order, stillness, and the observance of a code of fixed laws, were the same for infants but just out of their cradles, and for men who had been enrolled seven years in the militia. Now, nothing can be more obvious than that the kind of government appropriate and even indispensable for one portion of these scholars was flagrantly unsuitable for the other. The larger scholars, with a liberal recess, can keep their seats and apply their minds for three consecutive hours. But to make small children sit both dumb and motionless, for three successive hours, with the exception of a brief recess and two short lessons, is an infraction of every law which the Creator has impressed upon both body and mind. There is but one motive by which this violence to every prompting of nature can be committed, and that is an overwhelming, stupefying sense of fear. If the world were offered to these children as a reward for this prolonged silence

and inaction, they would spurn it: the deep instinct of self-preservation alone is sufficient for the purpose. The irreparable injury of making a child sit straight and silent and motionless for three continuous hours, with only two or three brief respites, cannot be conceived. Its effect upon the body is to inflict severe pain, to impair health, to check the free circulations in the system (all which lead to dwarfishness), and to misdirect the action of the vital organs, which leads to deformity. In regard to the intellect, it suppresses the activity of every faculty; and as it is a universal law in regard to them all, that they acquire strength by exercise, and lose tone and vigor by inaction, the inevitable consequence is, both to diminish the number of things they will be competent to do, and to disable them from doing this limited number so well as they otherwise might. In regard to the temper and morals, the results are still more deplorable. To command a child whose mind is furnished with no occupation to sit for a long time silent in regard to speech, and dead in regard to motion, when every limb and organ aches for activity; to set a child down in the midst of others, whose very presence acts upon his social nature as irresistibly as gravitation acts upon his body, and then to prohibit all recognition of or communication with his fellows, — is subjecting him to a temptation to disobedience, which it is alike physically and morally impossible he should wholly resist. What observing person who has ever visited a school where the laws of bodily and mental activity were thus violated has failed to see how keenly the children watch the motions of the teacher; how eagerly, the first moment when his face is turned from them, or any person or object intervenes to screen them from his view, they seize upon the occasion to whisper, laugh, chaffer, make grimaces, or do some other thing against the known laws of the school? Every clandestine act of this kind cultivates the spirit of deception, trickery, and fraud; it leads to the formation, not of an open and ingenuous, but of a dissembling, wily, secretive character. The evil is only aggravated when the teacher adopts the practice of looking out under his eye-

brows, as it is called, or of glancing at them obliquely, or of wheeling suddenly round, in order to detect offenders in the act of transgression. Such a course is a practical lesson in artifice and stratagem, set by the teacher; and the consequence is, that to entrap on the one side and elude on the other soon becomes a matter of rivalry and competition between teacher and pupils. Probably it is within the recollection of most persons, that, after the close of some school-terms, both teacher and pupils have been heard to boast, — the one how many he had insnared, the others how often they had escaped; thus presenting the spectacle of the moral guide of our youth, and the moral subjects of his charge, *boasting* of mutual circumvention and disingenuousness.

Teachers who manage schools with a due observance of those laws with which the Creator has pervaded the human system, are accustomed, when scholars have become restless and uneasy, to send them out to run, or in some way to take exercise, until the accumulation of muscular and nervous energy, which prompted their uneasiness, is expended. They will then return to the schoolroom to sit with composure, or to study with diligence and vigor.

I have deemed this matter of so much consequence, and have found, in some places, such inveterate false habits and modes of thinking respecting it, that I have desired to fortify my own views by those of gentlemen whose authority none will venture to question. Accordingly, I have obtained the opinions of some of the most eminent physicians and physiologists in the State, and have selected three from the number to be placed in the Appendix.*

The remedies for these various evils are the establishment of Union Schools, wherever the combined circumstances of territory and population will allow; the consolidation of two or more districts into one, where the union system is impracti-

* The letters referred to are from Dr. S. B. Woodard, Principal of the State Lunatic Hospital at Worcester; Dr. James Jackson, of Boston; and Dr. S. G. Howe, Principal of the Perkins Blind Institution, South Boston. They entirely confirm Mr. Mann's views.

cable; and, where the population is so sparse as to prevent either of these courses, there to break in upon the routine of the school, either by confining the young children for a less number of hours, or by giving to them two recesses each half-day. The health of the body must be preserved, because it is the only medium through which the brightest intellect and the purest morals can bless the world.

If it were possible to measure or gauge the quantity and quality of instruction which the teacher could give under the union system, compared with that which he can give in a school composed of scholars of all ages, and in all stages of advancement, no further proof in favor of a classification of the children into divisions of older and younger would be needed. A teacher well versed in the better modes of instruction, which are beginning to be adopted, will, in most branches, teach each one, of a class of twenty, more in the same time than he could teach any one individual of the same class. What an accession to his usefulness, that is, to the improvement of the children, would thus be gained! And is it not an unpardonable waste of means, where it can possibly be avoided, to employ a man, at $25 or $30 a month, to teach the alphabet, wheu it can be done much better, at half-price, by a female teacher?

The Union School is found to improve all the schools in the constituent districts. The children in the lower schools look upward to the higher with ambition, and labor more earnestly, that they may be prepared to enter it. So far as my knowledge extends, no districts which have adopted could be induced to abandon it.

. . . A brief consideration of a few of the qualifications essential to those who undertake the momentous task of training the children of the State will help us to decide the question, whether the complaints of the committees, in regard to the incompetency of teachers, are captious and unfounded; or whether they proceed from enlightened conceptions of the nature of their duties and office, and therefore require measures to supply the deficiency.

1st. One requisite is a knowledge of Common-school studies. Teachers should have a perfect knowledge of the rudimental branches which are required by law to be taught in our schools. They should understand, not only the rules, which have been prepared as guides for the unlearned, but also the principles on which the rules are founded, — those principles which lie beneath the rules, and supersede them in practice, and from which, should the rules be lost, they could be framed anew. Teachers should be able to teach *subjects*, not manuals merely.

This knowledge should not only be thorough and critical, but it should be always ready at command for every exigency, — familiar like the alphabet, so that, as occasion requires, it will rise up in the mind instantaneously, and not need to be studied out with labor and delay. For instance: it is not enough that the teacher be able to solve and elucidate an arithmetical question, by expending half an hour of school-time in trying various ways to bring out the answer; for that half-hour is an important part of the school-session, and the regular exercises of the school must be shortened or slurred over to repair the loss. Again: in no school can a teacher devote his whole and undivided attention to the exercises, as they successively recur. Numerous things will demand simultaneous attention. While a class is spelling or reading, he may have occasion to recall the roving attention of one scholar; to admonish another by word or look; to answer some question put by a third; or to require a fourth to execute some needed service. Now, if he is not so familiar with the true orthography of every word, that his ear will instantaneously detect an error in the spelling, he will, on all such occasions, pass by mistakes without notice, and therefore without correction, and thus interweave wrong instruction with right through all the lessons of the school. If he is not so familiar, too, both with the rules of reading, and with the standard of pronunciation for each word, that a wrong emphasis or cadence, or a mispronounced word, will jar his nerves, and recall even a wandering attention, then innu-

merable errors will glide by his own ear unnoticed, while they are stamped upon the minds of his pupils. These remarks apply with equal force to recitations in grammar and geography. A critical knowledge respecting all these subjects should be so consciously present with him, that his mind will gratefully respond to every right answer or sign made by the scholar, and shrink from every wrong one, with the quickness and certainty of electrical attraction and repulsion. In regard to the last-named branch, geography, a study which, in its civil or political department, is constantly mutable and progressive, the teacher should understand, and be able to explain, any material changes which may have occurred since the last edition of his text-book; as, for instance, the erection of Iowa into a territorial government by the last Congress; or, during the last year, the restitution of Syria to the Turkish government through the intervention of the Four European Powers. This establishment of a link between past events and present times, this realization of things as lately done or now doing, sheds such a strong light upon a distant scene, as makes it appear to be near us, and thus gives to all the scholars a new and inexpressible interest in their lessons.

However much other knowledge a teacher may possess, it is no equivalent for a mastership in the rudiments. It is not more true in architecture than in education, that the value of the work in every upper layer depends upon the solidity of all beneath it. The leading, prevailing defect in the intellectual department of our schools is a want of thoroughness, — a proneness to be satisfied with a verbal memory of rules, instead of a comprehension of principles, with a knowledge of the names of things, instead of a knowledge of the things themselves; or, if some knowledge of the things is gained, it is too apt to be a knowledge of them as isolated facts, and unaccompanied by a knowledge of the relations which subsist between them, and bind them into a scientific whole. That knowledge is hardly worthy of the name, which stops with things, as individuals, without understanding the relations

existing between them. The latter constitutes indefinitely the greater part of all human knowledge. For instance, all the problems of plane geometry, by which heights and distances are measured, and the contents of areas and cubes ascertained, are based upon a few simple definitions which can be committed to memory by any child in half a day. With the exception of the comets, whose number is not known, there are but thirty bodies in the whole solar system. Yet, on the relations which subsist between these thirty bodies is built the stupendous science of astronomy. How worthless is the astronomical knowledge which stops with committing to memory thirty names!

At the Normal School at Barre during the last term the number of pupils was about fifty. This number might have been doubled if the visitors would have consented to carry the applicants forward at once into algebra and chemistry and geometry and astronomy, instead of subjecting them to a thorough review of Common-school studies. One of the most cheering auguries in regard to our schools is the unanimity with which the committees have awarded sentence of condemnation against the practice of introducing into them the studies of the university to the exclusion or neglect of the rudimental branches. By such a practice a pupil foregoes all the stock of real knowledge he might otherwise acquire; and he receives, in its stead, only a show or counterfeit of knowledge, which, with all intelligent persons, only renders his ignorance more conspicuous. A child's limbs are as well fitted in point of strength to play with the planets before he can toss a ball, as his mind is to get any conception of the laws which govern their stupendous motions before he is master of common arithmetic. For these and similar considerations, it seems that the first intellectual qualification of a teacher is a critical thoroughness, both in rules and principles, in regard to all the branches required by law to be taught in the Common Schools; and a power of recalling them in any of their parts with a promptitude and certainty hardly inferior to that with which he could tell his own name.

2d. The next principal qualification in a teacher is the *art of teaching*. This is happily expressed in the common phrase, *aptness to teach*, which in a few words comprehends many particulars. The ability to acquire, and the ability to impart, are wholly different talents. The former may exist in the most liberal measure without the latter. It was a remark of Lord Bacon, that "the art of well-delivering the knowledge we possess is among the secrets left to be discovered by future generations." Dr. Watts says, "There are some very learned men who know much themselves, but who have not the talent of communicating their knowledge." * Indeed, this fact is not now questioned by any intelligent educationist. Hence we account for the frequent complaints of the committees, that those teachers who had sustained an examination in an acceptable manner failed in the schoolroom through a want of facility in communicating what they knew. The ability to acquire is the power of understanding the subject-matter of investigation. Aptness to teach involves the power of perceiving how far a scholar understands the subject-matter to be learned, and what, in the natural order, is the next step he is to take. It involves the power of discovering and of solving at the time the exact difficulty by which the learner is embarrassed. The removal of a slight impediment, the drawing aside of the thinnest veil which happens to divert his steps or obscure his vision, is worth more to him than volumes of lore on collateral subjects. How much does the pupil comprehend of the subject? What should his next step be? Is his mind looking towards a truth or an error? The answer to these questions must be intuitive in the person who is apt to teach. As a dramatic writer throws himself successively into the characters of the drama he is composing, that he may express the ideas and emotions peculiar to each; so the

* While writing this paragraph, I received the fifth report of the Glasgow Educational Society's Normal Seminary for 1839. It contains the following: "There is perhaps no mistake so fatal to the proper education and training of youth as the practical error of imagining, that, because a man possesses knowledge, therefore he will be able to communicate it. The knowledge of a Newton or a Bacon would avail little without a proper mode of communication."

mind of a teacher should migrate, as it were, into those of his pupils, to discover what they know and feel and need; and then, supplying from his own stock what they require, he should reduce it to such a form, and bring it within such a distance, that they can reach out and seize and appropriate it. He should never forget that intellectual truths are naturally adapted to give intellectual pleasure; and that, by leading the minds of his pupils onward to such a position in relation to these truths that they themselves can discover them, he secures to them the natural reward of a new pleasure with every new discovery, which is one of the strongest as well as most appropriate incitements to future exertion.

Aptness to teach includes the presentation of the different parts of a subject in a natural order. If a child is told that the globe is about twenty-five thousand miles in circumference, before he has any conception of the length of a mile or of the number of units in a thousand, the statement is not only utterly useless as an act of instruction, but it will probably prevent him ever afterwards from gaining an adequate idea of the subject. The novelty will be gone, and yet the fact unknown. Besides, a systematic acquisition of a subject knits all parts of it together, so that they will be longer retained and more easily recalled. To acquire a few of the facts gives us fragments only; and even to master all the facts, but to obtain them promiscuously, leaves what is acquired so unconnected and loose that any part of it may be jostled out of its place and lost, or remain only to mislead.

Aptness to teach, in fine, embraces a knowledge of methods and processes. These are indefinitely various. Some are adapted to accomplish their object in an easy and natural manner; others in a toilsome and circuitous one; others, again, may accomplish the object at which they aim with certainty and despatch, but secure it by inflicting deep and lasting injuries upon the social and moral sentiments. We are struck with surprise on learning, that, but a few centuries since, the feudal barons of Scotland, in running out the lines around their extensive do-

mains, used to take a party of boys, and whip them at the different posts and landmarks in order to give them a retentive memory as witnesses in case of future litigation or dispute. Though this might give them a vivid recollection of localities, yet it would hardly improve their ideas of justice, or propitiate them to bear true testimony in favor of the chastiser. But do not those who have no aptness to teach sometimes accomplish their objects by a kindred method?

He who is apt to teach is acquainted, not only with common methods for common minds, but with peculiar methods for pupils of peculiar dispositions and temperaments; and he is acquainted with the principles of all methods whereby he can vary his plan according to any difference of circumstances. The statement has been sometimes made, that it is the object of Normal Schools to subject all teachers to one inflexible, immutable course of instruction. Nothing could be more erroneous; for one of the great objects is to give them a knowledge of modes as various as the diversity of cases that may arise, that, like a skilful pilot, they may not only see the haven for which they are to steer, but know every bend in the channel that leads to it. No one is so poor in resources for difficult emergencies as they may arise as he whose knowledge of methods is limited to the one in which he happened to be instructed. It is in this way that rude nations go on for indefinite periods, imitating what they have seen, and teaching only as they were taught.

3d. Experience has also proved that there is no necessary connection between literary competency, aptness to teach, and the power to manage and govern a school successfully. They are independent qualifications; yet a marked deficiency in any one of the three renders the others nearly valueless. In regard to the ordinary management or administration of a school, how much judgment is demanded in the organization of classes, so that no scholar shall either be clogged and retarded, or hurried forward with injudicious speed, by being matched with an unequal yoke-fellow! Great discretion is necessary in the assignment of lessons, in order to avoid, on the one hand, such short-

ness in the tasks as allows time to be idle ; and, on the other, such over-assignments as render thoroughness and accuracy impracticable. and thereby so habituate the pupil to mistakes and imperfections, that he cares little or nothing about committing them. Lessons, as far as it is possible, should be so adjusted to the capacity of the scholar, that there should be no failure in a recitation not occasioned by culpable neglect. The sense of shame, or of regret for ignorance, can never be made exquisitely keen, if the lessons given are so long, or so difficult, as to make failures frequent. When "bad marks," as they are called, against a scholar, become common, they not only lose their salutary force, but every addition to them debases his character, and carries him through a regular course of training which prepares him to follow in the footsteps of those convicts who are so often condemned, that, at length, they care nothing for the ignominy of the sentence. Yet all this may be the legitimate consequence of being unequally mated or injudiciously tasked. It is a sad sight, in any school, to see a pupil marked for a deficiency, without any blush of shame, or sign of guilt ; and it is never done with impunity to his moral character.

The preservation of order, together with the proper despatch of business, requires a mean between the too much and the too little, in all the evolutions of the school, which it is difficult to hit. When classes leave their seats for the recitation-stand, and return to them again, or when the different sexes have a recess, or the hour of intermission arrives, if there be not some order and succession of movement, the school will be temporarily converted into a promiscuous rabble, giving both the temptation and the opportunity for committing every species of indecorum and aggression. In order to prevent confusion, on the other hand, the operations of the school may be conducted with such military formality and procrastination, — the second scholar not being allowed to leave his seat until the first has reached the door, or the place of recitation, and each being made to walk on tiptoe to secure silence, — that a substantial part of every school session will be wasted in the wearisome pursuit of an object worth nothing when obtained.

When we reflect how many things are to be done each half-day, and how short a time is allotted for their performance, the necessity of system in regard to all the operations of the school will be apparent. System compacts labor; and when the hand is to be turned to an almost endless variety of particulars, if system does not preside over the whole series of movements, the time allotted to each will be spent in getting ready to perform it. With lessons to set; with so many classes to hear; with difficulties to explain; with the studious to be assisted; the idle to be spurred; the transgressors to be admonished or corrected; with the goers and comers to observe; — with all these things to be done, no considerable progress can be made, if one part of the wheel is not coming up to the work while another is going down. And if order do not pervade the school as a whole, and in all its parts, all is lost: and this is a very difficult thing; for it seems as though the school were only a point, rescued out of a chaos that still encompasses it, and is ready on the first opportunity to break in and re-occupy its ancient possession. As it is utterly impracticable for any committee to prepare a code of regulations co-extensive with all the details which belong to the management of a school, it must be left with the teacher; and hence the necessity of skill in this item of the long list of his qualifications.

The government and discipline of a school demands qualities still more rare, because the consequences of error in these are still more disastrous. What caution, wisdom, uprightness, and sometimes even intrepidity, are necessary in the administration of punishment! After all other means have been tried, and tried in vain, the chastisement of pupils found to be otherwise incorrigible is still upheld by law and sanctioned by public opinion. But it is the last resort, the ultimate resource, acknowledged on all hands to be a relic of barbarism, and yet authorized because the community, although they feel it to be a great evil, have not yet devised and applied an antidote. Through an ignorance of the laws of health, a parent may so corrupt the constitution of his child as to render poison a

necessary medicine; and, through an ignorance of the laws of mind, he may do the same thing in regard to punishment. When the arts of health and of education are understood, neither poison nor punishment will need to be used, unless in most extraordinary cases. The discipline of former times was inexorably stern and severe; and, even if it were wished, it is impossible now to return to it. The question is, what can be substituted, which, without its severity, shall have its efficiency?

But how important is the relation in which a teacher stands towards a supposed offender! If the grounds of suspicion are presumptive only, how nice the balance of judgment in which they should be weighed, lest, on the one hand, injustice be done by bringing a false accusation against the innocent; or lest, on the other, a real offender should escape through mistaken confidence and charity! If there be sufficient ground to put a pupil upon trial, the teacher in his own person combines the characters of the law-maker, by whom the rule, supposed to be transgressed, was enacted; of the counsel who examines the witnesses; of the jury who decides upon the facts; and of the judge interpreting his own law, and awarding sentence according to his own discretion. And, after all this, he is the executive officer, inflicting the penalty himself has awarded, unless that penalty is remitted by the pardoning power, which also resides in him. Often, too, this representative or depositary of so many functions is himself the person supposed to be offended; and thus he presents the spectacle of a party in interest trying his own cause, and avenging his own insults against his own dignity. If he suffers the out-door consequences of inflicting punishment to enter his mind, his fears will become his counsellors, and they will be as false as his pride. This specification is not given for the purpose of excepting to that usage which makes the teacher the sovereign of the schoolroom, but only to show what danger of error there must be when teachers are employed who have had neither experience nor instruction, and whose judgment years have not yet begun to ripen. Are there not teachers to whom all the children in the district are intrusted

for their education, and for all the momentous and enduring interests connected with that word, to whom scarcely a parent in the district would surrender the care and management of his own children for the same length of time? Yet how much less incapable would the teacher be of governing and controlling a family of five or six children than a school of fifty or sixty! Every child ought to find at school the affection and the wisdom which he has left at home; or, if he has left neither wisdom nor affection at home, there is so much more need that he should find them at school.

A school should be governed with a steady hand, not only during the same season, but from year to year; substantially the same extent of indulgence being allowed, and the same restrictions imposed. It is injurious to the children to alternate between the extremes of an easy and a sharp discipline. It is unjust also for one teacher to profit by letting down the discipline of a school, and thus throw upon his successor the labor of raising it up to its former level.

4th. In two words the statute opens to all teachers an extensive field of duty, by ordaining that all the youth in the schools shall be taught "*good behavior.*" The framers of the law were aware how rapidly good or bad manners mature into good or bad morals; they saw that good manners have not only the negative virtue of restraining from vice, but the positive one of leading, by imperceptible gradations, towards the practice of almost all the social virtues. The effects of civility or discourtesy, of gentlemanly or ungentlemanly deportment, are not periodical or occasional, merely, but of constant recurrence; and all the members of society have a direct interest in the manners of each of its individuals; because each one is a radiating point, the centre of a circle which he fills with pleasure or annoyance, not only for those who voluntarily enter it, but for those, who, in the promiscuous movements of society, are caught within its circumference. Good behavior includes the elements of that equity, benevolence, conscience, which, in their great combinations, the moralist treats of in his books of ethics, and

the legislator enjoins in his codes of law. The schoolroom and its playground, next to the family table, are the places where the selfish propensities come into most direct collision with social duties. Here, then, a right direction should be given to the growing mind. The surrounding influences which are incorporated into its new thoughts and feelings, and make part of their substance, are too minute and subtle to be received in masses like nourishment; they are rather imbibed into the system unconsciously by every act of respiration, and are constantly insinuating themselves into it through all the avenues of the senses. If, then, the manners of the teacher are to be imitated by his pupils, if he is the glass at which they "do dress themselves," how strong is the necessity that he should understand those nameless and innumerable practices in regard to deportment, dress, conversation, and all personal habits, that constitute the difference between a gentleman and a clown! We can bear some oddity or eccentricity in a friend whom we admire for his talents or revere for his virtues; but it becomes quite a different thing when the oddity or the eccentricity is to be a pattern or model from which fifty or a hundred children are to form their manners. It was well remarked by the ablest British traveller who has ever visited this country, that, amongst us, "every male above twenty-one years of age claims to be a sovereign. He is, therefore, *bound to be a gentleman.*"

5th. On the indispensable, all-controlling requisite of moral character, I have but a single suggestion to make in addition to those admirable views on this subject which are scattered up and down through the committees' reports. This suggestion relates to the responsibility resting on those individuals who give letters of recommendation or certificates of character to candidates for schools. Probably one-half, perhaps more, of all the teachers in the State are comparatively strangers in the respective place where they are employed. Hence the examining committee, in the absence of personal knowledge, must rely upon testimonials exhibited before them. These consist of credentials brought from abroad, which are sometimes obtained

through the partialities of relationship, interest, or sect; or even given lest a refusal should be deemed an unneighborly act, and the applicant should be offended or alienated by a repulse. But are interests of such vast moment as the moral influence of teachers upon the rising generation to be sacrificed to private considerations of relationship or predilection, or any other selfish or personal motive whatever? It may be very agreeable to a person to receive the salary of a teacher, but this fact has no tendency to prove his fitness for the station: if so, the poorhouse would be the place to inquire for teachers; and what claim to conscience or benevolence can that man have who jeopards the permanent welfare of fifty or a hundred children for the private accommodation of a friend? In regard to pecuniary transactions, it is provided by the laws of the land, that whoever recommends another as responsible and solvent becomes himself liable for the debts which may be contracted, under a faith in the recommendation, should it prove to have been falsely given. The recommendation is held to be a warranty; and it charges its author with all its losses incurred, within the scope of a fair construction. It is supposed that, without this responsibility, the expanded business of trade and commerce would be restricted to persons possessing a mutual knowledge of each other's trustworthiness or solvency. But why should the precious and enduring interests of morality be accounted of minor importance, and protected by feebler securities than common traffic? Why should the man who has been defrauded by an accredited peddler have his remedy against the guarantor, while he who is instrumental in inflicting upon a district, and upon all the children in a district, the curse of a dissolute, vicious teacher, escapes the condign punishment of general execration? In the contemplation of the law, the school committee are sentinels stationed at the door of every schoolhouse in the State to see that no teacher ever crosses its threshold who is not clothed, from the crown of his head to the sole of his foot, in garments of virtue; and they are the enemies of the human race, — not of contemporaries only, but of

posterity, — who, from any private or sinister motive, strive to put these sentinels to sleep in order that one who is profane or intemperate, or addicted to low associations, or branded with the stigma of any vice, may elude the vigilance of the watchmen, and be installed over the pure minds of the young as their guide and exemplar. If none but teachers of pure tastes. of good manners, of exemplary morals, had ever gained admission into our schools, neither the schoolrooms nor their appurtenances would have been polluted as some of them now are with such ribald inscriptions, and with the carvings of such obscene emblems, as would make a heathen blush. Every person, therefore, who indorses another's character, as one befitting a school teacher, stands before the public as his moral bondsman and sponsor, and should be held to a rigid accountability.

It will ever remain an honor to the Commonwealth of Massachusetts, that among all the reports of its school committees for the last year, so many of which were voluminous and detailed, and a majority of which probably were prepared by clergymen belonging to all the various denominations in the State, there was not one which advocated the introduction of sectarian instruction or sectarian books into our public schools; while, with accordant views, — as a single voice coming from a single heart, — they urge, they insist, they demand, that the great axioms of a Christian morality shall be sedulously taught, and that the teachers shall themselves be patterns of the virtues they are required to inculcate.

The limits proper for a report debar me from pursuing the topics under this head into further detail. It may, however, be briefly observed, on the one hand, that there are some delinquencies on the part of a teacher, such as the commencement of a school without having submitted to an examination by the committee as required by law; the unauthorized introduction of books into the school which are not contained in the list furnished by the committee; and the open disregard of directions given by the committee in respect to the classification or management of the school; all or either of which prove that the

teacher is destitute of good principles, that he is capable of a wilful violation or evasion of the laws of the State, and which, therefore, demonstrate his unfitness to fill a place where a spirit of subordination and of obedience to legitimate authority is among the lessons to be taught by practice as well as by precept. On the other hand, I can only refer to those eminent advantages which would accrue from employing a teacher, who, in addition to the qualifications enumerated in the statute-book, should possess a mind filled with stores of knowledge collateral to the branches pursued in the school; so that the pupils from day to day might not only be enlivened and instructed by apposite anecdote and impressive illustration, but be led to emulate the attainments which it is their delight to witness in him. So too, if from the extent of the teacher's acquirements, and the worth and dignity of his character, his society should be sought by all the families in the neighborhood; and, as he visited from house to house, he should exhibit a living example of those powers of instructing and of pleasing which are derived from intellectual resources and benevolence of disposition, — he would imbue the youth of the district with the love of knowledge and the desire of excellence, and thus lay the foundation of tastes, habits, and institutions which would shed their pure and ennobling influences over a long tract of future time. It is an authentic anecdote of the late Dr. Nathaniel Bowditch, that when, at the age of twenty-one years, he sailed on an East-Indian voyage, he took pains to instruct the crew of the ship in the art of navigation. Every sailor on board, during that voyage, became afterwards a captain of a ship. Such are the natural consequences of associating with a man whose mind is intent upon useful knowledge, and whose actions are born of benevolence.

CONSTANCY AND PUNCTUALITY OF ATTENDANCE.

. . . After the territory of the State has been judiciously districted, good schoolhouses prepared, the scholars all provided both with the requisite number and proper kinds of books, and the town has made appropriations sufficiently liberal to com-

mand the services of well-qualified teachers, — after all these preliminaries have been attended to, *the power of money ceases.* Up to this point the possession of property, and a spirit of liberality in bestowing it, are indispensable; but here their agency terminates. The schools here pass, as it were, under a new jurisdiction, — from material to moral influences; and if not cherished by the latter, they might as well have never been founded. So far, it is external organization, the preparation of an outward form merely; but it is yet a cold, inert, dead mass, a body of clay. A vitality, a genial warmth, a living principle of energy, are now to be infused and spread through every fibre of this organized frame, or all the skill and cost which have been expended in its formation will be lost; or what is far worse, and perhaps far more probable, that body will corrupt, and in its corruption engender a thousand pernicious forms of life. Moral power is now to be added to pecuniary, or the pecuniary had better never have been exerted.

Under this head, the first thing in the order of time, if not the first in point of importance, is the constant and punctual attendance of the scholars. Without authentic information on the subject of irregularity in attendance, the extent to which it has prevailed would have been wholly incredible. According to the school census of last year, the whole number of children in the State between the ages of four and sixteen was one hundred and seventy-nine thousand two hundred and

sixty-eight		179,268
The average attendance during the summer of the same year (1839–40) was		92,698
Do. during the winter		111,844
Of the number attending who were under four years of age, there were	7,844	
Do. over sixteen years of age . . .	11,834	
		19,678

If the children under four years of age, who attended school, are deducted from the aggregate of attendance in summer, and those over sixteen

years from the aggregate of attendance in winter, the average attendance of those between four and sixteen will stand thus: —

For summer	84,854
For winter	100,010

And allowing twelve thousand as the number of the children who derive their whole education from academies and private schools, and therefore are not dependent upon the Common Schools at all, and deducting this number from the number of children in the State who are between the ages of four and sixteen years (thus 179,268 — 12,000 = 167,268), and the proportion of those who attend the Common Schools in summer, compared with the whole number dependent upon those schools, is as 84,854 to 167,268, or a very small fraction more than one-half; and the proportion of those who attend the same schools in winter, compared with the whole number dependent upon them, is as 100,010 to 167,268, or about ten-seventeenths only.

One striking aspect of this lamentable fact is the waste of money which it proves. The amount raised by taxes last year for teachers' wages and board, and fuel for the schools, was $477,221.24. Of the portion of this sum which was expended for the summer schools, about one-half was lost, and of the portion expended for the winter schools, about seven-seventeenths, through irregularity in the attendance of the scholars; that is, of the $477,221.24 raised for the support of our public schools, more than two hundred thousand dollars was directly thrown away by this voluntary abandonment of privileges. Nor, in this computation, is any thing included for interest on the cost of schoolhouses; for the loss of an equal proportion of the amount contributed for public schools ($37,269.74); for an equal proportion also of the income (about $20,000) of the State school fund; of the income also (15,270.89) of local funds for public schools; and of such portions of the income of the surplus revenue as individual towns have appropriated for the support of the schools. Vast, enormous as the main item

of the pecuniary loss is, a proportional loss from these sources (which in the whole amount to more than $75,000) would materially enlarge it. If made out with the exactness of a business account, it would startle every business man in the community. Is it a subject for less surprise and regret because it is an educational account? What manufacturing or other business establishment could prosper if its laborers should absent themselves for a corresponding proportion of the time? What a direful calamity it would be justly deemed if some wide-spreading epidemic should visit the State from year to year, and deprive its children of an equal amount of their school privileges! It is well remarked, in one of the reports, that the promulgation of a law which should deprive the children of so noble a boon would produce a stamp-act ferment.

Who, beforehand, could have deemed it possible that a people so renowned for the virtues of frugality and economy, for their skill in turning limited means to a great account, would have tolerated this extent of wastefulness? The fact can be explained only on the ground that we were unaware of its existence. A parent who surmounts no obstacles to get his children daily to school, or who keeps them at home to subserve the pettiest convenience, has no conception how rapidly the column of absences lengthens, nor of the amount of its footing at the end of the term. He does not see, that, for every day's absence of his child, so much mental nourishment is withheld, his growth so much retarded, and that he is preparing to send out that child into the world an intellectual dwarf.

But, with the industrial habits of our community, this amount of money can be re-earned; indeed, it bears no proportion to the annual products of our labor and skill. But an item of loss is involved which neither labor nor skill can ever repair. The *time* is irrevocable. The spring-season of human life once past cannot be restored. The seed-time lost, the harvest also is lost. This forfeiture is without redemption.

The period during which, as a general rule, our children attend school, viz. between the ages of four and sixteen years,

is twelve years. The proportion of twelve years corresponding with this amount of absences is more than five years; and therefore the children, on an average, for so much of the period of life that should be sacredly devoted to education, are deprived of its benefits. It must also be remembered that this deduction is not made from an entire year, but from the period of seven months and ten days, which was last year the average length of the schools; so that schools, originally far too short, are cut down to a little more than half their apparent length, and so much even of a scanty mental subsistence is taken away. When Dr. Franklin said, "Time is money," he referred to adult's: with children, time is more valuable than money; it is education.

Our law, in establishing the legal age of majority, or period of emancipation from parental control, at twenty-one years, has followed the clear indications of nature. The period of minority and tutelage which precedes this age is necessary for the growth and preparation required for the labors and duties of manhood. And the indications of nature are equally clear in regard to the mind. The young mind needs the instruction and guidance of more mature minds; it needs instruments and aids which it is incapable of preparing for itself; nay, of the very existence of which it is itself ignorant until the full period, or nearly the full period, of legal minority has passed. Were it not so, the young of the human race would have come to their bodily and mental maturity, like the young of the inferior animals, at an earlier period, at the end of a month or a year, or at farthest at the end of a few years. It is this extensive and irrevocable portion of early life, proved by all observation and analogy to be so essential to a preparation for the duties of manhood, that is withdrawn; and yet, when these neglected children shall arrive at the state of manhood, the duties belonging to that state will be required of them, or society, in some or in all of its relations, must suffer the penalty.

The main trunk of this evil of non-attendance sends off numerous branches, each of which is laden with its own peculiar

kind of bitter fruit. One effect is the injustice done to the teacher. If the register of the school bears the names of seventy different scholars, while the school is reduced by absences to an average of fifty, the common inference is, that although seventy is a greater number than one teacher can properly instruct, yet that he must be in fault if he does not teach the fifty in a competent manner, and advance them at a rapid rate. And yet a school averaging fifty scholars, reduced to that number from seventy by absences, is far more difficult, both to instruct and to govern, than a school of a hundred, all of whom attend regularly. A teacher, therefore, ought to be excused, not blamed, if he does not carry a small number of scholars rapidly forward if the number is made small by irregularity in attendance; yet those who send their children most irregularly are among the first to complain that they make little progress. The law (under a certain condition) requires the employment of an assistant teacher in all the public schools when the average number of scholars is fifty. But the principal teacher needs an assistant quite as much when a school of fifty is reduced to an average of thirty by absences as when it rises to seventy by a regular attendance of all the scholars belonging to it.

Again: if parents keep a child at home for two or three days, or for three or four half-days, in a week, he must, at least, be stationary, while the class to which he belongs is advancing. Hence, on his return to the school, he is not in a suitable condition to rejoin his class. But, generally, there is no other class in which he can be placed: and the formation of new classes to meet these cases would soon destroy classification altogether; because the classes would soon become as numerous as the scholars; and the school, which should march onward in regular divisions, would be reduced to a promiscuous throng of stragglers. Unless in extraordinary cases, therefore, the absent scholar must resume his place in the class; but, as the correct understanding of each successive step in his studies depends upon his having mastered the preceding steps, he is almost

necessarily incapacitated for intelligent study and good recitations. Out of this come, not merely loss of knowledge, but habits of incorrectness. The pupil, accustomed to failures and mistakes, is hardened into indifference; he loses the greatest incitement to study, — the pleasure of understanding his lessons; becomes careless, mischievous, disobedient; draws down upon himself the displeasure of the teacher, perhaps punishment; has all his associations established, adverse to learning; looks for pleasure elsewhere; is disgusted with the school; and, as soon as possible, forfeits its privileges by abandonment, — the victim of irregular attendance.

The previous half-day, when a child expects to be absent, and the half-day after he has been so, are worth but little, even with good scholars. A child must have an almost inconceivable love of the school to desire to be there, when he knows that his ignorance of the lessons is to be put in direct and public contrast with the knowledge of his classmates; and he must have an almost incredible love of knowledge to derive any gratification from the broken fragments of it which he can obtain at these irregular intervals. The spirit of pride, which would prompt him to stay away from the final examination of the school, lest he should be questioned upon parts of a study which he had never seen, or upon parts dependent upon what he had never seen, would promise as much for the character of the future man, as the spirit of indifference that could tamely bear the exposure.

Irregularity of attendance in any one member of a class is an act of injustice to every other member of it. After an absence, whether longer or shorter, the pupil, on his return, must inevitably learn his lessons in a very imperfect manner. He occupies double his share of the time at a recitation; he requires double the amount of explanations from the teacher; and these explanations, having been previously given, are not necessary for the others. Hence, the absent scholars are a perpetual clog upon the class. The advanced body must wait, while the laggards are coming up; and thus not only the

absentees themselves, but the reputation of the teacher, the condition of the school, the character of the district, are all made to suffer the consequences of the guilt of unnecessary absence.

The effects of a want of punctuality, though less in extent, are similar in kind; co-existing, they are a mutual aggravation.

But, without entering into further detail respecting the losses, embarrassments, and injustice, resulting from this common delinquency, it becomes a matter of primary importance to inquire what measures can be adopted to dry up a fountain of mischief, which sends forth such copious streams.

The first thing to be done is to render the schoolhouse, both by its external appearance and its internal conveniences, a place of attraction; or, at any rate, to prevent it from being a place odious to the sight, and painful to the bodies and limbs, of the pupils. The excuses and contrivances of the children to stay away from a repulsive, unhealthful schoolhouse seem to be preventives, which Nature, in her wise economy, has provided, to escape the infliction of permanent evils.

The teacher can do much, in various ways, to diminish the cases of absence and tardiness. When the question is debated, at the evening fire-side or at the breakfast-table, whether a child shall stay at home or go to school, the child has a voice and a vote, and often the casting vote, in its decision. If he loves the school, he will be an able advocate for the expediency of attending it. If errands or any little household services are to be done, the child will rise an hour earlier, or sit up an hour later, or bestir himself with greater activity, to accomplish them, that he may attend the school. For this object, he will forego a family holiday, postpone the reception or the making of a visit, endure summer's heat, or brave winter's cold. On the contrary, if the pupil looks towards the school with aversion; if his heart sinks within him when the name of the teacher is mentioned, or his image is excited, — then every pretence for absence will be magnified, and invention will be

active in fabricating excuses. In the former case, he would almost feign to be well when he was sick; here, he will feign to be sick when he is well. Hence it will very often happen, that the pleas or excuses of the pupil himself will determine the question of going or staying; and it depends primarily upon the teacher which way this steady and powerful bias shall incline.

During the first part of the school-term, and while the habits of the pupils are forming, a skilful teacher may do much towards inspiring a laudable pride in the scholars, in regard to constancy and promptness. He can cause a public opinion to be spread through the school, that absence or tardiness, without the strongest reasons, is a stigma on the delinquent, a dishonorable abandonment of the post of duty. When errors are committed, or difficulties felt, in consequence of either of these causes, he can point out the relation between the cause and its effect, and warn against a repetition. To save the feelings of a child who comes late, or after a half-day's absence, and renders a valid excuse, he can acquit him before the school of the apparent neglect. He can refer to the state of the Register in a brief remark at the close of the day; taking occasion, if the attendance is full, to commend the scholars for it, — to express his regret and mortification if it is not; but always so measuring and attempering his blame and his praise, that none shall be disheartened by the severity of the former, and that the latter shall not become valueless by its superabundance. If regularity and punctuality could be secured, during a four months' school, by expending an entire week in this way at its beginning, the loss would be repaid sevenfold before its close. If the teachers have not consideration enough to speak on these subjects to their pupils, how can they expect that the pupils, unprompted, will originate proper views concerning their importance?

There is one act of justice which a teacher, who demands punctuality, should never fail of rendering. Let him observe the golden rule, and, when he demands punctuality of his pupils,

be punctual himself, — punctual, not only in the hour of commencing his school, but in the hour of closing it. Pupils have a sense of justice on this subject: if the regular intermission is an hour, and the afternoon session commences at one o'clock, they want to be dismissed at twelve. In this respect, let the teacher bestow what he demands, and enforce his precept by his example; or, at least, when the morning or the evening hour arrives for dismissing the school, let him bring its exercises to a pause, and give his pupils an option to retire or to remain. Years of mere talk are often lost upon children, while a practical lesson is never without its effect.

Some teachers have adopted the plan of sending, to the parents and guardians of all the scholars, weekly reports, or cards, containing an account of all cases of absence or tardiness. In some instances, these cards contain also a description of the quality of recitations, of the general deportment of the children, or whatever else the teacher desires the parent or guardian to be acquainted with.

To secure a prompt attendance at the opening of the school, each half-day, some teachers make it their practice, during the first five or ten minutes of the school, to have an exercise in vocal music, or to relate some useful and instructive anecdote, or to read an interesting incident from a biography, or to give a description of a curious fact in natural history; or, where there is apparatus, to perform, occasionally, a striking experiment, and explain to what department of business or the arts it is related; to show the pupils, for instance, that, in an exhausted receiver, a feather falls as rapidly as a stone; that, without air, gunpowder will not burn; how a steam-engine is made, or a rainbow formed. Why should all the curiosity of children be pent up for months, to vent itself, at last, on the occasion of raree-shows, circus-riding, or militia musters?

The teacher ought also to visit the parents of children who attend irregularly, and kindly and affectionately to expostulate with them on the irremediable injury they are inflicting on

their offspring, both by the time they lose, and the bad habits they form.

In several of the larger towns in the State, the school-committees have enacted positive regulations, excluding for the forenoon or afternoon session all who come late; and for the residue of the term, all who are absent, unless from sickness or some other disabling cause, for a fixed number of days or half-days. There may be some objections to this course, — such as the fact, that truant-dispositioned boys may contrive to be absent the requisite number of days, or half-days, for the very purpose of being excluded afterwards; but almost any other evil is less than the combined influence of the innumerable throng that follow in the train of a general irregularity and tardiness. For most of the scholars, this last-mentioned method is very effectual. It is the practice of many of the lyceums in the State to close the doors of the lecture-room at a given hour; and railroad-cars and steam-boats have a fixed time for starting, — the consequence of which is that everybody is punctual; and, were all the gains of this punctuality added together, it would be found that years of time are saved daily by the regulation.

Some towns, in order to bring the force of a pecuniary motive to bear upon the subject, distribute the school-money among the districts, not in the ratio of the children between four and sixteen years of age, but in the ratio of their attendance upon the schools.

Although teachers, as a body, can do more than any other class in the community to abate the evils of inconstant and tardy attendance; although school-committees can do something through the instrumentality of school-regulations, and even towns can make their appropriations of money subserve the same end; yet neither of these, nor all of them united, can complete the work. The final, authoritative decision, in each case, rests with parents. They, therefore, should be appealed to with the most earnest and importunate solicitations, not to be guilty of so great cruelty to their own children, of so

great injustice towards the teacher and towards their neighbors, as to cause or suffer those children, except in cases of imperious necessity, to be absent from the school a single day of the term or a single hour of the day. From time immemorial, in all schools, truantship has been regarded as a high offence in a pupil, and forbidden under the sanction of severe corporal punishment; but it is difficult to see why an unnecessary absence from school at the pleasure of the child is worse than an unnecessary absence at the pleasure of the parent. The real cause of the difficulty must be, that parents are not aware of its existence, and of the manifold mischiefs it involves. Until recently, even the well-informed friends of education were not apprised of its magnitude; as, before the use of the Register, no authentic means of making it known existed. The diffusion of a knowledge, both of the fact and of its consequences, cannot fail to produce a remedy; and for this purpose, as I have elsewhere suggested, the reading of the Abstracts, at meetings of the inhabitants of the districts convened at the schoolhouse, or other convenient place; the circulation of their contents by means of lectures and newspapers; the visitation of negligent parents by the teachers and by the committees; together with conversations held, on all proper occasions, by those who know more of the subject with those who know less, — will be rapid and effectual means of conveying the information to the very individuals who need it, and must lead, in the end, to a much-needed reform. It is surprising and cheering to know what can be done by the combined and harmonious exertions of all to accomplish this object. There were many families of children, last winter, who did not miss a single day in their attendance; and in one school, although the roads were almost impassable from snow, there was scarcely the absence of a scholar during the whole school-term.

If the school is to continue four months, and parents or guardians cannot send their children more than two or three, let them be sent continuously while they are sent at all, and

taken wholly from school the residue of the time. Six weeks of constant attendance is better than three months scattered promiscuously over a four-months' school. So, if nine o'clock comes too early in the morning for punctual attendance, let the school begin at ten, or even at half-past ten. Almost any thing is better for children than to form the pernicious habit of tardiness, which, in regard to the rights of others, has all the practical effect of dishonesty, and varies but a shade from it in the motive.

Notwithstanding the melancholy view of the subject presented by existing facts, yet when we consider the excessive severity of the last winter; the depth of snow, which for a long period overspread all the inland counties, rendering the roads nearly impassable for weeks together; and also the fact, that, in many places, children suffered to an extraordinary degree from epidemic sickness, — the average attendance was better than in former years. It was not until last year that any return was ever made of the children under four and over sixteen years of age attending the schools. The number was found to be about twenty thousand. Heretofore, in comparing the average number of children in school with the whole number of children in the State between four and sixteen years of age, for the purpose of ascertaining what proportion of the whole number were in school, those who were below the age of four, and above that of sixteen, have been reckoned as between four and sixteen, and thus have materially swelled the apparent proportion of attendants.

MANIFESTATION OF PARENTAL INTEREST.

Sovereign, reigning over and above all other influences upon the school, is, or rather might be, that of the parents. The father, when presiding at his table, or returning home at evening from the labors of the day; the mother, in that intercourse with her children which begins with the waking hour of the morning and lasts until the hour of sleep, — enjoy a continuing opportunity, by arranging the affairs of the household in

such a way as to accommodate the hours of the school; by subordinating the little interests or conveniences of the family to the paramount subject of regular and punctual attendance; by manifesting such an interest in the studies of each child, that he will feel a daily responsibility, as well as a daily encouragement in regard to his lessons; by foregoing an hour of useless amusement or a call of ceremony, in order to make a visit to the school; by inviting the teacher to the house, and treating him, not as a hireling, but as a wiser friend; by a conscientious care in regard to their conversation about the school, and their award of praise or blame; in fine, by all those countless modes which parental affection, when guided by reason, will make delightful to themselves, the parents can inspire their offspring with a love of knowledge, a habit of industry, a sense of decorum, a respect for manliness of conduct and dignity of character, prophetic of their future usefulness and happiness and honor.

For one who has not traversed the State, and made himself actually acquainted with the condition of the schools by personal inspection and inquiry, it is impossible fully to conceive the contrasts they now present. I have no hope, therefore, of making myself adequately understood, when I say, that in contiguous towns, and even in contiguous districts, activity and paralysis — it is hardly too much to say life and death — are to be found side by side. Wherever a town or district has been blessed with a few men, or even with a single man, who had intellect to comprehend the bearings of this great subject, and a spirit to labor in the work, there a revolution in public sentiment has been effected, or is now going on. In some districts, last winter, the prosperity of the school became a leading topic of conversation among the neighbors; the presence of visitors, from day to day, cheered the scholars; a public spirit grew up among them, animating to exertion, and demanding courteous, honorable, just behavior; the consequence of which was, that, by a law as certain as that light comes with the rising of the sun, a proficiency surpassing all former example was made; and, when

the schools drew to a close, a crowd of delighted spectators attended the final examination, which, from the interest and the pleasure of the scene, was prolonged into the night. In some places, the visitors who did not come early to this examination could not obtain admittance on account of the crowded state of the house; and in one, although a cold and driving snow-storm lasted through the day, yet a hundred parents attended, whom the inclemency of the weather could not deter from being present to celebrate this harvest-home of knowledge and virtue; while on the same occasion, in an adjoining town, perhaps in a bordering district, a solitary committee-man dropped grudgingly in to witness a half-hour of mechanical movements, got up as a mock representation of knowledge, and to look at the half-emptied benches of the schoolroom made vacant by deserters. These differences are not imaginary, they are real; and their proximate cause is the interest, or the want of interest, manifested by the parents toward the schools.

It is a celebrated saying of the French philosopher and educationist, Cousin, that "as is the teacher, so is the school." In regard to France and Prussia, where the schools depend so much upon the authority of the government, and so little upon the social influences of the neighborhood where they exist, this brief saying is the embodiment of an important truth; but, with our institutions, there is far less reason for giving it the currency and force of a proverb. Here, every thing emanates from the people: they are the original; all else is copy. If, therefore, the transatlantic maxim, which identifies the character of the school with that of the teacher, be introduced amongst us, it must be with the addition, that "as are the parents, so are both teacher and school."

A visit to the school by the parents produces a salutary effect upon themselves. Although it is feeling which originates and sends forth conduct, yet conduct re-acts powerfully upon feeling; and, therefore, if parents could be induced to commence the performance of this duty, they would soon find it not only delightful in itself, but demanded by the force of

habit. Nor is it any excuse for their neglect, that they are incapable, in point of literary attainments, of examining the school, or of deciding upon the accuracy of recitation. If they have no knowledge to bestow in instruction, they all have sympathy to give in encouragement. Indeed, the children must be animated to exertion before they will make any valuable or lasting attainment. This animation the parents can impart, and thus become the means of creating a good they do not themselves possess.

It is surprising that the sagacity of parental love does not discover that a child, whose parents interest the teacher in his welfare, will be treated much better in school than he otherwise would be; and this, too, without the teacher's incurring the guilt of partiality. If the teacher is made acquainted with the peculiarities of the child's disposition, he will be able to manage him more judiciously, and therefore more successfully, than he otherwise could; he will be able to approach the child's mind through existing avenues, instead of roughly forcing a new passage to it; and thus, in many instances, to supersede punishment by mild measures. A wise physician always desires to know the constitution and habit of his patient before he prescribes for his malady; and a parent who should call a medical practitioner to administer to a sick child, but should refuse to give him this information, would be accounted insane. But are the maladies of the mind less latent and subtile and elusive than those of the body? and is a less degree of peril to be apprehended in the former case than in the latter from the prescriptions of ignorance? I have been credibly informed of a case where a child received a severe chastisement in school for not reading distinctly, when the inarticulateness was occasioned by a natural impediment in his organs of speech. The parent sent the child to school without communicating this fact to the teacher; and, under the circumstances of the case, the teacher mistook the involuntary defect for natural obstinacy. This may seem an extreme case, and one not likely to happen; but, doubtless, hundreds of similar though less discoverable ones,

in regard to some mental or moral deficiency, are daily occurring. Again: if parents do not visit the school until at or near its close, they may then discover errors or evils whose consequences might have been foreseen on an earlier visit, and thus prevented. It is another fact, eminently worthy of parental consideration, that many young and timid children, unaccustomed to see persons not belonging to the family, are almost paralyzed when first brought into the presence of strangers. An excessive diffidence cripples their limbs, and benumbs all their senses; and it is only by their being gradually familiarized to company, that the fetters of embarrassment can be stripped off, and the shy, downcast countenance be uplifted. After a few years of neglect, this awkwardness and shamefacedness become irremediable: they harden the whole frame, as it were, into a petrifaction; and their victim always finds himself bereft of his faculties at the very moment when he has most need of freedom and vigor in their exercise. On the other hand, pert, forward, self-esteeming children, who are unaccustomed to the equitable reciprocities of social intercourse, commit the opposite error of becoming rude, aggressive, and disdainful, whenever brought into contact with society. Now, one of the best remedies or preventives which children can enjoy, both for this disabling bashfulness, and for this spirit of effrontery, is the meeting of visitors in school, where a previous knowledge of what the occasion demands helps them to behave in a natural manner, notwithstanding the consciousness that others are present; and where they are relieved from the double embarrassment of thinking both what they are to do, and how it should be done. Especially is it necessary that mothers should accompany sensitive and timid children when they first go to school, to obviate a distrust of the teacher, or a fear of other children, which might otherwise infix in the mind a permanent repugnance to the place. Whatever confers upon the school a single attraction, or removes from it one feature of harshness, clears the avenue for a more ready transmission of knowledge into the pupils' minds.

RETROSPECT. — NUMBER AND COMBINATION OF INFLUENCES NECESSARY TO A GOOD SCHOOL.

In discussing the various topics embodied in this Report, and in pointing out, under each successive head, the imperfections belonging to it, — imperfections which prevent our school system from conferring those abundant and precious benefits it is capable of bestowing, — I have not been without fear that my remarks might seem to wear an aspect of accusation, and to savor of harshness; and although it might be admitted that no just exception could be taken to the views presented on any particular topic, still, that the tenor of the whole might seem too condemnatory and reprehensive. To be the bearer of unwelcome tidings is proverbially a thankless office; and the fidelity that tells a friend of his faults is too apt to forfeit the friendship which it should have strengthened. Yet to these general rules there are noble exceptions. A wise man wishes to know what is wrong in his affairs, that he may rectify it; and every sincere lover of excellence rejoices to be made acquainted with his faults, that he may correct them. In commenting, therefore, upon what I consider the imperfections of our system, in good faith, and with a single eye to their removal, I have proceeded upon the conviction that our people do possess that wisdom and that love of excellence which desires to "forget the things which are behind," and, in the career of well-doing, to "press forward to those which are before;" and rather to devote their energies to still higher achievements than ignobly to waste them in vain-glorying and self-eulogy. It would have been easy for me — and, could duty have allowed, it would have been delightful — to have occupied much more time, and to have filled a much larger space, in recounting those merits and excellences of our system of free schools, which, abroad as well as at home, it is acknowledged to possess; in pointing to the bright train of blessings which, from age to age, it has been the means of conferring upon the people of this State, which it is now conferring, and, as it remains steadfast while the

generations rise and pass away, it promises still to confer upon unborn millions. But, at best, the pleasure of self-adulation is fleeting, and it leaves no abiding improvement behind.

It should be remembered, too, that, in the administration of our system, a larger share of power is possessed by the people than in any other state or country in the world. If it were true here, that as soon as any error or deficiency became known to the Legislature, or to any central and supervisory body, they could forthwith issue an edict for its correction, such a summary mode of proceeding would supersede the necessity of all explanation. But, where all measures of improvement and reform are to be carried out by the people at large, it becomes necessary that they should first be made acquainted with the evils which it is their interest and duty to remedy; and, for this purpose, I have endeavored faithfully to perform the unwelcome task of describing them.

The explanation, and, to some extent, the excuses, for the deficiencies here enumerated, are to be found in the number and complexity of the parts whose combined and harmonious action is essential to a good school. We have no other institution where such a confluence of favorable influences is necessary to the production of the desired result; nor have we any whose usefulness is so liable to be impaired, or even destroyed, by a single adverse tendency. A long train of measures is requisite to accomplish the end, and a failure in any one of the series is ruin. If the schoolhouse be bad, in regard to its location or internal construction, then not only will the improvement in the children's minds be materially lessened, but the healthiness of their bodies will be exposed to continual danger. If the house be otherwise well built, but deficient in the single requisite of ventilation, two-thirds of all the intellectual power of the children will be destroyed at the very moment when they are called upon to exercise it. In the whole range of science, no fact is better established than that the breathing of impure air benumbs and stupefies every faculty; and, therefore, to call upon children to study or understand or remember, while we give them impure air for breathing, is

as absurd as to put fetters upon their limbs when we wish them to run swiftly, or to interpose an opaque body between their eyes and any object which we wish them to see clearly. But if the schoolhouse be the best that art can build, yet, if the town grants only penurious sums of money, the school will but just begin when the means of supporting it will end. This is the false economy of saving in the seed, though thirty or sixty or a hundred fold be lost in the harvest. Even when the town makes liberal grants of money, in proportion to its valuation and census, still, if it has unwisely divided its territory into minute districts, it defeats its own liberality; for, by attempting to support so many schools with disproportionate means, it gives an efficient support to none. But with a good schoolhouse, and with such large and populous districts, or union districts, as give the multiplying power of union and concert to individual action, still, the employment of a bad teacher will vitiate the whole; and the place will have been prepared, and the money appropriated, only to gather the children into a receptacle, where bad feelings and passions, bad language and manners, will ferment into corruption; and, without a good prudential and superintending committee, the chance of securing the services of a good teacher becomes so small as to elude even a fractional expression. And, again, if the most perfect teacher is obtained, still the scholars must be brought within the circle of his influence in order to be benefited; and, therefore, absence, irregularity, and tardiness must be prevented, or the good teacher will have been employed in vain. Let all other influences be propitious, and the single circumstance, of which so little has heretofore been thought, viz., a diversity of class-books for scholars of similar ages and attainments, will derange any operation of the school; because no perseverance, no fertility of resources, on the part of the teacher, can carry it forward if each pupil brings a different book. The obstacle defies human genius. All that reciprocal aid and stimulus is lost which the different minds of a class afford each other when they have once been awakened, and their attention turned upon the same point. To expect progress under this embar-

rassment is as unreasonable as it would be for a singing-master to expect concord of sounds when all his pupils were singing simultaneously from different notes. Even if all the preceding arrangements and appointments are perfect, it will yet be true that not one-half of the capabilities of the school will be developed, unless the parents breathe life into the children before they leave their own door, and send them to school hungering and thirsting after knowledge.

Now, all these various agencies must work in concert, or they work in vain. When a system is so numerous in its parts, and so complex in its structure; when the nice adjustment of each and the harmonious working of all are necessary to the perfection of the product, — all who are engaged in its operation must not only have a great extent of knowledge, but they must be bound together by a unity of purpose. Experience has often proved how fatally powerful one ill-disposed person can be in destroying the value of a school; but experience is yet to prove what an amount of corporeal and material well-being, of social enjoyment, of intellectual dominion and majesty, of moral purity and fervor, what an amount, in fine, of both temporal and spiritual blessedness, this institution, in the providence of God, may be the means of conferring upon the race.

Experience is yet to develop the grandeur and the glory, which, through the exhaustless capabilities of this institution, may be wrought out for mankind, when, by the united labors of the wise and the good, its elastic nature shall be so expanded as to become capacious of the millions of immortal beings, who, from the recesses of Infinite Power, are evoked into this life as a place of preparation for a higher state of existence, and whom, like a nursing mother, it shall receive and cherish, and shall instruct and train in the knowledge and the observance and the love of those divine laws and commandments upon which the Creator, both of the body and the soul, has made their highest happiness to depend.

REPORT FOR 1841.

GENTLEMEN, —

. . . THE declination of the sun towards the southern tropic is not more certainly followed by winter, with all its blankness and sterility, nor does the ascension of that luminary towards our own part of the heavens more certainly bring on summer, with all its beauty and abundance, than does the want or the enjoyment of education degrade or elevate the condition of a people. I will occupy the short space which propriety allows to me, in concluding this Report, by showing the effect of education upon *the worldly fortunes and estates* of men, — its influence upon property, upon human comfort and competence, upon the outward, visible, material interests or well-being of individuals and communities.

This view, so far from being the highest which can be taken of the beneficent influences of education, may, perhaps, be justly regarded as the lowest. But it is a palpable view. It presents an aspect of the subject susceptible of being made intelligible to all; and, therefore, it will meet the case of thousands who are now indifferent about the education of their offspring, because they foresee no re-imbursement in kind, no return in money, or in money's worth, for money expended. The co-operation of this numerous class is indispensable, in order to carry out the system; and if they can be induced to educate their children, even from inferior motives, the children, when educated, will feel its higher and nobler affinities.

So, too, in regard to towns. If it can be proved that the aggregate wealth of a town will be increased just in proportion to the increase of its appropriations for schools, the opponents of such a measure will be silenced. The tax for this purpose, which they now look upon as a burden, they will then regard as a profitable investment. Let it be shown that the money which is now clung to by the parent, in the hope of increasing his children's legacies some six or ten per cent, can be so invested as to double their patrimony, and the blind instinct of parental love, which now, by voice and vote, opposes such outlay, will become an advocate for the most generous endowments. When the money expended for education shall be viewed in its true character, as seed-grain sown in a soil which is itself enriched by yielding, then the most parsimonious will not stint the sowing, lest the harvest also should be stinted, and thereby thirty, sixty, or a hundred fold should be lost to the garners.

I am the more induced to take this view of the subject, because the advocates and eulogists of education have rarely, if ever, descended to so humble a duty as to demonstrate its pecuniary value both to individuals and to society. They have expended their strength in portraying its loftier attributes, its gladdening, refining, humanizing tendencies. They have not deigned to show how it can raise more abundant harvests, and multiply the conveniences of domestic life; how it can build, transport, manufacture, mine, navigate, fortify; how, in fine, a single new idea is often worth more to an individual than a hundred workmen, and to a nation than the addition of provinces to its territory. I have novel and striking evidence to prove that education is convertible into houses and lands, as well as into power and virtue.

Although, therefore, this utilitarian view of education, as it may be called, which regards it as the dispenser of private competence, and the promoter of national wealth, is by no means the first which would address itself to an enlightened and benevolent mind, yet it will be found to possess intrinsic

merits, and to be worthy of the special regard, not only of the political economist, but of the lawgiver and moralist. Nature fastens upon us original and inexorable necessities in regard to food, raiment, and shelter. Though these physical wants are among the lowest that belong to our being, yet there is a view of them which is not sordid or ignoble. They must be first served, because, if denied, forthwith the race is extinct. They domineer over us; and, until supplied, their importunate clamor will drown every appeal to higher capacities. No hungry or houseless people ever were, or ever will be, an intelligent or a moral one. It is found that the church, the lecture-room, and the hall of science, flourish best where regard is paid to the institution for savings. The divine charities of Christian love are often straitened, because our means of benevolence fall short of our desires.

I proceed, then, to show that education has a power of ministering to our personal and material wants beyond all other agencies, whether excellence of climate, spontaneity of production, mineral resources, or mines of silver and gold. Every wise parent and community, desiring the prosperity of their children, even in the most worldly sense, will spare no pains in giving them a generous education.

During the past year, I have opened a correspondence, and availed myself of all opportunities to hold personal interviews, with many of the most practical, sagacious, and intelligent business-men amongst us, who for many years have had large numbers of persons in their employment. My object has been to ascertain the difference in the productive ability — where natural capacities have been equal — between the educated and the uneducated; between a man or woman whose mind has been awakened to thought and supplied with the rudiments of knowledge by a good common-school education and one whose faculties have never been developed, or aided in emerging from their original darkness and torpor, by such a privilege. For this purpose I have conferred and corresponded with manufacturers of all kinds, with machinists, engineers, railroad

contractors, officers in the army, &c. These various classes of persons have means of determining the effects of education on individuals, equal in their natural abilities, which other classes do not possess. A farmer hiring a laborer for one season, who has reeeived a good common-school education, and, the ensuing season, hiring another who has not enjoyed this advantage, although he may be personally convinced of the relative value or profitableness of their services, will rarely have any exact data or tests to refer to by which he ean measure the superiority of the former over the latter. They do not work side by side, so that he can institute a comparison between the amounts of labor they perform. They may cultivate different fields, where the ease of tillage or the fertility of the soils may be different. They may rear crops under the influence of different seasons, so that he eannot discriminate between what is referable to the bounty of Nature, and what to superiority in judgment or skill. Similar difficulties exist in estimating the amount and value of female labor in the household. And as to the mechanic also, the carpenter, the mason, the blaeksmith, the tool-maker of any kind, there are a thousand eircumstances which we call aeeidental, that mingle their influenees in giving quality and durability to their work, and prevent us from making a precise estimate of the relative value of any two men's handicraft. Individual differences too, in regard to a single artiele, or a single day's work, may be too minute to be noticed or appreciated, while the aggregate of these differences at the end of a few years may make all the difference between a poor and a rich man. No observing man ean have failed to notice the difference between two workmen, one of whom — to use a proverbial expression — always hits the nail on the head, while the other loses half his strength, and destroys half his nails, by the awkwardness of his blows; but perhaps few men have thought of the difference in the results of two such men's labor at the end of twenty years.

But when hundreds of men or women work side by side, in

the same factory, at the same machinery, in making the same fabrics, and, by a fixed rule of the establishment, labor the same number of hours each day; and when, also, the products of each operative can be counted in number, weighed by the pound, or measured by the yard or cubic foot, — then it is perfectly practicable to determine with arithmetical exactness the productions of one individual and one class as compared with those of another individual and another class.

So where there are different kinds of labor, some simple, others complicated, and, of course, requiring different degrees of intelligence and skill, it is easy to observe what class of persons rise from a lower to a higher grade of employment.

This, too, is not to be forgotten, — that in a manufacturing or mechanical establishment, or among a set of hands engaged in filling up a valley or cutting down a hill, where scores of people are working together, the absurd and adventitious distinctions of society do not intrude. The capitalist and his agents are looking for the greatest amount of labor, or the largest income in money from their investments; and they do not promote a dunce to a station where he will destroy raw material, or slacken industry, because of his name or birth or family connections. The obscurest and humblest person has an open and fair field for competition. That he proves himself capable of earning more money for his employer is a testimonial better than a diploma from all the colleges.

Now, many of the most intelligent and valuable men in our community, in compliance with my request, — for which I tender them my public and grateful acknowledgments, — have examined their books for a series of years, and have ascertained both the quality and the amount of work performed by persons in their employment; and the result of the investigation is a most astonishing superiority, in productive power, on the part of the educated over the uneducated laborer. The hand is found to be another hand when guided by an intelligent mind. Processes are performed, not only more rapidly, but better, when faculties which have been exercised in early life

furnish their assistance. Individuals who, without the aid of knowledge, would have been condemned to perpetual inferiority of condition, and subjected to all the evils of want and poverty, rise to competence and independence by the uplifting power of education. In great establishments, and among large bodies of laboring men, where all services are rated according to their pecuniary value; where there are no extrinsic circumstances to bind a man down to a fixed position, after he has shown a capacity to rise above it; where, indeed, men pass by each other, ascending or descending in their grades of labor, just as easily and certainly as particles of water of different degrees of temperature glide by each other, — there it is found as an almost invariable fact, other things being equal, that those who have been blessed with a good common-school education rise to a higher and a higher point in the kinds of labor performed, and also in the rate of wages paid, while the ignorant sink like dregs, and are always found at the bottom.

I now proceed to lay before the Board some portions of the evidence I have obtained, first inserting my Circular Letter, in answer to which, communications have been made.

CIRCULAR LETTER.

To —— ——.

Dear Sir, — My best and only apology for taking the liberty to address you will be found in the object I have in view, which, therefore, I proceed to state without further preface.

In fulfilling the duties with which I have been intrusted by the Board of Education, I am led into frequent conversation and correspondence, not only with persons in every part of the State, but more or less with every class and description of persons in the whole community.

I regret to say, that among these I occasionally meet with individuals, who, although very differently circumstanced in life, cordially agree in their indifference towards the cause of common education; and some of whom even profess to be alarmed at possible mischiefs that may come in its train, and therefore stand in its path, and obstruct its advancement.

The individuals who thus maintain an attitude of neutrality, or assume one of active opposition, are either persons who, in their worldly circumstances, are deemed the favorites of fortune, or they are persons who are

alike strangers to mental cultivation, and to all the outward and ordinary signs of temporal prosperity. In a word, they are found, in regard to their worldly condition, at the two extremes of the social scale. I would by no means be understood to say, that any considerable proportion of the men of wealth amongst us look with an unfriendly eye on the general diffusion of the means of knowledge. On the contrary, some of the best friends of education are to be found amongst this class, who, uniting abundance of means with benevolence of disposition, are truly efficient in advancing the work. Nor, on this subject, are the lines of demarcation between parties broadly drawn; but they shade off, by imperceptible degrees, from friends to opponents.

But this I do mean to say, that there are men of wealth and leisure, too numerous to be overlooked in a calculation of friendly and of adverse agencies, who profess to fear that a more thorough and comprehensive education for the whole people will destroy contentment, loosen habits of industry, engender a false ambition, and prompt to an incursion into their own favored sphere, by which great loss will accrue to themselves, without any corresponding benefit to the invaders.

The other class are those who, suffering from a neglected or a perverted education in themselves, seem incapable of appreciating either the temporal and material well-being, or the mental elevation and enjoyment, which it is the prerogative of a good education to confer. These two parties, though alien from each other in all other respects, are allies here; and although, with the exception of a very few towns in the Commonwealth, they are not numerically strong, yet, by adroitly implicating other questions with that of the Public Schools, they are able in many cases to baffle all efforts at reform and improvement.

The views of these parties I believe to be radically wrong, anti-social, anti-Republican, anti-Christian; and I believe that all action in pursuance of them will impair the best interests of society, and originate a train of calamities, in which not only their advocates, but all portions of the community, will be involved. Convinced that such is the inevitable and accelerating tendency of such views, it seems to me to be the duty of the friends of mankind to meet them with fairness and a conciliatory spirit indeed, but with earnestness and energy, and to confute them by the production of evidence and the exposition of principles.

It is for this reason that I address you, and solicit a reply, founded upon your personal knowledge, to the following questions: —

First, — Have you had large numbers of persons in your employment or under your superintendence? If so, will you please to state how many? Within what period of time? In what department of business? Whether at different places? Whether natives or foreigners?

Second, — Have you observed differences among the persons you have employed, growing out of differences in their education, *and independent of*

their natural abilities; that is, whether, as a class, those who from early life have been accustomed to exercise their minds by reading and studying have greater docility and quickness in applying themselves to work? and, after the simplest details are mastered, have they greater aptitude, dexterity, or ingenuity in comprehending ordinary processes, or in originating new ones? Do they more readily or frequently devise new modes by which the same amount of work can be better done, or by which more work can be done in the same time, or by which raw material or motive-power can be economized? In short, do you obtain more work and better work, with less waste, from those who have received what, in Massachusetts, we call a good common-school education, or from those who have grown up in neglect and ignorance? Is there any difference in the earnings of these two classes, and consequently in their wages?

Third, — What, within your knowledge, has been the effect of higher degrees of mental application and culture upon the domestic and social habits of persons in your employment? Is this class more cleanly in their persons, their dress, and their households? and do they enjoy a greater immunity from those diseases which originate in a want of personal neatness and purity? Are they more exemplary in their deportment and conversation, devoting more time to intellectual pursuits or to the refining art of music, and spending their evenings and leisure hours more with their families, and less at places of resort for idle and dissipated men? Is a smaller portion of them addicted to intemperance? Are their houses kept in a superior condition? Does a more economical and judicious mode of living purchase greater comforts at the same expense, or equal comforts with less means? Are their families better brought up, more respectably dressed, more regularly attendant upon the school and the church? and do their children, when arrived at years of maturity, enter upon the active scenes of life with better prospects of success?

Fourth, — In regard to standing and respectability among co-laborers, neighbors, and fellow-citizens generally, how do those who have enjoyed and improved the privilege of good common schools compare with the neglected and the illiterate? Do the former exercise greater influence among their associates? Are they more often applied to for advice and counsel in cases of difficulty, or selected as umpires or arbitrators for the decision of minor controversies? Are higher and more intelligent circles for acquaintance open to them, from conversation and intercourse with which their own minds can be constantly improved? Are they more likely to rise from grade to grade in the scale of labor, until they enter departments where greater skill, judgment, and responsibility are required, and which therefore command a larger remuneration? Are they more likely to rise from the condition of employés, and to establish themselves in business on their own account?

Fifth, — Have you observed any difference in the classes above named

(I speak of them as classes, for there will, of course, be individual exceptions) in regard to punctuality and fidelity in the performance of duties? Which class is most regardful of the rights of others, and most intelligent and successful in securing their own? You will, of course, perceive that this question involves a more general one; viz., from which of the above-described classes have those who possess property, and who hope to transmit it to their children, most to fear from secret aggression, or from such public degeneracy as will loosen the bands of society, corrupt the testimony of witnesses, violate the sanctity of the juror's oath, and substitute, as a rule of right, the power of a numerical majority for the unvarying principles of justice?

Sixth, — Finally, in regard to those who possess the largest shares in the stock of worldly goods, could there, in your opinion, be any police so vigilant and effective, for the protection of all the rights of person, property, and character, as such a sound and comprehensive education and training as our system of common schools could be made to impart? and would not the payment of a sufficient tax to make such education and training universal be the cheapest means of self-protection and insurance? And in regard to that class which, from the accident of birth and parentage, are subjected to the privations and the temptations of poverty, would not such an education open to them new resources in habits of industry and economy, in increased skill, and the awakening of inventive power, which would yield returns a thousand-fold greater than can ever be hoped for from the most successful clandestine depredations, or open invasion of the property of others?

I am aware, my dear sir, that, to every intelligent and reflecting man, these inquiries will seem superfluous and nugatory; and your first impulse may be to put some such interrogatory to me in reply, as whether the sun has any influence on vegetable growth, or whether it is expedient to have windows in our houses for the admission of light. I acknowledge the close analogy of the cases in point of self-evidence; but my reply is, that while we have influential persons, who dwell with us in the same common mansion of society, and who, having secured for themselves a few well-lighted apartments, now insist that total darkness is better for a portion of the occupants born and dwelling under the same roof; and while, unfortunately, a portion of these benighted occupants, from never having seen more than the feeblest glimmerings of the light of day, insist that it is better for them and their children to remain blind; while these opinions continue to exist, I hold that it is necessary to adduce facts and arguments, and to present motives, which shall prove, both to the blinded and those who would keep them so, the value and beauty of light.

HORACE MANN,

Secretary of the Board of Education.

P. S. If the above shall give you a general outline of my object, I would thank you to fill it up, even though parts of it may not be distinctly indicated by the questions.

LETTER FROM J. K. MILLS, Esq.

Boston, Dec. 29, 1841.

My dear Sir, — I have endeavored, since I received your letter, to collect such information as would enable me to answer your questions. The house with which I am connected in business has had, for the last ten years, the principal direction of cotton-mills, machine-shops, and calico-printing works, in which are constantly employed about three thousand persons. The opinions I have formed of the effects of a common-school education upon our manufacturing population are the result of personal observation and inquiries, and are confirmed by the testimony of the overseers and agents, who are brought into immediate contact with the operatives. They are as follows : —

1. — That the rudiments of a common-school education are essential to the attainment of skill and expertness as laborers, or to consideration and respect in the civil and social relations of life.

2. — That very few, who have not enjoyed the advantages of a common-school education, ever rise above the lowest class of operatives ; and that the labor of this class, when it is employed in manufacturing operations, which require even a very moderate degree of manual or mental dexterity, is unproductive.

3. — That a large majority of the overseers, and others employed in situations which require a high degree of skill, in particular branches, which oftentimes require a good general knowledge of business, and *always* an unexceptionable moral character, have made their way up from the condition of common laborers with no other advantage over a large proportion of those they have left behind than that derived from a better education.

A statement made from the books of one of the manufacturing companies under our direction will show the relative number of the two classes, and the earnings of each. This mill may be taken as a fair index of all the others.

The average number of operatives annually employed for the last three years is one thousand two hundred. Of this number, there are forty-five unable to write their names, or about three-fourths per cent.

The average of women's wages, in the departments requiring the most skill, is $2.50 per week, exclusive of board.

The average of wages in the lowest departments is $1.25 per week.

Of the forty-five who are unable to write, twenty-nine, or about two-

thirds, are employed in the lowest department. The difference between the wages earned by the forty-five, and the average wages of an equal number of the better-educated class, is about twenty-seven per cent in favor of the latter.

The difference between the wages earned by twenty-nine of the lowest class, and the same number in the higher, is sixty-six per cent.

Of seventeen persons filling the most responsible situations in the mills, ten have grown up in the establishment from common laborers or apprentices.

This statement does not include an importation of sixty-three persons from Manchester, in England, in 1839. Among these persons, there was scarcely one who could read or write; and although a part of them had been accustomed to work in cotton-mills, yet, either from incapacity or idleness, they were unable to earn sufficient to pay for their subsistence, and at the expiration of a few weeks not more than half a dozen remained in our employment.

In some of the print-works, a large proportion of the operatives are foreigners. Those who are employed in the branches which require a considerable degree of skill are as well educated as our people in similar situations. But the common laborers, as a class, are without any education; and their average earnings are about two-thirds only of those of *our* lowest classes, although the prices paid to each are the same for the same amount of work.

Among the men and boys employed in our machine-shops, the want of education is quite rare; indeed, I do not know an instance of a person who is unable to read and write, and many have had a good common-school education. To this may be attributed the fact, that a large proportion of persons who fill the higher and more responsible situations came from this class of workmen.

From these statements, you will be able to form some estimate, in dollars and cents at least, of the advantages even of a little education to the operative; and there is not the least doubt that the employer is equally benefited. He has the security for his property that intelligence, good morals, and a just appreciation of the regulations of his establishment, always afford. His machinery and mills, which constitute a large part of his capital, are in the hands of persons, who, by their skill, are enabled to use them to their utmost capacity, and to prevent any unnecessary depreciation.

Each operative in a cotton-mill may be supposed to represent from one thousand to twelve hundred dollars of the capital invested in the mill and its machinery. It is only from the most diligent and economical use of this capital that the proprietor can expect a profit. A fraction less than one-half of the cost of manufacturing common cotton-goods, when a mill is in full operation, is made up of charges which are permanent. If the product is reduced in the ratio of the capacity of the two classes of operatives mentioned in this statement, it will be seen that the cost will be increased in a compound ratio.

My belief is, that the best cotton-mill in New England, with such operatives only as the forty-five mentioned above, who are unable to write their names, would never yield the proprietor a profit; that the machinery would soon be worn out, and he would be left, in a short time, with a population no better than that which is represented, as I suppose, very fairly, by the importation from England.

I cannot imagine any situation in life where the want of a common-school education would be more severely felt, or be attended with worse consequences, than in our manufacturing villages; nor, on the other hand, is there any place where such advantages can be improved with greater benefit to all parties.

There is more excitement and activity in the minds of people living in masses, and, if this expends itself in any of the thousand vicious indulgences with which they are sure to be tempted, the road to destruction is travelled over with a speed exactly corresponding to the power employed.

Very truly yours,

JAMES K. MILLS.

HON. HORACE MANN.

LETTER FROM H. BARTLETT, Esq.

LOWELL, Dec. 1, 1841.

HON. HORACE MANN.

Dear Sir, — In replying to your interrogatories, respecting the effect of education upon the laboring classes, I might be very brief; but the subject is one in which I feel so deep an interest, that I propose to go a little into detail, and hope to do so without being tedious.

I have been engaged for nearly ten years in manufacturing, and have had the constant charge of from four hundred to nine hundred persons during that time. The greater part of them have been Americans; but there have always been more or less foreigners. During this time, I have had charge of two different establishments in different parts of the State.

In answering your second interrogatory, I can say, that I have come in contact with a very great variety of character and disposition, and have seen mind applied to production in the Mechanic and Manufacturing Arts, possessing different degrees of intelligence, from gross ignorance to a high degree of cultivation; and I have no hesitation in affirming that I have found the best educated to be the most profitable help; even those females who merely tend machinery give a result somewhat in proportion to the advantages enjoyed in early life for education, — those who have a good common-school education giving, as a class, invariably, a better production than those brought up in ignorance.

The former make the best wages. If any one should doubt the fact, let him examine the pay-roll of any establishment in New England, and ascertain the character of the girls who get the most money, and he will be satisfied that I am correct. I am equally clear, that, as a class, they do their work better. There are many reasons why it should be so. They have more order and system; they not only keep their persons neater, but their machinery in better condition.

But there are other advantages, besides mere knowledge, growing out of a good common-school education. Such an education is calculated to strengthen the whole system, intellectual, moral, and physical. It educates the whole man or woman, and gives him or her more energy and greater capacity for production in all departments of labor. Minds formed by such an education are superior in the combination and arrangement of what is already known, and more frequently devise new methods of operation.

Your third inquiry relates to the effect of education upon the domestic and social habits of persons in my employ. I have never considered mere knowledge, valuable as it is in itself to the laborer, as the only advantage derived from a good common-school education. I have uniformly found the better educated, as a class, possessing a higher and better state of morals, more orderly and respectful in their deportment, and more ready to comply with the wholesome and necessary regulations of an establishment. And in times of agitation on account of some change in regulations or wages, I have always looked to the most intelligent, best educated, and the most moral, for support, and have seldom been disappointed. For, while they are the last to submit to imposition, they *reason*; and, if your requirements are reasonable, they will generally acquiesce, and exert a salutary influence upon their associates. But the ignorant and uneducated I have generally found the most turbulent and troublesome, acting under the impulse of excited passion and jealousy.

The former appear to have an interest in sustaining good order, while the latter seem more reckless of consequences. And, to my mind, all this is perfectly natural. The better educated have more and stronger attachments binding them to the place where they are. They are generally neater, as I have before said, in their persons, dress, and houses; surrounded with more comforts, with fewer of "the ills which flesh is heir to." In short, I have found the educated, as a class, more cheerful and contented, — devoting a portion of their leisure time to reading and intellectual pursuits, more with their families, and less in scenes of dissipation.

The good effect of all this is seen in the more orderly and comfortable appearance of the whole household, but nowhere more strikingly than in the children. A mother who has had a good common-school education will rarely suffer her children to grow up in ignorance.

As I have said, this class of persons is more quiet, more orderly, and, I may add, more regular in their attendance upon public worship, and more punctual in the performance of all their duties.

Your fourth inquiry refers to the relative stand taken in society by those who have received an early education; and my answers to your inquiries under that head might be inferred from what I have already said. My remarks before have referred quite as much to females as to males, but what I shall say under this will refer particularly to the latter.

I have generally observed individuals exerting an influence among their co-laborers and citizens somewhat in proportion to their education. And, in cases of difficulty and arbitration, the most ignorant have paid an involuntary respect to the value of education by the selection of those who have enjoyed its benefits for the settlement of their controversies.

It would be very difficult, if not impossible, for a young man, who had not an education equal to a good common-school education, to rise from grade to grade, until he should obtain the birth of an Overseer; and in making promotions, as a general thing, it would be unnecessary to make inquiry as to the education of the young men from whom you would select; for their mental cultivation would be sufficiently indicated by their general appearance and standing among their fellows; and, if you had reference to merit and qualifications, very seldom indeed would an uneducated young man rise to "*a better place and better pay.*"

Young men who expect to resort to manufacturing establishments for employment cannot prize too highly a good education. It will give them standing among their associates, and be the means of promotion from their employers.

Your fifth interrogatory refers to difference of moral character in the two classes, and the dangers which society or men of property have to apprehend from the one or the other. I do not know that I can better answer your inquiries under this head than to give you my views of the value, in a *pecuniary* point of view, of education and morality, to the stockholders of our manufacturing establishments. If they have no danger to apprehend from a general diffusion of knowledge among those in their employ; if it is a fact that that class of help which has enjoyed a good common-school education are the most tractable, yielding most readily to reasonable requirements, exerting a salutary and conservative influence in times of excitement, while the most ignorant are the most refractory; then it appears to me that the public at large ought to be satisfied that they have more danger to apprehend from the ignorant than from the well educated. I am aware that there is a feeling to a certain, but I hope limited extent, that knowledge among the great mass is dangerous; that it creates discontent, and tends to insubordination. But I believe the fear to be groundless, and that our danger will come from an opposite source. In my view, there is a connection between education and morals; and I believe that our common schools have been nurseries, not only of learning, but of sound morality; and I trust they will always be surrounded by such influences as will strengthen and confirm the moral principles of our youth; and I am confident, that, so long as that shall be the case, society is safe.

From my observation and experience, I am perfectly satisfied that the owners of manufacturing property have a deep pecuniary interest in the education and morals of their help; and I believe the time is not distant when the truth of this will appear more and more clear. And as competition becomes more close, and small circumstances of more importance in turning the scale in favor of one establishment over another, I believe it will be seen that the establishment, other things being equal, which has the best educated and the most moral help, will give the greatest production at the least cost per pound. So confident am I that production is affected by the intellectual and moral character of help, that whenever a mill or a room should fail to give the proper amount of work, my first inquiry, after that respecting the condition of the machinery, would be, *as to the character of the help;* and if the deficiency remained any great length of time, I am sure I should find many who had made their marks upon the pay-roll, being unable to write their names; and I should be greatly disappointed if I did not, upon inquiry, find a portion of them of irregular habits and suspicious character. My mind has been drawn to this subject for a long time. I have watched its operation, and seen its result, and am satisfied that the pecuniary interest of the owners is promoted by the general diffusion of knowledge and morality among those in their employ.

Lowell is a striking illustration of the truth of my remarks on this subject. Probably no other place has done as much for the education and morality of those engaged in manufacturing. She has twenty-three public schools, fifteen churches, and numerous associations for intellectual improvement; and the result is seen, not only in the orderly and temperate character of the people, but in the great productiveness of the mills. And where, I would ask, is manufacturing stock of more value? If any one doubts the connection between these institutions and the price of stocks, let the former be destroyed, let those lights be extinguished, let ignorance and vice take the place of intelligence and virtue, let the prevailing influence here be against schools and churches; and my opinion is, that the moral character of the people would not decline faster than the price of manufacturing stocks. The founders of this place were clear and far-sighted men; and they put in operation a train of moral influences which has formed and preserved a community distinguished for intelligence, virtue, and great energy of character. Should any owner or manager think otherwise, and surround himself with the ignorant and unprincipled, because for a time he might get them for less wages, I am confident that loss in production would more than keep pace with reduction in pay, — to say nothing of the insecurity of property in the hands of such persons.

In short, in closing my answer to your fifth interrogatory, I consider that "those who possess property, and hope to transmit it to their children," have nothing to fear from the general diffusion of knowledge; that if their rights are ever invaded, or their property rendered insecure, it will be when igno-

rance has corrupted the public mind, and prepared it for the controlling influence of some master-spirit possessing intelligence without principle.

Finally, in answering your sixth and last interrogatory, I remark that "those who possess the greatest share in the stock of worldly goods" are deeply interested in this subject as one of mere insurance; that the most effectual way of making insurance on their property would be to contribute from it enough to sustain an efficient system of common-school education, thereby educating the whole mass of mind, and constituting it a police more effective than peace-officers or prisons. By so doing they would bestow a benefaction upon "that class, who, from the accident of birth or parentage, are subjected to the privations and temptations of poverty," and would do much to remove the prejudice and to strengthen the bands of union between the different and extreme portions of society. The great majority always have been, and probably always will be, comparatively poor, while a few will possess the greatest share of this world's goods. And it is a wise provision of Providence which connects so intimately, and as I think so indissolubly, the greatest good of the many with the highest interest of the few.

Yours very respectfully and truly,

H. Bartlett.

LETTER FROM J. CLARK, Esq.

Lowell, Dec. 3, 1841.

Dear Sir, — I owe you an apology for not having made an earlier reply to your inquiries respecting the influences of education upon the character and conduct of our operatives. I have to plead in excuse for my neglect an unusual press of business, which has almost literally occupied every moment of my time; and, while I was seeking a leisure hour to devote to this purpose, my friend, Mr. Bartlett, has kindly allowed me to read the very full and particular answers prepared by him to your several interrogatories.

. . . We have in our mills about one hundred and fifty females who have, at some time, been engaged in *teaching schools*. Many of them teach during the summer months, and work in the mills in winter. The average wages of these ex-teachers I find to be seventeen and three-fourths per cent *above the general average of our mills, and about forty per cent above the wages of the twenty-six who cannot write their names*. It may be said that they are generally employed in the higher departments, where the pay is better. This is true; but this again may be, in most cases, fairly attributed to their better education, which brings us to the same result. If I had included in my calculations the remaining fourteen of the forty, who are mostly

sweepers and scrubbers, and who are paid by the day, the contrasts would have been still more striking; but having no well-educated females engaged in this department with whom to compare them, I have omitted them altogether. In arriving at the above results, I have considered the *net wages* merely, — the price of board being in all cases the same. I do not consider these results as either extraordinary or surprising, but as a part only of the legitimate and proper fruits of a better cultivation and fuller development of the intellectual and moral powers.

Yours very respectfully,

JOHN CLARK,

Superintendent of Merrimack Mills.

HON. HORACE MANN, BOSTON.

Extracts from a Letter of Jonathan Crane, Esq., for several years a large Contractor on the Railroads in Massachusetts.

My principal business, for about ten years past, has been grading railroads. During that time, the number of men employed has varied from fifty to three hundred and fifty, nearly all Irishmen, with the exception of superintendents. Some facts have been so apparent, that my superintendents and myself could not but notice them: these I will freely give you. I should say that not less than three thousand different men have been, more or less, in my employment during the before-mentioned period, and that the number that could read and write intelligibly was about one to eight. Independently of their natural endowments, those who could read and write, and had some knowledge of the first principles of arithmetic, have almost invariably manifested a readiness to apprehend what was required of them, and skill in performing it, and have more readily and frequently devised new modes by which the same amount of work could be better done. Some of these men we have selected for superintendents, and they are now contractors. With regard to the morals of the two classes, we have seen very little difference; but the better-educated class are more cleanly in their persons and their households, and generally discover more refinement in their manners, and practise a more economical mode in their living. Their families are better brought up, and they are more anxious to send their children to school. In regard to their standing and respectability among co-laborers, neighbors, and fellow-citizens, the more educated are much more respected; and in settling minor controversies, they are more commonly applied to as arbitrators. With regard to the morals of the two classes before mentioned, permit me to remark, that it furnishes an illustration of the truth of a common saying, that merely cultivating the understanding, without improving the heart, does not make a man better. The more extensively

knowledge and virtue prevail in our country, the greater security have we that our institutions will not be overthrown. Our common-school system, connected as it is, or ought to be, with the inculcation of sound and practical morality, is the most vigilant and efficient police for the protection of persons, property, and character, that could be devised ; and is it not gratifying that men of wealth are beginning to see, that, if they would protect their property and persons, a portion of that property should be expended for the education of the poorer classes? Merely selfish considerations would lead any man of wealth to do this, if he would only view the subject in its true light. Nowhere is this subject better understood than in Massachusetts ; and the free discussions which have of late been held, in county and town meetings, have had the effect to call the attention of the public to it; and I trust the time is not far distant, when, at least in Massachusetts, the *common-school system* will accomplish all the good which it is capable of producing. Why do we not in these United States have a revolution, almost annually, as in the republics of South America? Ignorance and vice always have invited, and always will invite, such characters as Shakspeare's Jack Cade to rule over them. And may we not feel an assurance, that in proportion as the nation shall recover from the baneful influence of intemperance, so will its attention be directed pre-eminently to the promotion of virtue and knowledge, and nowhere in our country will an incompetent or intemperate common-school teacher be intrusted with the education of our children?

These are a fair specimen, and no more than a fair specimen, of a mass of facts which I have obtained from the most authentic sources. They seem to prove incontestably that education is not only a moral renovator, and a multiplier of intellectual power, but that it is also the most prolific parent of material riches. It has a right, therefore, not only to be included in the grand inventory of a nation's resources, but to be placed at the very head of that inventory. It is not only the most honest and honorable, but the surest means of amassing property. A trespasser or a knave may forcibly or fraudulently appropriate the earnings of others to himself; but education has the prerogative of originating or generating property more certainly and more rapidly than it was ever accumulated by force or fraud. It has more than the quality of an ordinary mercantile commodity, from which the possessor realizes but a single profit as it passes through his hands: it rather resembles

fixed capital, yielding constant and high revenues. As it enjoys an immunity from common casualties, it incurs no cost for insurance or defence. It is above the reach of changes in administration or in administrational policy; and it is free from those fluctuations of trade which agitate the market, and make it so frequent an occurrence that a merchant who goes to bed a man of wealth at night rises a pauper in the morning. Possessing these qualities, it has the highest economical value; and although statesmen who assail or defend, who raise up or put down, systems of commercial, manufacturing, or agricultural policy, have seldom or never deigned to look at education as the grand agent for the development or augmentation of national resources, yet it measures the efficacy of every other means of aggrandizement, and is more powerful in the production and gainful employment of the total wealth of a country than all other things mentioned in the books of the political economist. Education is an antecedent agency; for it must enlighten mankind in the choice of pursuits, it must guide them in the selection and use of the most appropriate means, it must impart that confidence and steadiness of purpose which results from comprehending the connections of a long train of events, and seeing the end from the beginning, or all enterprises will terminate in ruin.

Considering education, then, as a producer of wealth, it follows that the more educated a people are, the more will they abound in all those conveniences, comforts, and satisfactions which money will buy; and, other things being equal, the increase of competency and the decline of pauperism will be measurable on this scale. There are special reasons giving peculiar force to these considerations in the State of Massachusetts. Our population is principally divided into agriculturists, manufacturers, and mechanics. We have no *idle* class, no class born to such hereditary wealth as supersedes the necessity of labor, and no class subsisting by the services of hereditary bondmen. All, with exceptions too minute to be noticed, must live by their own industry and frugality. The master and

the laborer are one; and hence the necessity that all should have the health and strength by which they can work, and the judgment and knowledge by which they can plan and direct. The muscle of a laborer and the intelligence of an employer must be united in the same person.

The healthful and praiseworthy employment of Agriculture requires knowledge for its successful prosecution. In this department of industry we are in perpetual contact with the forces of Nature. We are constantly dependent upon them for the pecuniary returns and profits of our investments, and hence the necessity of knowing what those forces are, and under what circumstances they will operate most efficiently, and will most bountifully reward our original outlay of money and time. In the presence of the savage, the exuberance of Nature may cover the earth with magnificent forests, through whole degrees of latitude and longitude, and clothe and beautify it with the grasses and flowers of the prairie to whose ocean-like expanse the eye can discover no shore; magnificent and poetic spectacles, indeed; yet, for the sustentation of human life, for the existence and extension of human happiness, almost valueless. But under the art of agriculture, which is only another name for the knowledge of natural powers, millions are feasted on a territory, where, before, a hundred starved. Perhaps there is no spot in the world, of such limited extent, where there is a greater variety of agricultural productions than in Massachusetts. This brings into requisition all that chemical and experimental knowledge which pertains to the rotation of crops, and the enrichment of soils. If rotation be disregarded, the repeated demand upon the same soil to produce the same crop will exhaust it of the elements on which that particular crop will best thrive; and, if its chemical ingredients and affinities are not understood, an attempt may be made to re-enforce it by substances with which it is already surcharged, instead of renovating it with those of which it has been exhausted by previous growths. But, for these arrangements and adaptations, knowledge is the grand desideratum; and the addition of a new

fact to a farmer's mind will often increase the amount of his harvests more than the addition of acres to his estate. Why is it, that, if we except Egypt, all the remaining territory of Africa, containing nearly ten millions of square miles, with a soil most of which is incomparably more fertile by Nature, produces less for the sustenance of man and beast than England, whose territory is only fifty thousand square miles? In the latter country, knowledge has been a substitute for a genial climate and an exuberant soil; while, in the former, it is hardly a figurative expression to say that all the maternal kindness of Nature, powerful and benignant as she is, has been repulsed by the ignorance of her children. Doubtless, industry as well as knowledge is indispensable to productiveness; but knowledge must precede industry, or the latter will work to so little effect as to become discouraged and to relapse into the slothfulness of savage life. But, without further exposition, it may be remarked generally, that the spread of intelligence, through the instrumentality of good books and the cultivation in our children of the faculties of observing, comparing, and, reasoning through the medium of good schools, would add millions to the agricultural products of the Commonwealth, without imposing upon the husbandman an additional hour of labor. It would be as foolish for us as for the African to suppose that we have reached the ultimate boundary of improvement.

In regard to another branch of industry, the State of Massachusetts presents a phenomenon, which, all things being considered, is unequalled in any part of the world. I refer to the distribution or apportionment of its citizens among the different departments of labor. With a population of only eighty-seven thousand engaged in agriculture, we have eighty-five thousand engaged in manufactures and trades. The proportion, therefore, in this State, of the latter to the former, is almost as one to one, while the proportion for the whole Union falls but a fraction below one to five. If to the eighty-five thousand engaged in manufactures and trades are added the twenty-seven (almost twenty-eight) thousand employed in navigating the

ocean, and to whom, as a class, the succeeding views are, to a great extent, applicable, we shall find that the capital and labor of the State embarked in the latter employments far exceed those devoted to agricultural pursuits.

Now, for the successful prosecution, it may almost be said, for the very existence amongst us of the manufacturing and mechanic arts, there must be not only the exactness of science, but also exactness or skill in the application of scientific principles throughout the whole processes, either of constructing machinery, or of transforming raw materials into finished fabrics. This ability to make exact and skilful applications of science to an unlimited variety of materials, and especially to the subtile but most energetic agencies of Nature, is one of the latest attainments of the human mind. It is remarkable that astronomy, sculpture, painting, poetry, oratory, and even ethical philosophy, had made great progress thousands of years before the era of the manufacturing and mechanic arts. This era, indeed, has but just commenced; and already the abundance, and, what is of far greater importance, the universality, of personal, domestic, and social comforts it has created, constitutes one of the most important epochs in the history of civilization. The cultivation of these arts is conferring a thousand daily accommodations and pleasures upon the laborer in his cottage, which, only two or three centuries ago, were luxuries in the palace of the monarch. Through circumstances incident to the introduction of all economical improvements, there has hitherto been great inequality in the distribution of their advantages, but their general tendency is greatly to ameliorate the condition of the mass of mankind. It has been estimated that the products of machinery in Great Britian, with a population of eighteen millions, is equal to the labor of hundreds of millions of human hands. This vast gain is effected without the conquest or partitioning of the territory of any neighboring nation, and without rapine or the confiscation of property already accumulated by others. It is an absolute creation of wealth; that is, of those articles, commodities, im-

provements, which we appraise and set down as of a certain moneyed value, alike in the inventory of a deceased man's estate, and in the grand valuation of a nation's capital. These contributions to human welfare have been derived from knowledge, — from knowing how to employ those natural agencies, which from the beginning of the race had existed, but had laid dormant or run uselessly away. For mechanical purposes, what is wind or water, or the force of steam, worth, until the ingenuity of man comes in, and places the wind-wheel, the water-wheel, or the piston, *between* these mighty agents and the work he wishes them to perform? but, after the invention and intervention of machinery, how powerful they become for all purposes of utility! In a word, these great improvements, which distinguish our age from all preceding ages, have been obtained from Nature by addressing her in the language of Science and Art, — the only language she understands, yet one of such all-prevailing efficacy that she never refuses to comply to the letter with all petitions for wealth or physical power, if they are preferred to her in that dialect.

Now, it is easy to show, from reasoning, from history, and from experience, that an early awakening of the mind is a prerequisite to success in the useful arts. It must be an awakening not to feeling merely, but to thought. In the first place, a clearness of perception must be acquired, or the power of taking a correct mental transcript, copy, or image of whatever is seen. This, however, though indispensable, is by no means sufficient. It may answer for mere automatic movements, — for the servile copying of the productions of others. The Chinese excel in imitations of this kind; but, as they have little inventive genius, the learner echoes the teacher, the apprentice repeats the master; and thus the human mind, for generation after generation, presents the monotonous aspects of a revolving cylinder, which turns up the same phases at each successive revolution. But the talent of improving upon the labors of others requires, not only the capability of receiving an exact mental copy or imprint of all the objects of sense or reasoning;

it also requires the power of reviving or reproducing at will all the impressions or ideas before obtained, and also the power of changing their collocations, of re-arranging them into new forms, and of adding something to, or removing something from, the original perceptions, in order to make a more perfect plan or model. If a shipwright, for instance, would improve upon all existing specimens of naval architecture, he would first examine as great a number of ships as possible; this done, he would revive the image which each one imprinted upon his mind; and, with all the fleets which he had inspected present to his imagination, he would compare each individual vessel with all the others, make a selection of one part from one, and of another part from another, apply his own knowledge of the laws of moving and of resisting forces to all, and thus create in his own mind the complex idea or model of a ship, more perfect than any of those he had seen. Now, every recitation in a school, if rightly conducted, is a step towards the attainment of this wonderful power. With a course of studies judiciously arranged and diligently pursued through the years of minority, all the great phenomena of external Nature, and the most important productions in all the useful arts, together with the principles on which they are evolved or fashioned, would be successfully brought before the understanding of the pupil. He would thus become familiar with the substances of the material world, and with their manifold properties and uses; and he would learn the laws — comparatively few — by which results infinitely diversified are produced. When such a student goes out into life, he carries, as it were, a plan or a model of the world in his own mind. He cannot, therefore, pass, either blindly or with the stupid gaze of the brute creation, by the great objects and processes of Nature; but he has an intelligent discernment of their several existences and relations, and their adaptation to the uses of mankind. Neither can he fasten his eye upon any workmanship or contrivance of man without asking two questions, — first, how is it? and, secondly, how can it be improved? Hence, he has as great an advantage over an

ignorant man as one traveller in a foreign country, who is familiar with the language of the people where he is journeying, has over another incapable of understanding a word that he hears. The one also carries a map of the whole country in his hand, while the other is without path or guide. Hence it is, too, that all the processes of Nature, and the contrivances of Art, are so many lessons or communications to an instructed man; but an uninstructed one walks in the midst of them like a blind man amongst colors or a deaf man amongst sounds. The Romans carried their aqueducts from hill-top to hill-top on lofty arches, erected at an immense expenditure of time and money. One idea, — that is, a knowledge of the law of the equilibrium of fluids, — a knowledge of the fact that water in a tube will rise to the level of the fountain, would have enabled a single individual to do with ease, what, without that knowledge, it required the wealth of an empire to accomplish.

It is in ways similar to this, — that is, by accomplishing greater results with less means; by creating products, at once cheaper, better, and by more expeditious methods; and by doing a vast variety of things otherwise impossible, — that the cultivation of mind may be truly said to yield the highest pecuniary requital. Intelligence is the great money-maker, — not by extortion, but by production. There are ten thousand things in every department of life, which, if done in season, can be done in a minute, but which, if not seasonably done, will require hours, perhaps days or weeks, for their performance. An awakened mind will see and seize the critical juncture; the perceptions of a sluggish one will come too late, if they come at all. A general culture of the faculties gives versatility of talent, so that, if the customary business of the laborer is superseded by improvements, he can readily betake himself to another kind of employment; but an uncultivated mind is like an automaton, which can do only the one thing for which its wheels or springs were made. Brute force expends itself unproductively. It is ignorant of the manner in which Nature works, and hence it cannot avail itself of her mighty agencies.

Often, indeed, it attempts to oppose Nature. It throws itself across the track where her resistless car is moving. But knowledge enables its possessor to employ her agencies in his own service; and he thereby obtains an amount of power, without fee or reward, which thousands of slaves could not give. Every man who consumes a single article, in whose production or transportation the power of steam is used, has it delivered to him cheaper than he could otherwise have obtained it. Every man who can avail himself of this power, in travelling, can perform the business of three days in one, and so far add two hundred per cent to the length of his life as a business-man. What innumerable millions has the invention of the cotton-gin by Whitney added, and will continue to add, to the wealth of the world! — a part of which is already realized, but vastly the greater part of which is yet to be received, as each successive day draws for an instalment which would exhaust the treasury of a nation. The instructed and talented man enters the rich domains of Nature, not as an intruder, but, as it were, a proprietor, and makes her riches his own.

And why is it, that, so far as this Union is concerned, four-fifths of all the improvements, inventions, and discoveries, in regard to machinery, to agricultural implements, to superior models in ship-building, and to the manufacture of those refined instruments on which accuracy in scientific observations depends, have originated in New England? I believe no adequate reason can be assigned, but the early awakening and training of the power of thought in our children. The suggestion is not made invidiously, but in this connection it has too important a bearing to be omitted. Let any one, who has resided or travelled in those States where there are no Common Schools, compare the condition of the people at large, as to thrift, order, neatness, and all the external signs of comfort and competence, with the same characteristics of civilization in the farm-houses and villages of New England. These contrasts exist, notwithstanding the fertility of the soil and the abundance of mineral resources, in the former States, as compared

with the sterile surface and granite substratum of the latter. Never was a problem more clearly demonstrated than that even a moderate degree of intelligence, diffused through the mass of the people, is more than an equivalent for all the prodigality of Nature. It is said, indeed, in regard to those States where there are no provisions for general education, that the want of energy and forecast, the absence of labor-saving contrivances, and an obtuseness in adapting means to ends, are the consequences of a system of involuntary servitude : but what is this, so far as productiveness is concerned, but a want of knowledge? what is it but the existence of that mental imbecility and torpor which arise from personal and hereditary neglect? In conversing with a gentleman who had possessed most extensive opportunities for acquaintance with men of different countries and of all degrees of intellectual development, he observed that he could employ a common immigrant or a slave, and, if he chose, could direct him to shovel a heap of sand from one spot to another, and then back into its former place, and so to and fro through the day; and that, with the same food or the same pay, the laborer would perform this tread-mill operation without inquiry or complaint; but, added he, neither love nor money would prevail on a New-Englander to prosecute a piece of work of which he did not see the utility. There is scarcely any kind of labor, however simple or automatic, which can be so well performed without knowledge in the workman as with it. It is impossible for an overseer or employer at all times to supply mind to the laborer. In giving directions for the shortest series or train of operations, something will be omitted or misunderstood; and, without intelligence in the workman, the omission or the mistake will be repeated in the execution.

It is a fact of universal notoriety, that the manufacturing population of England, as a class, work for half, or less than half, the wages of our own. The cost of machinery there also is but about half as much as the cost of the same articles with us; while our capital, when loaned, produces nearly double the rate of English interest. Yet, against these grand adverse cir-

cumstances, our manufacturers, with a small percentage of tariff, successfully compete with English capitalists in many branches of manufacturing business. No explanation can be given of this extraordinary fact, which does not take into the account the difference of education between the operatives in the two countries. Yet where, in all our Congressional debates upon this subject, or in the discussions and addresses of National Conventions, has this fundamental principle been brought out, and one, at least, of its most important and legitimate inferences displayed; viz., that it is our wisest policy as citizens — if, indeed, it be not a duty of self-preservation as men — to improve the education of our whole people, both in its quantity and quality? I have been told by one of our most careful and successful manufacturers, that on substituting, in one of his cotton-mills, a better for a poorer educated class of operatives, he was enabled to add twelve or fifteen per cent to the speed of his machinery, without any increase of damage or danger from the acceleration. How direct and demonstrative the bearing which facts like this have upon the wisdom of our law respecting the education of children in manufacturing establishments! What prominency and cogency do they give to the argument for obeying it, if not from motives of humanity, at least from those of policy and self-interest! I am sorry to say that this benignant and parental law is still, in some cases, openly disregarded; and that there are employers amongst us who say, that if their hands come punctually to their work, and continue at it during the regular hours, it is immaterial to them what private character they sustain, and whether they attend the evening school or the lyceum lecture on the week-day, or go to church on the sabbath.

The number of females in this State engaged in the various manufactures of cotton, straw-platting, &c., has been estimated at forty thousand; and the annual value of their labor, at one hundred dollars each, on an average, or four millions of dollars for the whole. From the facts stated in the letters of Messrs. Mills and Clark, above cited, it appears that there is a differ-

ence of not less than fifty per cent between the earnings of the least educated and of the best educated operatives, — between those who make their marks, instead of writing their names, and those who have been acceptably employed in school-keeping. Now, suppose the whole forty thousand females engaged in the various kinds of manufactures in this Commonwealth to be degraded to the level of the lowest class, it would follow that their aggregate earnings would fall at once to two millions of dollars. But, on the other hand, suppose them all to be elevated by mental cultivation to the rank of the highest, and their earnings would rise to the sum of six millions of dollars annually.

I institute no comparison in regard to the company imported from England, who, though accustomed to work in the mills of Manchester, could not earn their living here.

These remarks, in regard to other States or countries, emanate from no boastful or vain-glorious spirit. They come from a very different mood of mind; for I have the profoundest conviction, — and could fill much space with facts that would justify it, — that other communities do not fall short of our own so much as we fall short of what we might easily become.

A few instances, of a familiar kind, exemplifying the axiom that "knowledge is power," will close this Report.

M. Redelet, in his work, *Sur L'Art de Bâtir*, gives the following account of an experiment made to test the different amounts of force, which, under different circumstances, were necessary to move a block of squared granite, weighing a thousand and eighty pounds.

In order to move this block along the floor of a roughly-chiselled quarry, it required a force equal to seven hundred and fifty-eight pounds.

To draw the same stone over a floor of planks, it required a force equal to six hundred and fifty-two pounds.

Placed on a platform of wood, and drawn over the same floor, it required six hundred and six pounds.

By soaping the two surfaces of wood, the requisite force was reduced to a hundred and eighty-two pounds.

Placed on rollers of three inches diameter, and a force equal to thirty-four pounds was sufficient.

Substituting a wooden for a stone floor, and the requisite force was twenty-eight pounds.

With the same rollers on a wooden platform, it required a force equal to twenty-two pounds only.

At this point, the experiments of M. Redelet stopped. But by improvements since effected, in the invention and use of locomotives on railroads, a traction or draft of eight pounds is sufficient to move a ton of twenty-two hundred and forty pounds: so that a force of less than four pounds would now be sufficient to move the granite block of a thousand and eighty pounds; that is, a hundred and eighty-eight times less than was required in the first instance. When, therefore, mere animal or muscular force was used to move the body, it required about two-thirds of its own weight to accomplish the object; but, by adding the contrivances of *mind* to the strength of *muscle*, the force necessary to move it is reduced more than a hundred and eighty-eight times. Here, then, is a partnership, in which *mind* contributes a hundred and eighty-eight shares to the stock to one share contributed by *muscle;* or, while *brute strength* represents one man, *ingenuity* or *intelligence* represents a hundred and eighty-eight men.

Dr. Potter, in his late work, entitled "The Principles of Science, applied to the Domestic and Mechanic Arts, and to Mauufactures and Agriculture," has the following, p. 29 *n.*: —

"The increasing powers of the steam-loom are shown in the following statement, furnished by a manufacturer: —

"'A very good *hand-weaver*, twenty-five or thirty years of age, will weave *two* pieces of 9-8ths shirting a week.

"'In 1823, a *steam-loom weaver*, about fifteen years of age, attending two looms, could weave *seven* similar pieces in a week.

"'In 1826, a *steam-loom weaver*, about fifteen years of age, attending two looms, could weave *twelve* similar pieces in a week; some could weave *fifteen* pieces.

"'In 1833, a *steam-loom weaver*, from fifteen to twenty years of age, assisted by a girl about twelve years of age, attending four looms, could weave *eighteen* similar pieces in a week; some could weave *twenty* pieces.'"

Here, then, during a period of only ten years, the application of *mind* to a particular branch of business enabled a lad of fifteen years of age, assisted by a girl of twelve, to do from nine to ten times as much work as had before been done by an accomplished and mature workman.

In the manufacture of needles, a number equal to twenty thousand is thrown promiscuously into a box, mingled heads and points, and crossing each other in every possible direction. This happens several times during the various stages of manufacturing needles; and, in each case, it is necessary to arrange them lengthwise or in a parallel direction. One would suppose, beforehand, that the picking out of twenty thousand needles entangled together, and forming, as it were, one great iron burr, and placing them all in a parallel direction, would be a formidable task, even for a week; and also that the operator would need some insurance on the ends of his fingers, or be obliged to submit to a very uncomfortable species of blood-letting. But, by a simple and ingenious contrivance, aided by a little sleight of hand, the work is done in a few minutes. It is unnecessary to inquire how much such ingenuity diminishes the price of needles, because, without it, there would be no needles at any price.

Not more than thirty years ago, it was uncommon for a glazier's apprentice, even after having served an apprenticeship of seven years, to be able to cut glass with a diamond, without spending much time, and destroying much of the glass upon which he worked. The invention of a simple tool has put it in the power of the merest tyro in the trade to cut glass with facility and without loss. A man, who had a *mind as well as fingers*, observed that there was one direction in which the diamond was almost incapable of abrasion or wearing by use. The tool not only steadies the diamond, but fastens it in that direction.

The lathe, the old-fashioned spinning-wheel, and the loom, by having a treadle for the foot, became equal to the addition of another hand to the workman.*

The operation of tanning leather consists in exposing a hide to the action of a chemical ingredient called tannin for a length of time sufficient to allow every particle of the hide to become saturated with the solution. In making the best leather, the hides used to lie in the pit for six, twelve, or eighteen months, and sometimes for two years; the tanner being obliged to wait, all this time, for a return of his capital. By the modern process, the hides are placed in a close pit with a solution of the tannin-matter; and, the air being exhausted, the liquid penetrates through every pore and fibre of the skin, and the whole process is completed in a few days.

The bleaching of cloth, which used to be effected in the open

* "Without tools, that is, by the mere efforts of the human hand, there are, undoubtedly, multitudes of things which it would be impossible to make. Add to the human hand the rudest cutting instrument, and its powers are enlarged; the fabrication of many things then becomes easy, and that of others possible, with great labor. Add the saw to the knife or the hatchet, and other works become possible, and a new course of difficult operations is brought into view, whilst many of the former are rendered easy. This observation is applicable even to the most perfect tools or machines. It would be *possible* for a very skilful workman, with files and polishing substances, to form a cylinder out of a piece of steel; but the time which this would require would be so considerable, and the number of failures would probably be so great, that, for all practical purposes, such a mode of producing a steel cylinder might be said to be impossible. The same process, by the aid of the lathe and the sliding-rest, is the every-day employment of hundreds of workmen." — *Babbage on the Economy of Machinery and Manufactures.*

"The earliest mode of cutting the trunks of a tree into planks was by the use of the hatchet or the adze. It might, perhaps, be first split into three or four portions, and then each portion was reduced to a uniform surface by those instruments. With such means, the quantity of plank produced would probably not equal the quantity of the raw material wasted by the process, and, if the planks were thin, would certainly fall short of it. An improved tool, the *saw*, completely reverses the case. In converting a tree into thick planks, it causes the waste of a very small fractional part; and, even in reducing it to planks of only an inch in thickness, it does not waste more than an eighth part of the raw material. When the thickness of the plank is still further reduced, as is the case in cutting wood for veneering, the quantity of material destroyed again begins to bear a considerable proportion to that which is used; and hence circular saws, having a very thin blade, have been employed for such purposes. In order to economize still further the more valuable woods, Mr. Brunel contrived a machine, which, by a system of blades, cut off the veneer in a continuous shaving, thus rendering the whole of the piece of timber available." — *Id.*

air and in exposed situations where a temptation to theft was offered (and in England hundreds, and probably thousands, of men have yielded, and forfeited their lives), is now performed in an unexposed situation, and in a manner so expeditious, that cloth is bleached as much more rapidly than it formerly was as hides are tanned.

It is stated by Lord Brougham, in his beautiful "Discourse on the Advantages of Science," that the inventor of the new mode of refining sugar made more money in a shorter time, and with less risk and trouble, than perhaps was ever realized from any previous invention.

Intelligence also prevents loss, as well as makes profit. How much time and money have been squandered in repeated attempts to invent machinery, after a principle had been once tested, and had failed through some defect, inherent and natural, and therefore insuperable! Within thirty years, not less than five patents have been taken out, in England and the United States, for a certain construction of paddle-wheels for a steamboat, which construction was tested and condemned as early as 1810. A case once came within my own knowledge, of a man who spent a fortune in mining for coal, when a work on geology which would have cost but a dollar, and might have been read in a week, would have informed him that the stratum where he began to excavate belonged to a formation lower down in the natural series than coal ever is, or, according to the constitution of things, ever can be found. He therefore worked into a stratum which must have been formed before a particle of coal, or even a tree or a vegetable, existed on the planet.

These are a few specimens, on familiar subjects, taken almost at random, for the purpose of showing the inherent superiority of any association or community, whether small or great, where *mind* is a member of the partnership. What is true of the above-mentioned cases is true of the whole circle of those arts by which human life is sustained, and human existence comforted, elevated, and embellished. Mind has been the improver, for

matter cannot improve itself; and improvement has advanced in proportion to the number and culture of the minds excited to activity and applied to the work. Similar advancements have been effected throughout the whole compass of human labor and research: in the arts of transportation and locomotion, from the employment of the sheep and the goat, as beasts of burden, to the steam-engine and the railroad-car; in the art of navigation, from the canoe clinging timidly to the shore, to steamships which boldly traverse the ocean; in hydraulics, from carrying water by hand, in a vessel, or in horizontal aqueducts, to those vast conduits which supply the demands of a city, and to steam fire-engines which throw a column of water to the top of the loftiest buildings; in the arts of spinning and rope-making, from the hand-distaff to the spinning-frame, and to the machine which makes cordage or cables of any length, in a space ten feet square; in horology, or time-keeping, from the sun-dial and the water-clock to the watch, and to the chronometer by which the mariner is assisted in measuring his longitude, and in saving property and life; in the extraction, forging, and tempering of iron, and other ores having malleability to be wrought into all forms, and used for all purposes, and supplying, instead of the stone-hatchet or the fish-shell of the savage, an almost infinite variety of instruments, which have sharpness for cutting, or solidity for striking; in the arts of vitrification, or glass-making, giving not only a multitude of commodious and ornamental utensils for the household, but substituting the window for the unsightly orifice or open casement, and winnowing light and warmth from the outward and the cold atmosphere; in the arts of induration by heat, from bricks dried in the sun to those which withstand the corrosion of our climate for centuries, or resist the intensity of the furnace; in the arts of illumination, from the torch cut from the fir or pine tree to the brilliant gas-light which gives almost a solar splendor to the nocturnal darkness of our cities; in the arts of heating and ventilation, which at once supply warmth for comfort and pure air for health; in the art of building, from the hol-

lowed trunk of a tree, or the roof-shaped cabin, to those commodious and lightsome dwellings which betoken the taste and competence of our villages and cities; in the art of copying or printing, from the toilsome process of hand-copying, where the transcription of a single book was the labor of months or years, and sometimes almost of a life, to the power-printing press, which throws off sixty printed sheets in a minute; in the art of paper-making, from the preparation of the inner bark of a tree, cleft off, and dried at immense labor, to the machinery of Fourdrinier, from which there jets out an unbroken stream of paper with the velocity and continuousness of a current of water; and, in addition to all these, in the arts of modelling and casting; of designing, engraving, and painting; of preserving materials and of changing their color, of dividing and uniting them, &c., &c., — an ample catalogue, whose very names and processes would fill columns.

Now, for the perfecting of all these operations, from the tedious and bungling process to the rapid and elegant; for the change of an almost infinite variety of crude and worthless materials into useful and beautiful fabrics, — *mind* has been the agent. Succeeding generations have outstripped their predecessors, just in proportion to the superiority of their mental cultivation. When we compare different people or different generations with each other, the diversity is so great, that all must behold it. But there is the same kind of difference between contemporaries, fellow-townsmen, and fellow-laborers. Though the uninstructed man works side by side with the intelligent, yet the mental difference between them places them in the same relation to each other that a past age bears to the present. If the ignorant man knows no more respecting any particular art or branch of business than was generally known during the last century, he belongs to the last century; and he must consent to be outstripped by those who have the light and knowledge of the present. Though they are engaged in the same kind of work, though they are supplied with the same tools or implements for carrying it on, yet so long as one has

only an arm, but the other has an arm and a mind, their products will come out stamped and labelled all over with marks of contrast: superiority and inferiority, both as to quantity and quality, will be legibly written on their respective labors. It is related by travellers among savage tribes, that when, by the help of any ingeniously-devised instrument or apparatus, they have performed some skilful manual operation, the savages have purloined from them the instrument they had used, supposing there was some magic in the apparatus itself, by which the seeming miracle had been performed; but, as they could not steal the art of the operator with the implement which he employed, the theft was fruitless. Any person who expects to effect, with less education, what another is enabled to do with more, ought not to smile at the delusion of the savage, or the simplicity of his reasoning.

On a cursory inspection of the great works of art, — the steam-engine, the printing-press, the power-loom, the mill, the iron-foundery, the ship, the telescope, &c., &c., — we are apt to look upon them as having sprung into sudden existence, and reached their present state of perfection by one, or, at most, by a few mighty efforts of creative genius. We do not reflect that they have required the lapse of centuries, and the successive application of thousands of minds, for the attainment of their present excellence; that they have advanced from a less to a more perfect form by steps and gradations almost as imperceptible as the growth by which an infant expands to the stature of a man; and that, as later discoverers and inventors had first to go over the ground of *their* predecessors, so must future discoverers and inventors first master the attainments of the present age before they will be prepared to make those new achievements which are to carry still further onward the stupendous work of improvement.

Amongst a people, then, who must gain their subsistence by their labor, what can be so economical, so provident and far-sighted, and even so wise, — in a lawful and laudable, though not in the highest sense of that word, — as to establish, and,

with open heart and hand, to endow and sustain, the most efficient system of universal education for their children; and, where the material bounties of Nature are comparatively narrow and stinted, to explore, in their stead, those exhaustless and illimitable resources of comfort and competency and independence which lie hidden in the yet dormant powers of the human intellect?

But, notwithstanding all I have said of the value of education in a pecuniary sense, and of its power to improve and elevate the outward domestic and social condition of all men, yet, in closing this Report, I should do injustice to my feelings, did I abstain from declaring, that, to my own mind, this tribute to its worth, however well deserved, is still the faintest note of praise which can be uttered in honor of so noble a theme; and that, however deserving of attention may be the *economical* view of the subject which I have endeavored to present, yet it is one that dwindles into insignificance when compared with those loftier and more sacred attributes of the cause which have the power of converting material wealth into spiritual well-being, and of giving to its possessor lordship and sovereignty alike over the temptations of adversity, and the still more dangerous seducements of prosperity, and which — so far as human agency is concerned — must be looked to for the establishment of peace and righteousness upon earth, and for the enjoyment of glory and happiness in heaven.

REPORT FOR 1842.

Gentlemen, —

. . . During the last year, I have obtained returns from almost every public school in the State, respecting the number of scholars who are engaged in studies above the elementary or statutory course prescribed for the lowest grade of our schools. The result is as follows: —

Scholars studying	History of the United States	10,177
" "	General History	2,571
" "	Algebra	2,333*
" "	Book-keeping	1,472
" "	Latin Language	858
" "	Rhetoric	601
" "	Geometry	463
" "	Human Physiology	416
" "	Logic	330
" "	Surveying	249
" "	Greek Language	183

In some of the public schools, other branches, such as botany, chemistry, natural history, astronomy, intellectual philosophy, and the French language, are attended to; but, as these are not included in the statutory course prescribed for the highest grade of schools, I have not obtained any particular information respecting them. They are not extensively pursued.

Now, is not a bare inspection of the above list of studies

* It was found last year, in the State of New York, that out of 173,384 pupils in attendance upon the public schools, in forty-three out of the fifty-nine counties in the State, only 616 were studying algebra.

sufficient to show that caprice rather than intelligence has presided over their adoption? In this general statement, it is impossible to exhibit the relative proportions in which these different studies are distributed among the different towns in the Commonwealth. It must suffice to state generally, that there is the greatest inequality, not only between different towns, but between different schools in the same town, whose circumstances in other respects are substantially alike.

But, supposing a judicious distribution to exist, can any sufficient reason be given for the proportion which prevails among them? Does the numerical order in which they stand correspond with the natural order, — that is, with an order founded upon their relative importance? Can any satisfactory ground be assigned why algebra — a branch which not one man in a thousand ever has occasion to use in the business of life — should be studied by more than twenty-three hundred pupils, and book-keeping, which every man, even the day-laborer, should understand, should be attended to by only a little more than half that number? Among farmers and road-makers, why should geometry take precedence of surveying? and, among seekers after intellectual and moral truth, why should rhetoric have double the followers of logic?

In the entire list above given, is there one which can claim rightful precedence of that which stands almost the lowest in it? — I mean human physiology, or an exposition of the laws of health and life. After a competent acquaintance with the common branches, is there a single department in the vast range of secular knowledge, more fundamental, more useful for increasing our ability to perform the arduous duties and to bear the inevitable burdens of life, more astonishing for the wonders it reveals, or better fitted to enforce upon us a lively conviction of the wisdom and goodness of God, than a study of our physical frame, its beautiful adaptations and arrangements, the marvellous powers and properties with which it is endowed, and the conditions indispensable to its preservation in a state of vigor, usefulness, and enjoyment? Yet the number in our

public schools engaged in this study, during the last year, was only four hundred and sixteen; and more than one-fifth part of these were in the single town of Nantucket.

The community needs a sound and practical treatise on the relative value and importance of what are called the higher studies, so that these studies might be taken up in an order, and pursued for a length of time, proportioned to their respective utility. Even if I were able to throw out any serviceable hints in regard to these branches, or to assign to each of them its place on a scale graduated according to their relative merits, the appropriate limits of a Report like this would debar me from the undertaking.

The study of human physiology, however, — by which I mean both the laws of life and hygiene, or the rules and observances by which health can be preserved and promoted, — has claims so superior to every other, and, at the same time, so little regarded or understood by the community, that I shall ask the indulgence of the Board while I attempt to vindicate its title to the first rank in our schools, after the elementary branches.

In civilized communities, where the rates of mortality have become a statistical science, it is found that more than one-fifth, almost a fourth part, of the human race die before attaining the age of one year. Instead of filling the number of threescore years and ten, — the period spoken of by the Psalmist as the allotted life of man, — almost one-quarter part of the race perish before attaining one-seventieth part of their natural term of existence. And, before the age of five years, more than a third part of all who are born have died.

After the age of two or three years, however, the annual proportion of deaths rapidly diminishes. Those children who have inherited feeble constitutions from their parents have been thinned off, and the rest have escaped the terrible slaughtering of that ignorance which presides over the nursery. Nature then seems to take them under her care; she prompts them to activity, and even counsels disobedience and stratagem to

secure for them the oft-prohibited boon of exercise and out-door air. Still a vast majority of mankind die before attaining *one-half* of that age at which the faculties of body and mind reach their fullest development and vigor. Before the age of twenty years, — that is, before two-sevenths of the scriptural period has elapsed, — one-half of the human race are supposed to have died. Nor is this all, or the worst; for a vast portion of those who survive suffer pains which it is frightful to think upon. The sick and valetudinary, instead of being here and there an individual, are a countless host; and it is rare to find any person entirely free from all ailments, organic and functional. Instead of contributing their share to those productions and improvements by which life is sustained, and the arts of life and the resources of well-being supplied, these classes are grievous burdens upon their friends or upon society. The worldly prosperity of thousands of families is destroyed by the diseases or infirmities of one, if not both, of their heads. Children are made orphans, or mainly deprived of parental nurture and supervision; or, on the other hand, parents are bereaved of their children. And further, although it is most true that the calamity of sickness, or even of death itself, is nothing, compared with crime, yet it is also true that sickness induces poverty, which is one of the tempters to crime; and that a deranged condition of the physical system often urges to vicious and destructive indulgences by the unnatural appetites which it creates, and thus ill health becomes the parent of guilt as well as of bodily pains.

Should any one think that this view of the subject refers too much of human suffering and delinquency to an ignorance or disregard of the *physical laws*, let him learn what the most obvious and palpable of those laws enjoin; and then let him go through society, and see how systematically and flagrantly they are violated, and he will be in haste to retract his former opinion. I have the concurrent authority of many of our most eminent physicians for saying that *one-half* of all human disability, of the suffering and early death inflicted upon man-

kind, proceeds from ignorance, from sheer ignorance, of facts and principles which every parent, *by virtue of his parental relation*, is as much bound to know as a judge is bound to know the civil or criminal law which he undertakes to administer, or as a juror, in a case of life and death, is bound to understand the evidence on which his verdict is to be rendered. When we reflect that every child in the community, before he arrives at the age of twenty years, might and should become acquainted with those organic laws upon which the Creator of the body has made its health and vigor to depend, how worthless in the comparison becomes a knowledge of algebra, of ancient mythology or history, or of all the Grecian and Latin lore which has come down to us from author or commentator ! *

* Since this Report was written, I have received from England a volume of extraordinary interest and value, entitled "*Report from the Poor-law Commissioners, on an Inquiry into the Sanitary Condition of the Laboring Population of Great Britain*," 1842.

It is an octavo of nearly five hundred pages, and was prepared under one of those Parliamentary Commissions of Inquiry, which, so much to the honor of that country and the benefit of maukind, have been lately instituted in Great Britain.

The work was compiled from the results of investigations into the condition of the laboring classes, both in country and city, — the peasantry, the operatives in factories, the laborers in workshops, mines, and so forth. It is comprehensive in its facts, aud philosophical in its deductions; and its materials were evidently prepared and arranged by some of the ablest and most benevolent minds in the kingdom. It traces back a vast proportion of the personal sufferings, physical degeneracy, and brevity of life, of the laboring people, to their sources; and finds their proximate causes to be a want of cleanliness both of dress and person, living in wet or damp apartments, insufficient or unhealthful food, and, pre-eminently, the indulgence in intoxicating drinks, and the breathing of a corrupt atmosphere.

The work ought to be read by every capitalist and manufacturer, and every builder of houses, in this country. I take advantage of the opportunity afforded, while this Report is going through the press, to add in a note a few of the remarkable facts with which the book abounds. They show to what an extent our health and life are in our own hands. The appalling consequences of a violation of the natural laws by the poor and laboring classes of Great Britain are the results, partly of ignorance, and partly of necessity. But in this country, where wages are so much higher, and where the means of a comfortable subsistence are so abundant, almost all the analogous evils suffered by our people are attributable to an ignorance of those laws and observances, the knowledge and practice of which are essential to health and longevity.

In contrasting the comparative chances, or average length of life, of different

But it may be asked whether I would have all our district schools turned into medical schools, and all the children in the State, males and females, educated as physicians. A few

classes, one chapter of the work exhibits the following facts, not drawn from a single city or district, but from various parts of the country: —

No. of Deaths.		Average age of Deceased.
	In Truro.	
33	Professional persons or gentry, and their families	40 years.
138	Persons engaged in trade or similarly circumstanced, and their families	33 ,,
447	Laborers, artisans, and others similarly circumstanced, and their families	28 ,,
	In Derby.	
10	Professional persons or gentry	49 ,,
125	Tradesmen	38 ,,
752	Laborers and artisans	21 ,,
	Bolton Union.	
103	Gentlemen and persons engaged in professions, and their families	34 ,,
381	Tradesmen and their families	23 ,,
2,232	Mechanics, servants, laborers, and their families	18 ,,
	Bethnal Green.	
101	Gentlemen and persons engaged in professions, and their families	45 ,,
273	Tradesmen and their families	26 ,,
1,258	Mechanics, servants, and laborers, and their families	16 ,,
	Leeds Borough.	
79	Gentlemen and persons engaged in professions, and their families	44 ,,
824	Tradesmen, farmers, and their families	27 ,,
3,395	Operatives, laborers, and their families	19 ,,
	Liverpool, 1840.	
137	Gentry and professional persons, &c.	35 ,,
1,738	Tradesmen and their families	12 ,,
5,597	Laborers, mechanics, and servants, &c.	15 ,,
	Whitechapel Union.	
37	Gentlemen and persons engaged in professions, and their families	45 ,,
387	Tradesmen and their families	27 ,,
1,762	Mechanics, servants, and laborers, and their families	22 ,,

remarks will show that no difficulty would be presented by such a question.

The *Laws of Health and Life* are comparatively few and simple. Every person is capable of understanding them. Every child in the State, before arriving at the age of eighteen years, might acquire a competent knowledge of them, and of the reasons on which they are founded. The profession of medicine, on the other hand, is mainly conversant with the *Laws of Disease.* It is these which are so numberless and complex as to defy the profoundest talent, and the study of the longest and most assiduous life, for their thorough comprehension. Infinity is their attribute. Every difference of climate, of occupation, of personal constitution and habits, modifies their character, multiplies their number, and perplexes their intricacy. Human Physiology, or the science of health and life, may be written in one book; for Pathology, or the science

UNIONS IN THE COUNTY OF WILTS.

No. of Deaths.		Average age of Deceased.
119	Gentlemen and persons engaged in professions, and their families	50 years.
218	Farmers and their families	48 ,,
2,061	Agricultural laborers and their families	33 ,,

This afflictive catalogue might be extended. But enough has been exhibited to show that health and life are held *upon conditions*, and are forfeitable without redemption, by a non-compliance with them. Even the more favored classes of English society, as it appears by these records, live out but a little more than half their days; while the ranks of the poor and laboring classes are thinned, devastated, by the terrible scourges of vice, penury, and ignorance, and are utterly swept away by the time they reach half the average life of their neighbors.

In Manchester, more than fifty-seven per cent of the laboring classes die before they attain the age of five years; and, in a district in Bethnal Green, it was found, that, out of twelve hundred and sixty-eight deaths amongst the laboring classes in 1839, no less than seven hundred and eighty-two, or one in one and four-sevenths, died at their own residences, under five years of age.

This dreadful havoc of human life and happiness was attributable principally to causes whose nature and effects are discussed in the subsequent pages of this Report. It should be remarked, however, that most of these causes exist in a greater degree of energy and intensity in England than in this country. Those who offend much are beaten with many stripes; those who offend less are beaten with fewer; but, even though they offend in ignorance, they are still beaten with stripes. In regard to the whole range of the laws of health and life, Providence seems to treat mere ignorance as an offence, and to punish it accordingly.

of diseases, thousands and ten thousands of books have been written, and yet the subject seems, at the present time, to be hardly nearer exhaustion than in the age of Galen or Hippocrates.

The economy of Providence seems to be the same in regard to our natural capacity for acquiring the knowledge requisite for the preservation of our health that it is in regard to our capacity for acquiring the knowledge requisite for the performance of our duties. What is essential *to* all is made attainable *by* all. Even the heathen — those who were unblessed by the light of the Gospel — were "by nature," in regard to moral obligations, "a law unto themselves, their conscience bearing witness, and their thoughts accusing or else excusing." And so our Creator, in giving us desires to better our worldly condition, to improve in the long catalogue of useful arts, and to adorn the useful with the beautiful, to undertake great enterprises for the benefit of our contemporaries, and to make better provision for the happiness of posterity; in implanting in our bosoms these noble impulses, which demand such arduous and long-sustained exertions, — must also have given us the physical capability of performing the labor, and of enduring the toil, which these exalted services require. It would be an impeachment alike of his wisdom and goodness to suppose that he had tormented the race by imbuing them with a class of desires which reason and conscience approve, but had withheld from them all physical capability of carrying those desires into execution. But this physical capability is nothing without a mental ability to acquire the knowledge on which it depends. And hence it is just to infer that this knowledge is attainable, and should be attained by all.

As it can never be well with us *morally*, unless we obey the laws of duty; so it can never be well with us *physically*, unless we obey the laws of health. But we cannot obey, unless we know the law to be obeyed; and we cannot possess this knowledge, unless we are endowed with capacities, which, by cultivation, can be made competent to attain it.

When we look into our own family circles, or abroad upon the community, and behold the utter waste and havoc which disease and infirmity so often make of human usefulness and happiness, the protracted or condensed agonies of the chamber of sickness, the bereavement of parents, or the orphanage of children, we might be almost tempted to question the goodness of the Being by whom we have been called into existence, were we not assured that "affliction cometh not forth of the dust, neither doth trouble spring out of the ground." This "affliction and trouble" are designed to show us that some rule has been transgressed which the Divine Being in his wisdom had established. They are always monitors to warn us to obedience when we have erred wilfully, or, when we have erred ignorantly, to stimulate us to acquire the requisite knowledge, as well as to practise upon it when acquired. Every bodily pain is a special notification that some part of the machinery of life is out of order.

I see no way in which this knowledge can ever be universally, or even very extensively, diffused over the land, except it be through the medium of our Common Schools. All other instrumentalities for instructing mankind reach but a small part of them, and, of course, must fail extensively in accomplishing any general purpose. Only a comparatively small portion of our youth attend the higher seminaries of learning; and, while this species of knowledge is every way as important to females as to males, the latter only enjoy the benefits of our colleges or universities. Besides, the course of studies in these higher seminaries is already so full as almost to forbid the introduction of more; and those branches which have general usage and prescription in their favor will not readily yield to others, however much more intrinsically important. And hence it is that students are instructed in languages, and in the recondite truths of mathematics and astronomy; they are taught all the motions of the planets, and even the librations of the moon, as carefully as though those mighty orbs would fly from their paths or lose their balance if their course and equipoise were

not prescribed anew from year to year, and to class after class; while the structure of their own bodies, and the simple and beautiful laws on which life and all our capabilities of usefulness are dependent, are almost universally neglected. Lyceum lectures are a medium through which something might be done to inform the public mind on this subject; but their courses are generally too unsystematic and desultory to be relied upon for communicating this indispensable knowledge to the whole people. Besides, there are many towns, inland and sparsely peopled, where no such institution as a lyceum exists.

I hope to be pardoned for evincing a feeling and a conviction on this subject more deep and strong than will meet with the sympathy or concurrence of others. Within the last six years I have visited schools in every section of the Commonwealth, seaboard and inland, city and country. Every day's observation has added proof to proof, and argument to argument, respecting the importance of physical training. Were I to be carried blindfold, and set down in any school in the State, I could tell at a glance, by seeing the mere outline of the bodies and limbs, without referring to face or hands as a test, what had been the habits of the children composing it. Such as have been accustomed to live in the open air, such as have been subjected to the exposures and the hardy exercises of the farm or the mechanical trade, appear almost like a different race of beings when compared with those who suffer under the amazing parental folly of being delicately brought up. As a general fact, the children of the rural population, and of those who live in sparsely-settled towns upon the seaboard, have double the bodily energy, the vital force, the stamina of constitution, which belong to the children of cities and of crowded towns. A fuller development of body, of limbs, and of brow; a firmer texture of muscle; motions evincive, not only of greater vigor, but of longer endurance; in fine, the whole bodily appearance indicating that they have been laid out by Nature on an ampler scale, — characterize the former as compared with the latter. In whatever would task the physical energies, one individual

of one class would be a match for two of the other. This is emphatically true of females. On the other hand, the children bred in cities excel in sprightliness and vivacity. The nervous temperament more generally prevails. Their perceptions are quicker, and their power of commanding more readily, both themselves and their attainments, greatly superior. Continually is the question forced upon my mind, why, with a higher but perfectly practicable system of schools throughout the State, conducted by teachers of adequate knowledge and refinement, and with a general diffusion of the great principles of the laws of health, we could not have in the country the quickness, ease, and self-command which distinguish the city, and in the city the bodily robustness and the mental energy which signalize the country. The possession of these qualities, by each class, would make a new race.

In visiting schools, I have found it a common occurrence, when the hour of recess arrives, and the scholars are permitted to go out and take exercise for ten minutes in the open air, that some half-dozen pupils, with pale faces, narrow chests, and feeble frames, will continue bending over their desks, too intent upon their lessons to be aroused by the joyous shouts that ring through the schoolroom from abroad. These the teacher complacently points out as the jewels of his school; and fathers and mothers look on with swelling hearts and glistening eyes, as the bright vision of future honors and renown rises to their view. Alas, they do not know that those children are victims of an over-active brain, and that every such disproportionate mental effort is a cast of the shuttle that weaves their shrouds! Of all the pupils in the school, it is most important that those who are disposed to sit so long and study so intensely should be lured forth to engage in some genial sport.

So, in nine-tenths of the schools in the State, composed of children below seven or eight years of age, the practice still prevails of allowing but one recess in the customary session of three hours; although every physiologist and physician knows, that, for every forty-five or fifty minutes' confinement in the

schoolroom, all children under those ages should have at least the remaining fifteen or ten minutes of the hour for exercise in the open air.

There is a frightful extent of ignorance on the subject of the physical laws, as they appertain to the human constitution (and in this sense only I use the phrase), pervading the whole community. Even educated men, who are not physicians, are rare exceptions to this remark. The graduates of colleges and of theological seminaries, who would be ashamed if they did not know that Alexander's horse was named Bucephalus, or had not read Middleton's octavo volume upon the Greek article, are often profoundly ignorant of the great laws which God has impressed upon their physical frame, and which, under penalty of forfeiting life and usefulness, he has commanded them to know and obey.

In travelling through the country, how often will a man, who is at once intelligent and benevolent, be pained at witnessing the location of dwelling-houses on low and marshy spots of ground, where the dampness and exhalations from beneath must be like the daily administration of a poison to the families who reside in them!

How few of our public houses — whether the schoolhouse, the court-house, the lecture-room, or the church — are constructed with any suitable regard to ventilation! And even when they have been constructed upon scientific principles, if they are managed by persons who are ignorant of those principles, the benefits of the construction are cancelled. In cities, and in many of our large manufacturing towns, there is an enormous prostration of health and strength attributable to the smallness and the closeness of the sleeping apartments. In this way the soundest economy is defeated; because it is for the interest of any manufacturer or capitalist, whatever his department of business, to employ healthy workmen. Canal-boats and steamboats commit hardly less havoc upon life and comfort by their accidents and explosions, than by the poisonous atmosphere in which it would almost seem as though their

conductors regarded it as a part of their official duty to steep the passengers. How often are the senses offended by the impurity of the atmosphere, on entering large apartments where great numbers of workmen or workwomen — shoemakers, tailors, compositors — are plying their tasks; especially in the evening, when dozens of smoking lamps are each sending off a stream of poison, in addition to the vitiated atmosphere respired from as many pairs of lungs! As such companies often work in a thin, light dress, or even in an undress, they regard only the physical sensations of heat or cold, while they are neglectful of the vital necessity of pure air.

All these are flagrant, conspicuous monuments of public ignorance on the subject of physiology. They are practices, which, if the common mind were once enlightened, would pass away, like the barbarian rite of sacrificing a child to prevent an eclipse.

How little is the diet, especially of young children, regulated in accordance with the principles of physiology! Nutrition and growth depend not less on the times at which food is given, than on the quality of the food itself. Yet, with most mothers, feeding is the standing remedy for every manifestation of disquiet.*

After a child has passed the period of infancy, and begins to show that he has impetuous and unborrowed impulses within, he is then hired to do one thing, or to abstain from another, by the promise of some dainty; and thus he is defrauded, at the very outset of life, of that inward, spontaneous emotion of

* "It is a great mistake," says Dr. A. Combe, "to treat crying as an infallible sign of an empty stomach. New as the infant is to the surrounding world, it shrinks instinctively from every strong sensation, whether of heat or of cold, of pressure or of hardness, of hunger or of repletion. Its only way of expressing all disagreeable feelings is by crying. If it is hungry, it cries; if it is over-fed, it cries; if it suffers from the prick of a pin, it cries; if it lies too long in the same position, so as to cause undue pressure on any one part, it cries; if it is exposed to cold, or any part of its dress is too tight, or it is held in an awkward position, or is exposed to too bright a light, or too loud a sound, it can indicate its discomfort only by its cries; and yet the one remedy used against so many different evils is, not to find out and remove the true cause of offence, but to give it the breast." — *Combe on Infancy*, 152.

pleasure which Nature has made inseparable from every right action performed from a right motive; and, instead of the feeling of joy which would be a sufficient reward for an angel, there is substituted a sensual pleasure which can only satisfy a brute. Even in educated circles, it is still a common thing for acquaintances and visitors to send or carry to children some pernicious present of confectionery or sweetmeats, as a testimonial of, or perhaps more frequently as a lure to, affection. Thus, not only selfishness, but physical disturbances, are caused, and morbid appetites generated, which, before the close of life, grow into tyrannical desires, involving character and happiness, or subject the sufferer to agonizing struggles and mortifications before they can be subdued. Such an act ought to be regarded as an injury at least, if not an insult; oftentimes it is both. And even amongst adults who are accounted rational men and women, and who are not obnoxious in any one thing to the charge of sensual indulgences, how little is the grand axiom practised upon, that the temperate man is the greatest epicure! that is, that, in the long-run of life, those persons will derive the greatest amount of pleasure from their natural appetites who never indulge them to excess.

While such practices in the treatment of childhood and youth, even in the single article of diet, continue to prevail, it will be necessary that more than three hundred and sixty-five miracles should be wrought in their favor, every year of their lives, before they can ever become a vigorous race of men and women. But, until the subject of physical education is better understood, any general reformation is hopeless.

In regard to exercise, many people who acknowledge it to be indispensable, and a necessary of life, still conceive of it as some given amount of bodily motion or of muscular activity, which may be taken, once for all, at the end of a week or a month; or that, by securing an annual vacation, they can crowd into one toilsome excursion what should be distributed over the year. They do not regard it, like food, as a daily necessity. They do not know that its utility depends wholly

upon certain states, either of the system in general or of the digestive organs in particular. Hence inconvenience and expense are often incurred in order to promote health by means of exercise, which, from its untimeliness or severity, is sure to inflict greater evils than it was intended to avert.

Nothing is more commonly overlooked, than that the great sustainers of a vigorous life — air, exercise, diet — depend upon proportion, adaptation, adjustment; that what is salutary at one time may prove fatal at another; and therefore that there should be a presiding intelligence in every individual, by which his conduct may be so modified as to correspond with ever-varying circumstances. It is injurious to health to be deprived of a sufficiency of food; but, if one is deprived of exercise, it is better that he should be deprived of a corresponding portion of food also. In the long-run, it is fatal to be deprived of fresh air; but, without an adequate quantity of food, even fresh air will consume the vitals of the system. Thus, the hybernating animals live without either food or air for months, when, if they exercised and respired freely, and at the same time were deprived of food, they would perish in a week.

An accurate knowledge of a few great physiological principles, together with a sound judgment or discretion in applying them, will suffice to ward off an inconceivable amount of human suffering, and to confer an ability to make great additions to the public welfare, instead of subtracting from it. The Creator assures us that "he doth not afflict willingly nor grieve the children of men;" and if, in all things, the race should obey the physical laws of God, they would no more suffer physical pain, than they would suffer remorse, or moral pain, if in all things they would obey the moral laws of God.

This subject has its merits, which should command the attention of the statesman and political economist. All investments to preserve or increase the public health would be reimbursed many fold, in an increased capacity for production. One of the most important items in a nation's wealth consists in the healthfulness and vigor enjoyed by its people. All agricul-

turists and manufacturers must feel the force of this remark in regard to their own workmen; and they would feel it still more if they were obliged, at their own expense, to support those workmen during all periods of sickness or incapacity to labor; and this is the relation in which the State stands to its citizens. It has been said by some writers on political economy, that from one-seventh to one-eighth of all the wealth of a country originates in the *labor of each year*. Hence, if any nation or community should cease from production for seven or eight years, the whole of its wealth — houses, lands, goods, money — would be consumed. What a forcible idea of the value of labor is presented by this fact! Yet what a sick workman or operative would be to a capitalist who was obliged to maintain him, a sick citizen is to the Republic. Every sick man, every man rendered unserviceable by general debility or specific ailment, must be subtracted from a nation's available resources. He not only adds nothing to the common stock, but he draws his subsistence in some form — and often, too, a very expensive subsistence — from the storehouse which the industry of others has filled. Omitting all considerations of personal and domestic suffering, of the extinction of intellectual power, and of those moral aberrations which originate in physical derangement and disease, — and considering the race under the mere aspect of a money-making power, — in this respect it is clear, that the health and strength of one community, if set in opposition to the debility or infirmity of another, would be sufficient, not only to determine the balance of trade, but to settle all other points of relative superiority. Let such information be diffused through the public as all the children in our schools might easily acquire, and a single generation would not pass away, without the transfer of immense sums to the other side of the profit-and-loss account in the national ledger. Of course, I do not mean that all diseases could be abolished at once, even by universal diffusion of a knowledge of their causes; or that the era foretold by the prophet would be ushered in, when "the child shall die a hundred years old," and when there shall be

no "old man that hath not filled his days." The violation of those beautiful and benign laws which the Creator has inwrought into our system has been too heinous, and too long persevered in by the race, to be expiated or atoned for in a single age. Disease and debility, transmitted through a long line of ancestors, have acquired a momentum by the length of the descent which cannot at once be overcome. But I do mean, if this subject were generally understood, that such a change would be wrought in a single generation, that a broad and deep current of wealth would be made to change its direction; and, instead of millions annually flowing outward from the common treasury to defray the various expenditures of sickness, that treasury would be replenished by an equal number of millions, coined in the mint, and from the ore, of labor-loving health. Yet, amid all our pecuniary speculations, this grand financial operation of substituting health and strength for sickness and debility — that is, immense gains for immense expenditures — has been unheard of.

In the army and navy, where the expediency of giving battle has been discussed in a council of war, or afterwards, when the causes of defeat have been explained by the vanquished, the state of the sick-list has been made the subject of inquiry. The historian, too, in his account of campaigns, recognizes health and sickness as among the grand causes of success or disaster. But the manly health and vigor of a people engaged in the arts of peace — as among the most essential items in a nation's valuation, as a capital ready for profitable investment in any industrial enterprise, and therefore as a prolific source of public revenue as well as of private wealth — have been overlooked by statesmen and lawgivers, in all their schemes for national aggrandizement.

The pecuniary merits of this subject may be presented under another aspect. Children, at different ages and under different circumstances, may be regarded as representing investments of different sums of money. These investments consist in the amount which has been expended for their nursing, rearing,

clothes, board, education, and so forth, and in the value of the time of others which has been appropriated to them. Though differing exceedingly in regard to different persons, yet, in this country, the aggregate expense, with its accruing interest, of the great majority, at the age of twenty or twenty-one years, can hardly be estimated at less than from five hundred to a thousand dollars, after deducting the value of all services performed. Now, if half mankind die by the time they arrive at this age, or before it, — and half of these come to their untimely end through the ignorance of their parents or themselves, — what an amazing price does our ignorance cost us! With what reckless prodigality do we continue to cherish it! What spendthrifts we are, not only of the purest sources of affection and domestic happiness, but of wealth!

Compared with the economical value of physiological knowledge to a nation, what is the utility of discovering a north-west passage, or of exploring the sources of the Niger, or circumnavigating a continent of ice around the south pole? Yet no systematic measures have ever been taken by any government for its universal diffusion amongst the people, although it is certain that such knowledge is a condition precedent, without which a high point of health for the whole community can never be reached. Our Common Schools are a channel through which this knowledge — as delightful in the acquisition as it is useful in possession — may be universally diffused; and, in the long-run, its legitimate products will be found to transcend in value the gains of the most adventurous commerce or the spoils of the most successful war.

Perhaps some may deem it a visionary notion, that any considerable amelioration of the public health can be effected by a more extended acquaintance with the physical laws. Many persons attribute disease to accident or chance, or to some occult or remote cause lying beyond human ken, and therefore beyond human control. Some believe diseases to be judgments directly inflicted by Heaven upon the body for offences committed against the moral law. Others, again, suppose pain

and untimely bereavement to be a part of the inevitable lot of humanity, designed to test the strength of our confidence in the goodness of the Creator ; and they therefore deem it a duty to practise resignation to what they suppose to be the divine will, rather than to inquire whether there may not be a duty of prevention as well as of acquiescence. This last view often degenerates into a sort of fatalism, — a belief that what is to be will be, and that our destiny is fixed irrespective of our conduct.

Amid this vagueness and confusion of thought, — often aggravated by superstitious views of the divine government, — the frightful extent of maladies which we bring upon ourselves, as the direct consequences of our own misconduct, ceases to be a subject of wonder. We attribute to Divine Providence what belongs to our own improvidence. We refer to chance what flows from the violation of unchangeable laws. Oftentimes we submit passively to pain, without seeking to find antidote or remedy, when the very object of the pain is to admonish us that we have offended, and to quicken our intellect to discover in what the offence has consisted, or to apprise our moral nature of the consequences of a known disobedience. In most cases, however, the ignorant appeal to empiricism to relieve them from the consequences of their ignorance ; and thus they aggravate the evils they would remedy. An immense extent of suffering, of abridgment of human life, is regularly bought and paid for among us. A market of imposition is opened to supply the demands of ignorance ; and this must continue to be so until the people are more enlightened. Did the pretenders to medical science who infest the country in such formidable numbers confine themselves to the barbarian's practice of charms and incantations, the mischief wrought by their arts would be far less deplorable ; but, accustomed as they are to more potent prescriptions, they commit wider havoc of human health and life than the medicine-men of the savages themselves.

In regard to this great subject, the first rule, in point of authority as well as of reasonableness, is, that "sin is a transgression of the law." And the consequences of a transgression

of the physical laws are equally visited upon the *body* of the offender, whether he were acquainted with the laws or not. An infant, though helpless, and ignorant of the quality of fire into which it accidentally falls, will be consumed by it as certainly as a Hindoo devotee who leaps into it for self-destruction. In the foundering of a slave-ship at sea, the stolen victim will be drowned as soon as the ruthless kidnapper. When carbonic-acid gas enters the lungs, it extinguishes life with equal certainty and rapidity, whether the heart of the sufferer be good or evil. On this subject, therefore, the first rule, that "sin is a transgression of the law," is universal; and equally universal is the last, that "the way of transgressors is hard."

The hastiest glance at the condition in which we are placed in this life will demonstrate, not merely the utility, but the necessity, of physical education, as a department of knowledge to be universally cultivated. We are introduced, at birth, into the midst of the great agencies of Nature. Each one of these agencies is sufficiently powerful to obliterate our senses, to maim our persons, or to extinguish our lives; and yet we are profoundly ignorant of their properties and of their modes of attack. We bring into life, it is true, a certain amount of vital force, which is antagonistic to the forces of Nature; but this vital force at first is so feeble, that, if not protected against its assailants, it is subdued at once, and life is annihilated.

The chemical affinities or forces, for instance, hold perpetual combat with the vital force. Our bodies are the battle-ground where these hostilities are carried on. If the vital force be driven, for a single minute, from any part of our bodies or organs, forthwith, in obedience to the chemical law, decomposition, or mortification, commences; and, if the chemical force be not overborne and beat back by the vital force, the mortification extends, and death ensues.

And, what is more, the vital force with which we are endowed cannot be sustained, for an hour, without drawing for support upon the hostile elements by which we are encompassed; that

is, a certain portion of these elements is essential to our existence, while an excess of them is fatal to it; and, further, the result is equally fatal whether we take too much or too little. Air is a necessary of life, from the first moment of our introduction into it; and yet the extinction of life will ensue as certainly from exposing the whole body to the action of the changes and currents of air as from an entire deprivation of it. Necessary as is the air, yet if its temperature varies very much from that of the blood, either on the side of coldness or of warmth, each extreme is equally fatal. And, again, if the air is too moist or too dry, the vital organs are clogged by its humidity, or inflamed by its aridness. Drink is necessary; but, at first, the urn of life is so shallow, that a few drops in excess will sink it forever. Food is necessary: if withheld, death follows by privation; if administered too freely, death equally follows by repletion; and if of an unwholesome quality, then it becomes a poison. Light is necessary to awaken the visual sensibility of the eyes; yet too strong a beam will extinguish them forever. Sound is necessary to break the silence of the ear; yet, if too violent and shrill, it will rend the delicate organ it should only have vibrated.

Now, Nature parcels out to us no fixed, definite quantities or qualities of these elements, which are essential in degree, in excess fatal. In the course of a year, from the melting heats of summer to winter's congelations, we are carried through variations in atmospheric temperature amounting to more than a hundred degrees. Even in a single day or hour, this temperature varies to an extent utterly destructive of health and life itself, if our prudence does not mitigate its changes. It varies, too, from the extreme dryness of the north-west wind, which will extract moisture from kiln-dried wood, to the humidity of a southerly or south-easterly wind, in which a fish would hardly perceive that it was out of its own element. We are also placed in the midst of a boundless profusion and variety of materials for food, both of the animal and vegetable kinds, and these kinds are intermixed with attractive though poisonous

substances; and yet Nature utters no warning voice when we are about to pluck and eat unwholesome fruits, nor does she stretch forth a hand to arrest our hands when we are indulging to a surfeit. Although, therefore, the vital force which we bring into life, if duly nurtured and protected, will speedily obtain immense accessions of strength, and power of endurance, yet it is always surrounded, pressed upon, besieged, by the mightier forces of Nature; and hence not only our health and strength, but our very existence, depends upon a knowledge how to adapt ourselves to these external agencies. Neither heat nor cold, nor moisture nor dryness, nor food nor raiment, is meted out and apportioned to us as needed for our daily use and for the prolongation of life. We are left, without any revelation, to find out, by our own study, what kinds, in what quantities, under what circumstances, they must be used to yield us the longest life and the greatest power. As all the agencies and objects of Nature which surrounds us and come in contact with us are *unintelligent* in regard to our wants, if we also are *unintelligent* in regard to their properties, then we and they hold the same relation to each other as that of particles in a chaos.

In our early years, these adjustments, adaptations, protections, are left to parental knowledge and vigilance; afterwards the responsibility is transferred from parents to offspring. But parents are deplorably ignorant. Hence they allow unhealthful indulgences. They inculcate false principles. They establish bad habits. As an inevitable consequence, sickness and suffering abound. Disease or debility of some vital organ is the common lot rather than the occasional fact. Untimely death is so frequent as no longer to excite surprise. And maladies whose pains are severer than those of death are bequeathed from parents to children as a disastrous and perpetual heritage.

Suppose any portion of our population to be as unlearned in the science of physiology as a tribe of savages, and a hundred reasons will be apparent why such portion would suffer more of disease and physical degeneracy than savages themselves. In civilized communities, there are many causes creative of disease

which have no existence in a savage state. In the former, the population is always more dense than in the latter. Hence people are crowded together in masses; and this mode of living, where ignorance prevails, is invariably accompanied with a dearth of pure air; and thus at once an indispensable constituent of health is taken away, and a prolific source of disease substituted for it. In the various processes of the arts cultivated by a civilized people, unhealthful occupations are pursued. All in-door and sedentary employments come within this description. In many branches of manufacture, noxious products of gases are evolved, which the operator inhales to the detriment of health, and often to the direct and obvious abridgment of life. Among savages, there is no painter's colic. No polisher of steel breathes steel-dust to inflame and corrode his lungs. No smelter lives in an atmosphere of corrosive gases. No preparer of beverages inhales the carbonic acid which is evolved in the process of fermentation. No savage tribe has ever reached such a depth of degradation as to render the enactment of penal laws necessary to rescue innocent and helpless children from excessive labor in factories and coal-mines. Amid the luxuries of a civilized community, the more degraded classes are surrounded by temptations always, and by opportunities occasionally, for indulging their appetites in forms of excess from which barbarians are happily exempted. All these are powerful agents for breaking down the health and constitution of those who occupy one extreme of the social scale. The other extreme is also assailed by causes hardly less potent for evil. What are seductively but falsely called the refinements of life; an ability to indulge in luxuries and epicurean diet, without any necessity for a corresponding degree of active exercise; fashions of dress in impotent defiance of climate; the conversion of night into day; systematic bodily indolence, lowering the tone of the system, and thus rendering necessary all the guards which human art can devise against those inclemencies of the seasons which ought to be braved instead of being shrunk from, — all these are mighty causes of physical deteri-

oration, from which the savage whom we pity is free. These are evils which, to a lamentable extent, characterize the civilization of the present age. Comfort has been sought so blindly as to bring a thousand discomforts in its stead. Means used to prolong life have shortened it, because adopted in ignorance of its conditions. Yet, much as these errors destroy the vigor, abridge the years, and impair the happiness, of the parents, their consequences are visited with terrible aggravation upon children.

And this is true of both the classes above referred to. Were the genealogy of families to be traced, it would be commonly found that those who occupy what are usually called, by way of distinction, the highest and the lowest grades in society, run out after two or three generations. Among the very poor, mortality is greatest below the age of five years. Among the wealthy, skill and appliances preserve their offspring through the years of childhood to perish between the ages of fifteen and twenty-five, just as the hopes and prospects of life are dawning upon them. The lineage of the poorest comes to a termination by poverty and wretchedness; that of the richest goes off in chronic and hereditary distempers, gout, apoplexy, and, especially among females, by consumption. Both are replenished from the middling classes of society, who owe their vigor and the perpetuation of their families rather to the happy fortune of being compelled to labor, to be out much in the open air, and to incur what they call exposures and hardships, than to any knowledge of those laws which they ignorantly observe, but whose observance, though ignorant, is thus generously rewarded.

Can reasons so cogent and demonstrative as these be offered in favor of the adoption in our schools of any of the other higher branches of knowledge? Here is a study upon whose cultivation the power to pursue all others with vigor and alacrity depends. Algebra and other branches of mathematics may discipline the intellect, and enable it to concentrate all its divergent forces into a focus of light, to be thrown on any par-

ticular point. Rhetoric and logic may make us acquainted with rules whereby to judge of the taste or reasonings of others, or to fashion our own. An acquaintance with the learned languages may enable us to read a few books, written in the infancy of society, before philosophy had acquired its present depth and expansion, and when scarcely any thing was known of those great civilizers of mankind, the useful arts. But an observance of the physical laws — and knowledge must necessarily precede the observance — would prepare us to enter upon any one in the whole range of studies, or upon any of the active duties of life, with tenfold capacity and ardor. Soundness of health is preliminary to the highest success in any pursuit. In every industrial avocation, it is an indispensable element; and the highest intellectual eminence can never be reached without it. It exerts a powerful influence over feelings, temper, and disposition, and, through these, upon moral character. If, now and then, as a rare exception to the general course of events, an extraordinary individual appears, who, without the sustaining power of bodily vigor, enlightens the race by his solitary contemplations, yet it is believed that such prodigies have never transmitted their powers to their offspring, and that no instance has existed where great executive efficiency has been united to intellectual or moral pre-eminence in the absence of physical health.

So, too, in the common course of nature, it is as improbable that a mother who is physically diseased will rear a healthy family of children, as it is that an immoral mother will train children to morality.

Yet, incredible as it may seem, the means of acquiring vigor, quickness, endurance, have been sought for, not by the clergyman, the lawyer, the artist, the cultivator of letters, the mother, but by the wrestler, the buffoon, the runner, the opera-dancer. There are ten professors of pugilism in our community to one of physical education in our seminaries of learning.

If opportunities for ease, and an eager competition for enervating luxuries and refinements, take possession of society,

without any corresponding knowledge of the laws of health, the race itself must rapidly deteriorate. Such a degeneracy must not only be considered as one of the greatest calamities that can befall a people, but it must be entered on the catalogue of its greatest sins. We look with abhorrence upon those barbarous tribes who practise infanticide; but they are as little conscious of the wrong of depriving their offspring of mere animal life as we are of the wrong of depriving ours of health, that is, of all the physical blessings which life affords; and an enlightened posterity may not be without difficulty in determining which is the greater offence against nature, — to relieve the impotent, the diseased, the deformed child at once, of all mortal suffering, or to rear a race of puny, dwarfish, imbecile children, the inheritors of parental maladies, doomed to suffer through all the years of their existence for offences which they did not commit, and to leave to their own offspring a patrimony of aggravated and redoubled miseries.

About seven millions, or one-half of the free white population of the United States, are under eighteen years of age. Could we allow to these only an average period of twenty four or five years, after having reached majority, how important to the country would be their condition as to health and strength! How much more important, yet how much less regarded, than if they were an army of seven millions of men! And what significancy and impressiveness does it give to the fact, that half of mankind die before reaching the age of twenty years. The amount of individual, domestic, social, and public interests dependent upon the physical well-being of this multitude, cannot be appreciated by any finite mind. It is too vast for our comprehension. We can hardly conceive of the latent power which exists even in a single healthy, well-formed infant. What a magazine of forces lies pent up within the narrow limits of its frame! What endurance, celerity, energy, achievement! As a mere material agent, a physical machine, there is something almost sublime in the idea of its hidden capacities and might. Who, without the evidence of observa-

tion and history, would be so credulous as to believe, that in the tiny, flaccid arms of a group of infant children, there were concealed such energies as could turn a granite quarry into the dwellings and temples of a city, or convert a forest into ships, or a wilderness into a garden, or almost turn the earth inside out to bring up its deep-deposited treasures for human comfort or embellishment? Yet we know that these helpless beings are endowed with innate forces which render such achievements possible and practicable; that they can not only satisfy the wants of the body, but provide in abundance for the higher wants of the soul, and, during the period of a short life, can prepare bounties and blessedness for continents and centuries.

But, on the other hand, the "glassy essence" of the child's life may be so treated that he will become more and more fragile; that he will be tormented with the pains and infirmities of disease, instead of exulting in the vigor and buoyancy of health; not able to impart aid to others, but constantly extorting assistance from them; adding nothing to the common stock, but drawing his own subsistence from it; and, instead of leaving the world indebted to him for the services he has rendered it, departing from it like an absconding debtor from among abused creditors. And, if this is so important in regard to a single individual, how vastly is this importance increased when multiplied by the number of all!

The idea is sometimes entertained, even by men otherwise intelligent, that Nature imparts to each individual a certain specific or fixed quantity of physical force; that this bestowment marks the extent or limit of ability; and therefore, when we have expended this quantity, whether more or less rapidly, we come to a point of exhaustion, which is not only natural, but necessary. In other words, the assumption is that each individual has a certain capacity; that this capacity is once filled; and, when it is exhausted, we might as well attempt to pour more than its own contents from a vessel of water, as to obtain more from the bodily system than the cubic measurement at which it was originally gauged. The same idea is sometimes

more learnedly, though with equal error, expressed under another similitude. Different individuals are said to be like so many galvanic batteries, capable respectively of generating a certain amount of force, according to the magnitude of the machine and the perfectness of its construction. This force, it is asserted, may be economized or squandered; but, with every expenditure of power, a certain portion of the machine is decomposed; and when, either by the frequency or the intensity of the shocks, the whole chemical energies of the apparatus are destroyed, we have nothing left but worthless oxides of copper and zinc.

Nothing can be more false, or more disparaging to the benevolence and skill of the Creator, than this view of our corporeal mechanism. The bodily machine has the faculty, after having given off its strength, of recovering it anew. This process it can repeat thousands and thousands of times. It is recuperative, self-replenishing, self-repairing. Each muscular effort may, indeed, be attended by a waste or loss of a part of the muscle or organ that is used; but, if the effort put forth is not excessive, that very waste is supplied by the deposit of new material which is capable of making a more vigorous effort than the part whose place it has taken. Thus we receive more than we give. The expenditure is followed, not by loss, but by accumulation; and this increase, or reduplication, may go on for fifty years without abatement.

But these wonderful resources of the body can be developed only by conforming to the laws of its organization. These laws are not an isolated system, independent of and unconnected with every thing else. They have the most intimate relation to the properties and laws of the external world. Diet, air, exercise, clothing, the changes of temperature and the vicissitudes of the seasons, light, moisture, the elevation or depression of different localities, come within their purview. With every new combination of circumstances, the law is modified, or, rather, a new law applies to the case. The practical application of the law, therefore, is a matter of adjustment, proportion, fitness, relevancy, — that is, of KNOWLEDGE.

Although the proofs from which these views are derived are abundant, and obvious to every intelligent observer, yet I am desirous of corroborating my own opinion by testimony in which the public will repose undoubting confidence. For this purpose, I here introduce a few letters from eminent physicians whose characters are a guaranty for the correctness of their statements. The circular to which the letters are a reply is prefixed.

CIRCULAR.

To —— ——.

My dear Sir, — Ever since I became at all acquainted with the laws of health and life, I have had daily and hourly occasion to lament the unnecessary as well as immense loss which is suffered, by individuals and by the community, in consequence of the violation of those laws.

The loss consists in the personal suffering of many, with its attendant expenses, in the impaired ability for usefulness of a still larger number, and in the premature death of a vast majority of mankind.

In looking at these calamities with a view to their prevention or diminution, it seems to me important that a distinction should be made between those transgressions of the law which arise from ignorance merely, and those which are committed by yielding to the impulses of inordinate appetites. For the prevention of those which flow solely from ignorance, mere knowledge will be an antidote; but, to prevent those which punish the improper indulgences of appetite, some change must be effected in the moral condition of the patient. Even in the latter case, however, a clear knowledge of the benefits naturally resulting from an observance of the laws of health and life would come powerfully in aid of a moral reformation.

I am aware that there is a class of cases which do not fall exclusively under either of these heads, —cases which may be called *mixed,* because they include a surrender to the dominion of appetite, notwithstanding certain vague and obscure notions — a sort of half-knowledge — of injurious consequences. If, however, even in this class of cases, that which alone is entitled to be called *knowledge* — that is, a clear, vivid perception of the consequences attached to an act — would have saved the victim, I see not why such cases should not be arranged under the head of evils resulting from ignorance.

From a retrospect of your extensive medical practice, and from your observations on health and longevity, I trust you will be able to arrive at, or at least to approximate, some pretty definite conclusion respecting the *proportion* of sickness, physical disability, and premature death, which may be fairly attributed to an ignorance of physiological principles already discov-

ered, and which most persons would avoid if proper attention were paid to early education and habits. Or, in other words, in the present state of the science of physiology, how great a *proportion* of disease, of suffering, of a diminution of the physical capacity of usefulness, and of the abridgment of life, comes from sheer ignorance (as contradistinguished from that which proceeds from causes not known, or from inordinate indulgences), and which, therefore, we might hope to see averted, if the community had that degree of knowledge which is easily attainable by all.

By so doing, I think you will furnish a powerful argument in favor of making those conditions on which health and life depend a subject of study, not only for adults, but especially for the young; and, in order to reach the latter class as extensively as possible, you would prove the expediency of introducing the study of physiology into our common schools, after the primary studies have been mastered.

Should you do me the favor to reply to this letter, I hope you will not think yourself confined within the narrow outline I have sketched, but will extend your remarks to any topics which will subserve the two great objects I have in view, — namely, the prevention of suffering, and the increase of the physical capabilities of the community.

Very truly yours,

HORACE MANN,
Secretary of the Board of Education.

LETTER FROM DR. JAMES JACKSON.

HON. HORACE MANN.

My dear Sir, — I agree with you entirely as to the lamentable evils which arise from the violation of the laws of Nature in regard to health and life. You will add much to the benefits you have already conferred on the rising generation, and on the community, if you cause to be instilled into the young a knowledge of the value of health, and of the means of preserving it.

The evils you describe are undoubtedly, in many instances, incurred from ignorance. An acquaintance with the functions of the living body, and with the causes which influence those functions for good or for evil, would have a great tendency to prevent such evils. But the proportion of cases in which ignorance alone, "sheer ignorance," is the cause of disease, &c., is not perhaps so large as you are disposed to believe. By far the greatest proportion of cases in which the health is injured, and life is shortened or rendered useless, unnecessarily, consists of the cases you call

"*mixed.*" Ignorance has a share in producing them, a greater or less share, but is not the sole cause.

You now ask in how great a portion of all the cases of sickness, impaired health, &c., ignorance is either the sole cause, or co-operates with other causes in producing the result. I find it impossible to give a very precise answer to this inquiry; but I feel assured that the answer should be, *more than one-half.* When it is brought to mind that the ignorance of parents is included in the terms of the inquiry, the justice of the answer will probably be admitted by all who are conversant with the subject.

The first great difficulty in the young, and often in those who have passed their youth, is, that they are ignorant of the value of health. They may acknowledge in words, but they do not realize, how much the enjoyment of life is abridged by ill health. Still less are they aware how much the usefulness of one's days may be impaired by disease, or even by chronic ailments, which are scarcely called diseases. While men desire long life, they too often disregard the importance of being able to use all their powers and faculties unimpaired during the years they do live. The first thing, therefore, is to make the young understand that they should endeavor to cultivate and maintain all their powers, and be ready to bring them into healthy exercise at all times. To this end, they must learn, not only to be properly equipped for the warfare of life, but also not to take on the burdens of bad habits, which will impede them in their march.

If these views of the importance of sound health be presented clearly and fully to the young, they may then be desirous to learn the art of living well. Teaching principles alone will not insure the practice of this art, but it will promote it. The study of Physiology will lay the foundation. To the common student, who does not intend to devote himself to medicine, it would suffice to learn the great or most important functions of the human system, — such as those by which we convert our nutriment into blood, and, distributing this to the various parts of the body, form from it the various solid and fluid substances; those by which we carry off the useless materials by the various emunctories; those by which we recognize the existence and qualities of the material things around us; and those by which we perform the voluntary motions. To these might be added the changes which the body and mind undergo from infancy to old age, the mutual influence of the mind and body on each other, and perhaps some others.

A general acquaintance with the matters thus described, which might be illustrated by demonstrations to a very limited extent on brute animals and plants, could, I think, easily be communicated to young people from fourteen to sixteen years of age. But this instruction in physiology would not be enough. It should be followed by instruction in hygiene. This is the branch of medical science which regards the preservation of health and the attainment of long life. Rules on this subject may be given to those

who are ignorant of physiology; but the subject can be presented much more advantageously to those who are not ignorant of it.

The advantages of such instruction as we have in view may be doubted by many persons. I would not exaggerate those advantages, nor hold out expectations which may be disappointed. I should not look for a marked change in the habits of society in any short time. But, as knowledge of this kind becomes diffused in the community, there would probably be an increased desire for it; many of the thoughtful would continue to study the matter as they were growing up; and future mothers, at least, would be anxious to apply their learning for the benefit of their children. If they would do this successfully, the generations which are to follow us would be rising in the scale of physical well-being at least. I say physical well-being at least; but I have a full conviction that there would be some corresponding moral improvement. The tendency of physical health, attained by well-trained habits, must, I think, promote that manliness, that virtue, which enables men to keep in the paths of rectitude. There would be fewer of those deviations which one excuses to himself by saying he could not help it. At any rate, some of the evils of life might be mitigated or averted. Meanwhile, the studies proposed connect themselves readily with other branches of natural history. How useful, how beneficial to the mind, are all branches of natural history, I need not say to you. Perhaps I owe you an apology for having been led off so much from the immediate object of your inquiry.

I am, dear sir, with sincere respect,

Your friend and servant,

JAMES JACKSON.

6, 1842.

LETTER FROM DR. S. B. WOODWARD.

STATE LUNATIC HOSPITAL, WORCESTER,
Jan. 2, 1843.

HON. HORACE MANN.

Dear Sir, — I have received your late letter, and improve the earliest opportunity to reply.

From the cradle to the grave, we suffer punishment for the violation of the laws of health and life.

In infancy, mismanagement, arising from ignorance or neglect of these laws, not only destroys many lives, but impairs the health of thousands who survive, gives bad development to organs essential to life, and entails the elements of disease and death upon them.

The more common errors are, bandaging the body and limbs, neglect

of cleanliness, hot beds, hot and ill-ventilated apartments, bad clothing, covering some parts too much and too closely, and others too little or not at all; bad food, too much feeding, and especially administering drugs for those slight indispositions which, in a short time, would be removed without remedies, &c. Thus the infant is subjected to suffering, to disease and death, before it is responsible for a single error.

The exposures, imprudences, and evil habits of the young are the causes of many of the diseases of that period of life, particularly of CONSUMPTION, the great destroyer of this most interesting portion of the human family. Many of the victims of this disease have an hereditary predisposition transmitted from parents, and also feel the influence of a neglect of proper training in the periods of infancy and childhood.

As far as I have known, the educated and wealthy classes of society manage their children with less regard to the natural laws of life than the common-sense yeomanry of the country. They are less healthy, less robust, and die prematurely in greater proportion.

The *former* restrain from active pursuits, and pamper appetite too much, often preferring delicacy of appearance to vigor of health; and by this mistake they bring suffering and disease upon their offspring, which is felt in all after-life.

The *latter*, by encouraging activity, and simplicity of diet, insure for their children vigorous health, a power of repelling the causes of disease, and of throwing off disease when it attacks them.

Considering the many errors which we adopt, and adhere to in life; the many imprudences of which we are guilty; the hazards we run, and the exposures which we voluntary make, which are rash and unnecessary, — it is not surprising that a large proportion of our suffering, and the premature deaths which take place in the community, are ascribable to violations of the natural laws of life and health.

Death from old age is rare. Many of the aged die of acute disease, which almost always arises from imprudent exposure, and violation of the laws of health. Many such persons have sufficient general vigor to hold out much longer than is common; but the ravages of disease upon one organ destroys its functions, the system succumbs to local causes, and death follows.

I have no doubt that *half* the evils of life, and *half* the deaths that occur among mankind, arise from ignorance of these natural laws, and that a thorough knowledge of them would diminish the sufferings incident to our present state of being in very nearly the same proportion.

Yours very respectfully,

S. B. WOODWARD.

LETTER FROM DR. EDWARD JARVIS.

CONCORD, MASS., 13th December, 1842.

TO THE HON. HORACE MANN.

My dear Sir, — Yours of September I received in due time, requesting my opinion of the proportions of disease caused by ignorance of our organization and physical powers, or from neglect of this knowledge. My records and data on which I could found a more accurate opinion are in Kentucky; and therefore I have hesitated until now to give any answer.

From an observation of thirteen years, I have been led to believe that *three-fourths, perhaps more,* of the ailments of men come from a want of sufficient knowledge of their frame, or a disregard for it.

Considering how men are educated to view life, — the body, its organs and powers, and their relation to external nature, — it is not at all surprising that this should be so. Out of the ignorance of anatomy and physiology have grown two radical errors: —

1st. The body, its faculties and powers, are supposed to have an indefinite capacity of endurance, both of use and abuse; and hence have arisen innumerable disorders.

2d. Diseases, derangements, injuries, are, in some way or other, supposed to be the direct acts of Providence, moving in a mysterious way, and not to come from human agency, — from our neglect or misuse of Heaven's gifts.

> "Diseases are thy servants, Lord;
> They come at thy command,"

is more than an adjuration of the pious poet; it is too much a common faith: and therefore we are not taught to use the means in our hands, nor made to feel our own responsibility for the preservation of our health.

To say nothing of those disorders that come from dissipation, I believe that the whole chapter of accidental injuries is caused by violation of the natural laws, through ignorance often, through temerity oftener, and, in most cases, for want of that care which is usually given to the preservation of property.

The ordinary diseases of the human body, — fever, consumption and inflammations, and derangements of the digestive apparatus, nervous system, &c., — though not so palpably the consequences of the violations of the laws of our members as what are called accidents, yet I doubt not that most of them can be charged remotely or directly to these errors.

The earth was given us by a generous Providence for our habitation. Our organs and their functions, and the necessities of our frames, are perfectly fitted to external nature. Between the wants of the animal body and the elements there is a beautiful harmony. For every need of our organs or our life, God has created an abundant supply. Some of these things

are supplied to us all ready for use, — as the air for the lungs and respiration, the light for the eye, the water for drink; other things are given us in the raw material, unfit for use. But then we have intellect given us to perceive the powers and worth of these, and their convertibility to such shapes or combinations as our bodies may require. We have also hands to do this work; and thus has our beneficent Creator provided for our clothing, our shelter, our food, and our exercise. So far, mere life is maintained. But this is done in the best manner by the use of every faculty and organ; for the exercise of every one of these is not only necessary for its own development, but for the health and energy of all the rest.

By the faithful and discreet use of all these means and powers, — by not corrupting the air we breathe nor the water we drink; by suiting our food exactly to our powers of digestion and to the wants of nutrition; by adopting our clothing precisely to the temperature, and the power of the body to sustain atmospheric changes; by protecting ourselves, by house and by fire, from the elements; by a proper exercise of all our faculties, neither timid nor rash, neither abusing nor exhausting them, nor letting them rust from neglect, — we may probably live to a good old age, and avoid many, if not most, diseases. Certainly we may thus escape all accidents, and very materially prolong life on earth.

This requires much study and continual observation, —

1st. To understand the structure of our bodies.

2d. To know the relations of our organs to the external world.

3d. To learn the use and extent of our faculties.

Herein lies our fundamental deficiency. We want the proper knowledge to begin with, and a habit of observation afterwards. Consequently, we have a world full of almost innumerable diseases, and premature death comes upon most men. Hence, in Boston, from 1811 to 1839, instead of holding on in a life of vigor until finished by the exhaustion of old age, from thirty-three to forty-three per cent of the population died before they passed their fifth year; and less than seven out of one hundred reached their three-score and ten. In Concord, twenty-two per cent died under five years, and eighteen in every hundred passed their seventieth year. The average duration of life for the last thirteen years was only thirty-seven years and five months; and even this period was far from being a perfect life, for the whole catalogue of diseases was fastened upon this brief earthly space.

A careful observation shows how this happens, considering the complicated structure of our bodies, the almost infinite variety of circumstances that may affect them for good or for evil, and the perpetual necessity of adapting the material, the support and food of life, to our organization. I believe that men give less time to the study of the laws that govern these matters than they do to the regulations of their animals or their machinery, which contribute to their profit or pleasure.

I can explain this better by examples.

I was long in the habit of attending, in way of my profession, upon the family of a very sagacious farmer. He always lived with his eyes open, and was a keen observer of every thing but his own frame. Hence he was very successful in raising pigs and managing cattle. He carefully watched the effects of the food, and varied it to suit the appetite and health of his animals. Meal, potatoes, corn, pumpkins, boiled or raw, mixed in every proportion, or singly, were prepared and changed, just as he saw that the hogs would thrive the best and fatten the fastest. Hay, corn, oats, meal, roots, cut-hay, these were given to his oxen and horses according as he noticed the effects on their strength, spirit, and power of endurance. For these purposes, he had no fixed principles or inflexible habits ; but his daily observation of the effects of food was his law of permanence or change.

He told me once, rather incidentally than otherwise, that for a year or two he had suffered much from heart-burn, or acid stomach. He felt it some after breakfast, and so much after dinner as to impair his energies, and sometimes so severely as to prevent the possibility of labor. On some days this was very distressing. But he very rarely had this pain in the evening. On inquiry, I discovered that he ate brown (rye and Indian corn) bread for breakfast, and the same more plentifully for dinner; but for supper he ate wheaten bread. Occasionally, he had Indian-pudding at noon, and then his stomach suffered the most distress. The same attention to the effects of his own diet that he gave to the effects of their food on his cattle and hogs would have detected this error in its very beginning, and might have saved him many months of suffering. But, when I proposed the change, he hardly comprehended the necessity.

I know of some men who make it a rule to work their horses at the *top* of their strength, using them only in their fullest flesh and spirit, and resting them before much fatigued. But they work themselves at the *bottom* of their strength. If they rest, it is only when nearly or quite exhausted; and they return to action as soon as they gather power to crawl to their labor.

There are two opposite principles or notions somewhat common, both warring against health, interfering with the vital energies, and rendering the human frame more or less susceptible of disease.

First. There is a sort of stoicism relative to food, labor, and self-sacrifice. Men under the influence of this feeling eat every thing that is set before them, of whatever kind, and however prepared, whether it suits their digestive powers or not. To think any food that is offered them is indigestible, and therefore unsuitable to them, to request any change on their account, savors to them of childish fault-finding, and of unmanly selfishness. With the same feeling, they go through every variety of labor and exposure to which business or pleasure, duty or kindness, may call them. Through fatigue, through severe cold, storm, or heat, they run and toil, forgetful of the animal machinery by which they move, and regardless of the influence of the elements or over-action upon it. Of course, these feelings

and habits must open the way to digestive disturbance in some, and to colds, rheumatisms, fevers, &c., in others.

Second. There is often precisely the reverse feeling, — a selfish regard to appetite and comfort. Governed by this, some eat more for appetite than for nourishment. They regard good eating, but not good digestion. They swallow crudities, perverse cookeries, and absurd mixtures, provided these please the palate; but the poor stomach is forgotten. Others err by the quantity of their food: they thus over-tax their digestive powers, and often derange them. If not this, they are stupid and sleepy after eating; their activity of life is for the time suspended, because all the nervous energies are absorbed in aid of the over-tasked stomach.

The selfish regard to personal comfort, which avoids the exercise of some or of many of the organs or powers, and thereby leaves them feeble; which abhors the ordinary exposures, and thus renders the body incapable of enduring the changes of temperature which it must sometimes meet, — this, in various ways, disarms the system of much of its vital energy, prevents the full development of life, and reduces the power of resistance to those influences which are apt to engender disease.

There is one other important evil following from this ignorance of the laws of health; that is, a total misconception of the nature and location of disease, and, therefore, a want of a guide to the way and means of recovery; and many, in attempting to attain this, carry their bodies through all sorts of experiments, even those of an opposite nature, to cure the same disorder. On the other hand, every sort of disorder is submitted to the same experiment, as if every possible combination of derangement and of remedy would produce one and the same result of health and strength. Hence arises quackery, which is the natural fruit of popular ignorance upon the subject in which it pretends to operate.

One man advertises that all diseases are primarily in the blood, and for this state of things he has a certain remedy. He finds many people, with all kinds of ailments, to believe him; and they gladly try his method upon themselves. Another rises, and declares that all diseases originate in the liver, and straight the former patients change their faith: with no change of symptoms or evidence, they suddenly cease to believe their various derangements come from the blood, and become convinced that they proceed from the liver, and take the corresponding medicine. From the liver to the stomach, from the stomach to the nerves, their ignorant credulity bandies about their fickle faith, while their poor frames endure all the trials of ignorance, and their impoverishing purses pay all the cost.

The remedy for all this is in a better education. If our people were as well taught the organization of their bodies as they are the structure of a clock or a wagon; if they understood the uses, powers, and limits of the animal frame as well as they do the objects and capacities of machinery, — they would make a much more faithful use of their health and strength, and save themselves from many diseases.

For this purpose, our children should be taught in school the law of their members, as early and as carefully as they are taught geography or philosophy. Anatomy and physiology should be studied, not as barren facts, but as a law for their government. They should have it impressed upon them as a conscientious duty to take care of their health, to develop and preserve their powers of life in their fullest energy. They should feel that they have no more right to impair or diminish or pervert or waste this life by negligence, by misuse, or by over-exertion, and thus commit fractional and gradual suicide, than they have to put an end to it by a blow in complete suicide. Both of these are violations of the same law of society, of nature, and religion. They differ in degree, but not in kind.

Every child, then, should be first taught the nature of his own bodily machine, and the relation of this to external objects. Then he should be made to feel a conscientious responsibility for its faithful use. Upon himself it must depend whether this shall give him the highest uninterrupted pleasure, or the greatest pain; whether it supply him with wealth more than all other means, or involve him in hopeless poverty.

Very truly and respectfully yours,

EDWARD JARVIS.

LETTER FROM DR. M. S. PERRY.

BOSTON, Oct. 25, 1842.

DEAR SIR, — I received your letter of Sept. 23, in which you propound to me the following question: "In the present state of the science of physiology, how great a proportion of suffering, of disease, of a diminution of the physical capacity of usefulness, and of the abridgment of life, comes from sheer ignorance, and which, therefore, we might hope to see averted if the community had that degree of knowledge which is easily attainable by all?"

To this question, I regret to say, I cannot give any definite answer; but I have taken pains to record the exciting causes of disease (as far as they could be ascertained) in fifty cases which have come under my care since I received your letter, and in twenty-five more which, within the last two months, have entered the Massachusetts General Hospital. These last were recorded by the resident student. Some of those that came under my care were children; but I thought I would take fifty successive cases without reference to age. Those that entered the hospital were adults.

The result is, that more than half of the fifty cases were induced by causes which might have been avoided if the individuals had understood the laws of health; for I may safely say that not one of them did understand those laws.

The cause of sickness in fourteen of the cases received at the hospital was ascertained. They were exposure to wet and cold, fatigue, and want of exercise. Of the other cases, whose cause was not known, it is but fair to suppose, from the nature of the diseases, that more than half of them arose from similar causes. Allowing this supposition to be correct, we shall have more than three-quarters of the twenty-five patients made sick by causes which might have been avoided if they had possessed the requisite knowledge, and been placed under circumstances where they could have applied it.

I think a large majority of the patients that come under the care of physicians are made sick from the following causes: Exposure to atmospheric changes, excess in eating and drinking, fatigue, impure air, and want of exercise. Now, in order to avoid these exciting causes of disease, an individual should not only understand the laws of physiology, but the influence of physical and moral agents. Important as these subjects are, I will venture to say that not one individual in a hundred amongst us does understand them; and if you can direct the attention of the community to them, and induce them to introduce the study of these sciences into our Public Schools, you will confer a great blessing upon the present and future generations.

It is generally supposed that there has been, within the last few years, a decrease in the annual mortality in this city. But in a paper lately written by S. Shattuck, Esq., on the vital statistics of Boston, he says, "The average value of life is greater now than during the last century, *but not as great* as it was twenty years ago. It was at its maximum from 1811 to 1820; and, since that time, it has somewhat decreased." He also says, "It is a *melancholy fact, and one which should arrest the attention of all, that forty-three per cent, or nearly one-half, of all the deaths which have taken place within the last nine years, are of persons under nine years of age; and the proportional mortality of this age has been increasing.*"

W. R. Gray, Esq., in a paper published in the last number of "The Statistical Journal," says that the rate of annual mortality has increased in England, since 1820, ten per cent, and probably twelve and a half. These facts show the importance of directing public attention to the causes of disease, in order, if possible, to avert a still greater annual increase of suffering and death.

Respectfully yours,

M. S. PERRY.

HORACE MANN, ESQ.

This list of authorities might be indefinitely extended. Many personal interviews with eminent members of the medical profession have confirmed my belief in the above conclusions. But,

to any one who understands even the more obvious principles of physiology, the evidence which is inherent in the nature of the subject supersedes the necessity of extrinsic proof. Yet thousands of the more advanced scholars in our schools are engaged in studying geometry and algebra, rhetoric and declamation, Latin and Greek, while this *life-knowledge* is neglected. Having passed through our Public Schools, through select schools and academies, without ever having had their attention turned to the great science of health and life, our young men and women, who are, or who are soon to be, the fathers and mothers of the next generation, devote their leisure time to the reading of novels and the other bubble literature of the day, and neglect that knowledge on which so much of personal and almost all of domestic happiness and hopes are so obviously founded. In the fallacious tranquillity of ignorance, pernicious indulgences are yielded to, indispensable observances are omitted, unhealthful habits are formed; and, as the inevitable consequence, debility or sickness ensues, old age is antedated, feeble parents are succeeded by feebler children, the lineage dwindles and tapers from less to less, the cradle and swaddling-clothes are frequently converted into the coffin and the shroud, occasional contributions are sent off to deformity, to idiocy, and to insanity, until, sooner or later, after incredible sufferings, abused and outraged Nature, finding all her commandments broken, her admonitions unheeded, and her punishments contemned, applies to the offending family her sovereign remedy of extinction.

Considering, then, the paramount importance of this subject, it seems to me desirable that it should be commended to the favor of the public, not merely by argument and the authority of distinguished names, but by a presentation of some of its leading and most essential doctrines. The duty of prescribing text-books, and of regulating the studies in our schools, is devolved by the Legislature upon the school committees. These committees are chosen annually by the people. The people, then, are to be reached, — not by coercion of law, but by per-

suasion and conviction. And I am so well satisfied that the people of Massachusetts are competent to understand and appreciate the preponderating merits of this study, and that, to ensure it priority over any and all others of the higher branches pursued in our schools, it only needs to have its claims presented before the tribunal of an intelligent public opinion, that I propose to occupy the residue of this Report with a brief outline of the more obvious principles of physiological science, and of their practical bearing upon the great interests of health and life.

What we are accustomed to call the Human System is a *variety of systems*. It is not one, but many. Between these different systems, there is the most remarkable diversity of appearance, structure, functions, uses; yet all are harmoniously associated together for the formation of a complex whole.

1. In the first place, as a foundation and framework for all the rest, there is the Osseous or Bony System, consisting of about two hundred and forty different pieces. A great portion of these are levers. They are adapted to raise weights, or to overcome other resistances. Had the farmer and the manufacturer, or the mechanic of any kind, a mind properly instructed on this subject, how elevating and delightful it would be for them to trace analogies and resemblances between the laboriously-wrought utensils and instruments which they use, and those similar but more perfect instruments, which, by the benevolence of God, grow unconsciously into symmetry and strength, and operate with such precision and celerity in their own bodies and limbs!

Some of our bones are not levers, but defences; and some serve the double purpose of a defence for what they contain, and as a centre of motion for some other parts; yet all of these grow where they are needed, — of the requisite size, form, solidity, strength, — without oversight or direction of ours, so that, when we wake up to consciousness of our formation (if we ever do wake up to that consciousness), there we find these solid portions of our frame, each fitted to its appropriate place,

and each performing its assigned duty, according to the benevolent intentions of its Divine Architect.

2. There is the Muscular System. This is wholly different from the osseous or bony. The one is solid and almost unbending; the other pliant, flexible, elastic. The muscles are fastened at each end to some bone, or some organ intended to be moved by them. They all have the power of contracting themselves, that is, of diminishing their own length; and, by so doing, they bring their extremities nearer together, and thus cause motion. If the bone to which one end of a muscle is attached is a fixed point, then the whole motion is communicated to the organ or part to which the other end is fastened. Such is the case with the muscles of the eye, — one end being attached to an immovable bone, and the other to some part of the eye-ball; and thus all its variety of motions, whether to the right or left, upwards, downwards, or obliquely, are effected. The infant uses all these muscles, and is excited to emotions of wonder and delight by the visible objects which surround him, before he knows that he has either an organ of vision, or muscles to direct it. This is not to be wondered at; but it is to be wondered at, that so many persons go through a long life as ignorant as an infant of these beautiful facts. In the human body, there are said to be between four hundred and forty and four hundred and fifty different muscles. With these, all the myriads of different motions of which we are capable are performed. The muscles overlay, interlace, and cross each other in all directions; and yet so admirable is their arrangement, and so exquisite the skill with which they are fitted to play upon each other, that their whole work is done without perceptible friction and in absolute silence. What machine or mill made by the art of man, consisting of more than four hundred bands or cords, moving more than two hundred solid pieces, and having the requisite number of joints and pullies, was ever so skilfully constructed as to move *inaudibly* for fifty or seventy years? In the most rapid and dexterous operation which an artisan ever performs; when the tool, which he grasps

in one hand to fashion the material which he holds in the other, moves with such velocity as almost to elude eye-sight, — neither the tool nor the material has half the motions, which, at the same time, are taking place in the muscles of the eye and hand of the operator. Yet the work of man we admire, while, our whole lives long, we regard with stupid indifference the work of the Creator.

3. Next in order may be mentioned the Nervous System. Of this system, the grand, central body is the brain, which is a mass or congeries of nervous matter. The brain sends off nerves to each of the five senses, and to every part of the body. The pairs of nerves which go to the eye, the ear, and the organs of taste and smell, pass to their points of destination by the shortest convenient route. Through these media the mind holds intercourse with the external world. It is along these lines of communication that impressions from outward objects are transmitted inward, and that each different property of color, sound, odor, taste, makes itself perceived in the dark and silent chambers of the brain. A few years ago an apparatus was invented in England, which consisted of bundles of metallic wires, several miles in length, each wire being carefully wound round with some covering impenetrable to moisture, and the whole placed under ground to secure them from injury. At each extremity of these wires there was a system of corresponding signs; and the apparatus was so adjusted, that, by means of galvanism, any motion produced at one end of the train would write out its corresponding and intelligible sign at the other. In this way, information could be communicated along the whole track with the speed of lightning. The invention attracted great attention from the learned. Something of the kind has lately been projected in this country; and perhaps, at a future period, it may be improved, and applied to purposes of practical utility. But what is this compared with the optic nerve, which, although only two or three inches in length, makes known to us the existence of objects, however magnificent or minute, with all their variety and splendor of coloring,

alike whether they are within the reach of our fingers, or whether they are stars in the depths of immensity? Yet we accord our admiration to the mechanism of man, but, through general ignorance and stupidity, withhold it from the infinitely greater skill of the Maker of man.

With what a variety of sounds does the nerve of hearing — a little soft cord two inches long, and not larger than a straw — make us acquainted! No arithmetic can compute the number of sounds which come from the hum or chirp of insects; from the song of birds; from the occupations, the speech, or the music of men; from the voices of animals; from trees and streams; from the ocean and the air; and yet with what facility and distinctness does this bit of nervous matter communicate the whole to the mind, so that we can readily assort or unravel these sounds, and refer each to its true origin! and all this is effected without any artificial change of stops or keys.

If we admire a single instrument of many strings, or a cathedral organ with its many pipes, what ought we to think of that minute contrivance, the ear, which, within a space of less than one square inch, vibrates to every sound in the vast orchestra of Nature!

By far the largest branch of nerves which the brain sends off passes down in the interior or hollow of the spinal column, and is thence distributed to every part of the body. This branching, or ramification, of the nerves is inconceivably minute. They penetrate all parts of the frame, and stand as sentinels at every point, to warn us of the approach of danger. There is no spot on the surface of the body so minute that we can touch it with the point of the sharpest needle, without striking we know not how many of these nervous filaments, which immediately give us notice of the aggression. In fineness, as compared with the nerves, a spider's web or the thread of a silkworm is as cord or cable.

But the nerves which descend along the interior of the spine, though alike to the eye, to the touch, or even to any chemical test, are wholly different in their functions. That part of the

branch which occupies the posterior or back side of the column is appropriated to the transmission of sensations to the mind. They are the nerves through which we *feel*. Those, on the other hand, which occupy the anterior or front side, are nerves of motion, — those by means of which we *act* or *move*. If the nerves of *motion* were cut or broken off at any point, all parts of the body below the point of separation would lose the power of motion; and, therefore, though the extremest pain from laceration or burning were suffered in any part dependent on those nerves, yet we should be unable to escape or withdraw from it. On the other hand, if the nerves of *sensation* were destroyed, our feet or hands might lie in the fire and be consumed, without our feeling any sense of pain as a warning to remove them. The rapidity with which communications are made along these thoroughfares is amazing, being equalled only by that of light, electricity, galvanism, or other of the imponderable bodies. If a man in a crowd feels the heel of another beginning to press upon his foot, the intelligence is forwarded to the brain along the nerves of sensation; and forthwith an order is despatched from the brain along the nerves of motion for the removal of the foot out of harm's way. If the person enjoys good health and has ordinary quickness, the information will be transmitted to the brain, and the order sent back to the foot in sufficient season to save it from injury. This process takes place in all cases when the hand is exposed to be burned by any heated substance, whether solid or fluid. The attention of thousands has been arrested by the celerity of movement with which the hand has been withdrawn from contact with a basin of hot water or a hot shovel, who never knew or thought of the wonderful mechanism by which, in the momentary interval between the touch and the escape, a message had been sent from the hand to the brain, delivered, considered, and an answer, exactly adapted to the exigency of the case, forwarded to the scene of action by another post-route, in season for the removal of the endangered member. In the case of the juggler, the tumbler, and the rope-dancer, with what inconceivable

velocity and frequency must the couriers of the mind pass up the nerves of sensation with their intelligence, and down the nerves of motion with their orders!

There is still a third set of nerves, which are connected with the *involuntary* motions of the vital organs, — with the beating of the heart, with the motions of the stomach in digestion, of the lungs in respiration, &c.

4. Again: there is the digestive system, by which the crude and heterogeneous masses that are taken as food are broken down and dissolved in such a manner, that they can be carried by the circulatory system to every part of the body, — to become, in one place, bone; in another, muscle; in another, brain; in others, hair or teeth or skin; here to suffuse the cheek with the beautiful hues of health, and there to light up the eye with the fires of intelligence.

5. Another system is that of the blood-vessels, or of the circulation. It was said above that no part of the surface of the body could be pricked with the point of the finest needle, without striking a nerve; and this is equally true in regard to the blood-vessels; that is, both the nerves and the blood-vessels lie so closely side by side, that a needle cannot find any unoccupied space or interstice between them. Although the whole blood of the system pours through the heart, and issues forth from it into the aorta in one great stream, yet this stream is afterwards so minutely subdivided as to reach every part of the body. Not the space of a pin's point is deprived of it; for, if the blood should cease to nourish any part, that part would immediately perish with mortification. Hence the current must have its winding passages, its arches, its culverts; and, when it reaches the bones, it must descend into them, as by subterranean channels, to permeate and nourish their solid structure. Nor does this process of circulation consist, as we are accustomed to suppose, in the mere flowing round and round of the same fluid. The blood carries nutritious particles as its freight, and every point in the whole body is a port where it unlades its treasures; and, in return, it receives the waste or used-up

particles, which every part of a healthy body is constantly throwing off.

Besides all these there are the lungs, or the respiratory system, the systems of absorbents, lymphatics, secretories, excretories, &c., — all going to make up that one mechanism, which with brevity we call the human system. Physiologists enumerate more than twenty of the elementary or compound tissues of which the body is composed.

But what I mainly aim at here is to direct attention to the differences which obtain amongst all these component parts, and, therefore, to the necessity of some knowledge of each. How entirely unlike each other, both in structure and function, are the solid and fluid portions! — the bones and the blood, the opaque muscle and the transparent humors of the eye, the vegetative and almost insentient hair, and the keenly living nerve, the stomach which is the principal organ of digestion, and the lungs which are the principal organs of respiration. One thousandth part of what we daily take into the stomach would kill us instantaneously if taken into the lungs. What is indispensable to the lungs would extinguish life in a moment if taken into the blood-vessels. And so of the rest. The truth of practical importance to be noted here is, that each system not only has its peculiar uses, but its peculiar diseases, and therefore needs its peculiar care. The hard aud cohesive bones are liable to become either brittle or soft. The softer parts, the heart, for instance, are liable to ossification, which is only a bone made in a wrong place. The muscles are attacked by rheumatism and spasms, the lungs by consumption, the liver by hepatisis, and the digestive organs, which in this country are abused more than any others, by a host of maladies greater than any other.

Hence the necessity of our knowing each organ and its functions; for how can one wisely superintend a complicated machine who is only acquainted with one, or with but a few, of its parts? All these various systems are brought together, compacted, and harmonized into one. Within the narrow com-

pass of our frames are collected, and placed side by side, all contradictory and conflicting elements, — earthy matter which will not burn, and phosphorus which takes fire by exposure to the open air; oil and water; fire and water; acid and alkali; solid and fluid; vegetable and animal; iron, and the oxygen that corrodes it. And these are not only made to agree, but to co-operate; they are not merely tolerant of, but essential to, each other. Each, however apparently hostile, is indispensable to the well-being of all the rest. Such are the wonderful ingenuity and marvellous adaptations of a mechanism, respecting which, though our life and welfare are dependent upon it, we are content to remain in profound ignorance.

What but an ignorance of the plurality of our vital organs can account for the fact that men are so heedless of an attack upon any one of them, because the rest are in a sound condition? An ambitious student thinks little of an over-excitement of the brain, because, as he says, he is perfectly well in other respects, — his digestion is good, his lungs are sound, his muscles are strong. But when the over-working of the brain brings on inflammation, and this matures into insanity, of what avail, then, is his good digestion, or his sound lungs, or his strong muscles, but to render him a more formidable and destructive madman? A mother is subject to colds and coughs; but her appetite is good, her nervous system is steady, and her mind clear. Why should she be alarmed at occasional pains in the side? But when successive exposures prolong a cold into a permanent inflammation, and consumption follows, every vital part, however vigorous before, must perish with the lungs. And so of each of the many vital organs on which life is dependent. We retain existence only on the condition of taking care of them all. We talk about *the seat of life*, as though the vital principle had some *one* fortress or citadel, by the defence of which our existence would always be safe. But life has no such *one* citadel; or, if it has, it is assailable through a hundred gates, at any one of which death may enter and expel it.

The various systems of the body are not only designed to work harmoniously together, but, in a healthy and proper child, they are endued with proportionate and corresponding energies: they are pre-adapted to last and to work for equal periods of time. The stomach was not made to last for ten years, and then to break down, the lungs for twenty, the heart for thirty, and the brain for forty or fifty, and so on; but an identical term of existence was imparted to all, so that they might run on in the race of life together, and come simultaneously to their goal. Yet, owing to our ignorance and mismanagement of ourselves, and especially to the mismanagement of children by ignorant parents, one or another of these great vital organs is destroyed while the rest are in comparative health and vigor; or some two organs, by different abuses, incur diseases which require incompatible remedies, so that what is done to cure the disease of one aggravates that of the other. Not one individual in a hundred, in our times, dies of old age, — that is, after each of the vital powers has expended its quantum of force, and when the whole sink together to a peaceful close. In more than ninety-nine cases in every hundred, death is a terrible struggle between the vital energy of a majority of the organs, which cling with strong tenacity to life, and the fierce disease or premature decay of some other, which drags them reluctant and resisting down to the grave. Thus are the value and productive force of the healthful organs annihilated and lost. A business partnership or corporation may be dissolved, and each of its constituent members may enter some other sphere of industry to provide support for a dependent family, or to add something to the common weal. But, in this partnership of the vital powers, the withdrawing of any one partner causes not only a dissolution of the firm, but the death of all the other members. There is no survivorship. If one perishes, all perish. How often do we see this exemplified, when, from the decay of some one only of the vital powers, a clergyman, who is a minister of religious consolation and hope to his people, is removed in the prime of his life and in the midst of his use-

fulness; or a mother, on whose counsel and guidance a family of children are leaning for support, sinks to an untimely grave; or a statesman, upon whose life the welfare of millions seemed to hang, is hurried prematurely to the tomb! In such cases we ungratefully and impiously attribute the event to the interference of our heavenly Father, when we might as well embark all our treasures, our friends, and our family, on board a ship which had some one fatal defect, and because she foundered in the first gale, or was dashed to pieces on the nearest rocks, throw the responsibility upon Heaven for not having suspended the laws of Nature to save us from the consequences of our own folly. Why did our Creator give us these faculties of inquiry, of forethought, of prevention, if we are not to use them? And what the necessity of our using them, if he were always to stand by, and rescue us from the effects of our premeditated fool-hardiness? The possession of the power is accompanied by the obligation to use it; that is, to learn and to obey the wise and beneficent laws of the Creator. His language in regard to the physical law seems to be the same as in regard to the moral, — that it is easier for heaven and earth to pass than for one tittle of the law to fail.

The first developed power of the infant is that of taking the food, which is to be metamorphosed into the tissues of its body, to be turned, by the transforming power of the organs, from dead substance into living and sentient material. The main preparation of food for the purpose of nutrition is effected in the stomach. The stomach is an organ of curious construction, and it is endowed with astonishing properties. Its appearance is simply that of an oval or oblong sac, or bag, suspended across the body from left to right, just below the diaphragm, and a little below midway of the trunk, — the largest end being situated on the left side of the body. It is separated from the heart and lungs only by the diaphragm. On the upper side of the stomach, and towards the left, there is an opening, where the food which we swallow is received; and at its other extremity, on the right, another opening, through

which the food, when properly digested, passes out. If the stomach had no property beyond that of a common bag or vessel made of cloth or skin, it is obvious that it would hold, in a quiescent state, whatever was poured into it, except so far as motion might be communicated to its contents from without. But it is indispensable, for the purposes of digestion, that the food taken into the stomach should be kept in constant motion; otherwise the solid and heaviest particles would sink to the bottom, the lightest would float upon the top, and their specific gravities would be their law of arrangement. But, without continual agitation, the simplest food could no more be turned into *chyme* (which is its condition when it passes out of that organ) than cream could be turned into butter without that agitation which we call churning. And could the food be ever so well digested, yet, without this motion, how could it be thrown out afterwards? The stomach is therefore endued with the power of spontaneous or involuntary motion. Food is the natural excitant of this motion. Hence, in every healthy stomach, as soon as food enters it, motion is commenced, and is continued until digestion is completed, and its contents, in the form of chyme, are discharged. To effect this motion, the stomach possesses *two* distinct sets of muscular coats, each coat consisting of fibres which pass around, respectively, in opposite directions. Suppose an egg, instead of a hard shell, to have a soft skin, and suppose this skin to consist of two sets of muscular fibres, one of which should run around it from the large end to the small one, while the other set should run round in the opposite direction, that is, in the line of the shortest circumference. If the longer fibres of this covering should contract (and it has been before mentioned that the power of contraction, or shortening themselves, is the property of all muscles), it is obvious that the egg would be made more nearly round, and its contents compressed from the ends towards the middle. If, then, these longer fibres should relax, and the shorter ones contract, the egg would be elongated; the contents being pressed outwards towards the ends. Now

these sets of fibres might be so alternately contracted and relaxed as to drive the coutents of the egg round and round, from side to side, and from end to end. And such is the structure and action of the stomach.

These motions of the stomach are primarily necessary for the purpose of mingling with the food a certain ingredient which is indispensable to digestion. This ingredient is a fluid, and is called the *gastric juice.* It is effused or exuded from the mucous membrane or inner coat of the stomach. For the process of digestion there is no substitute for this fluid, nor has any thing like it ever been prepared by the art of man. Boiling in water, for any length of time, will not digest food. Roasting, baking, the action of fire in any form, or of steam, or of any chemical solvents, will not accomplish the object. So far as we know, there is but one agent in the world which has this power, and but one place where that agent is found. That agent is the gastric juice, and the stomach the place of its preparation.

As soon as a mouthful of solid food is received into this organ, its flexible sides immediately contract upon it; and, if not interfered with by having another mouthful forced in too soon, they clasp it, and hold it for the space of a minute. By this clasping movement, the gastric juice is shed out or expressed, and then, by the motion of the food round and round, the juice is intimately mingled with its whole mass. Important practical rules will, by and by, be deduced from these arrangements of Nature.

The natural food of the infant being milk, and this being a fluid, it is obvious that the above-described motions of the muscular coats can propel it round and round until each drop of it is brought into contact with the gastric juice, by whose agency and mixture it is coagulated. This is the first step in the process of its digestion. Yet so ignorant of this fact are many mothers, that, when an infant throws up a little curd from the stomach, they take it as a sign of sickness, and hastily administer an emetic.

But what shall be done when the child begins to require more solid food, — bread, meat, fruit, vegetables? The coats of the stomach, which are softer and more flexible than wash-leather, remain as before. The inner surfaces of this organ do not now become harder to correspond with the more solid food received. They are not converted into a triturating apparatus, like the gizzard of a fowl, for the purpose of breaking down and grinding the solid food which the system is now prepared to assimilate. Nor is this organ suddenly provided with any cracking machine, like that of a lobster, by which hard bodies — shells or bones — can be pulverized and adapted to the wants of the system. What corresponding provision, then, has Nature made to meet the new wants of its child?

Simultaneously with the period when the body requires more concentrated aliment, and the stomach is prepared to receive substances of a firmer texture, the teeth appear. Whoever knows the structure of the stomach, and therefore its inability for effecting the minute mechanical division of any hard, tenacious, or cohesive material, can have no doubt as to the necessity and proper function of the teeth. And here is the first great sin against the laws of health, committed, with few exceptions, by all the people of this country. We eat, not merely with indecent, but with unhealthful haste. As a nation, we have a profusion and an attractiveness of food such as no other people upon the earth enjoys. We consume quantities which would astonish the inhabitants of other countries; and these quantities are often swallowed *en masse*, almost as a wild animal gorges its prey, and, of course, without that mastication which is indispensable to health. In eating, we dispense with the use of the teeth, as though our stomachs were provided with some machinery — a grater, a pestle and mortar, or an upper and nether millstone — to do the work of comminution. But, such not being the case, it follows, that, if we would enjoy health, our food must be finely ground before it is swallowed; for nothing is more certain than that food which is insufficiently masticated will be imperfectly digested; that what is imper-

fectly digested tends to produce disorder through the whole alimentary canal, and cannot make good blood; and, without good blood, we cannot have good health, good spirits, or the full use of any of our faculties either bodily or mental.

Another reason for retaining the food in the mouth for a long time is, that there are certain glands, opening into the mouth about the cheeks and jaw-bones, which throw a great quantity of saliva into this cavity during the process of mastication. Food saturated with this saliva before entering the stomach is much more easily digested. The saliva, too, has a strong affinity for air; and in this way the oxygen of that element is carried into the stomach, and there, by its combining with other elements, caloric is given off, which helps to raise the stomach to a higher temperature, and thus aids the process of digestion.

That food may be taken slowly, it ought to be taken in company, and with agreeable conversation. Mental pleasures should save our meals from the grossness of mere animal enjoyment. Cheerfulness should always preside at the table. Food fails of half its nourishing qualities when eaten in solitude, in sullenness, or with any painful or dissocial feelings. No family will enjoy a full measure of health, any more than of domestic tranquillity, who are habitually selfish, morose, or unkind at their meals. Care and anxiety of mind should never be guests at the family board. The very secretions of the body are vitiated by anger, solicitude, or any of the painful emotions. The fruits of the labor of man never nourish us so much as when they are taken with good will towards all mankind; and it is one of the *physical* conditions of deriving the greatest benefit from the bounties of Heaven, that they shall be received with gratitude to their Author.

Another strong argument in favor of taking our food slowly is founded on our knowledge of the capacity of the stomach. Man is sometimes defined to be an *omnivorous* animal; which seems to be understood by many people to mean, not that he is capable of eating some of all kinds of food, but that he is

able to eat all of each kind. Instead of supposing that the stomach does not occupy more than one-twelfth of the cavities of the trunk, they seem to reverse this proportion, and to graduate their indulgence of appetite accordingly. An ordinary-sized stomach of an adult is generally said to be capable of holding about three pints; and some physiologists are of the opinion that the quantity of gastric juice poured into this organ at a hearty meal is one pint. Supposing, however, that only two-thirds or one-half of this quantity of gastric juice is poured into that organ at a meal: if we eat slowly, the stomach is filled with the food and with the gastric juice at the same time; and, when the natural limit of its distention is reached, appetite vanishes, and a feeling of satisfaction ensues. But if we eat rapidly or gormandize, the stomach is filled with food alone, and the gastric solvent must be afterwards injected; that is, when this organ is already brimmed, its muscular coats must be strained or distended for the reception of more. As digestion cannot begin until this juice is intimately mingled with the food, the stomach labors to discharge a sufficient quantity of it, and also to make room to receive it. Though full, it must force in more as the means of preparing its contents for egress. It is obvious that such a strain upon its muscular fibres must weaken them. They become like a bow which has been bent so far as to lose its elasticity. A few repetitions of such abuse will impair the tension of the muscles for years, perhaps for life. Instances occur where, through a beastly indulgence of appetite, the muscular coats of this organ are so strained that they lose their contractile power, and remain, like a man beneath a load which he cannot lift. In such cases, the stomach becomes a motionless, that is, a lifeless organ; the food remains a foreign substance, and death speedily ensues.

Another fact deserves remark under this head. The watery parts of our beverage, or liquid food, are not digested, but absorbed. In eating slowly, time is given for this process of removal; but, in eating rapidly, the organ is encumbered, at once and without relief, by the accumulated bulk and weight of all we swallow.

And again: however solid the food we take, whether meat, unsodden vegetables, or the fruit of nuts, — hardly less solid and indigestible than the shell that encloses them, — it must all be reduced to a pulp, to a soft, semi-fluid substance, before it is prepared to pass out of the stomach, to be carried into the circulation, and be deposited, in infinitely minute particles, over the system, as a part of the living organization. Now, as every one knows, all solid masses, when saturated with or steeped in water until they become soft, are greatly enlarged in bulk. If, then, the stomach is filled with solids, how much must it be overstrained when the volume of these solids is enlarged by their being reduced to a fluid! The farmer is familiar with cases of this kind; for it is the cause of death to neat cattle or horses who gorge themselves with dry grain, and then have access to water.

I will add but one more reason why all our food should be masticated until it is ground to a powder, and, being mixed with saliva, become almost a fluid, before it is thrown into the stomach. The gastric juice cannot penetrate at once to the interior of solid lumps, or hard knots of food, — of compact muscle, or of tendinous or ligamentous substances. In such cases, it must commence the dissolving process on their outsides; and only when the outer layer is dissolved and removed can it begin to operate upon the next layer, and so on, until the whole process of solution is effected. This occupies much time; and, while the gastric juice is at work on the exterior of the mass, a most unhealthful fermentation, or chemical change, caused by heat and moisture, is going on in its interior.

Yet notwithstanding all this accumulation of mischiefs, so obvious as soon as stated, how common it is for most parents to hurry children at their meals, even beyond the rate prompted by the keenness of young appetites! Not only example but commands are added to the impulses of hunger; and thus a habit of gorging food, as unseemly as it is unhealthful, is formed, which lasts them through the shortened life it allows. Derangement, weakness, inflammation of all the digestive or-

gans throughout their whole extent, dyspepsia, that prolific mother of diseases, follow in the train of this unbecoming and unnatural practice. The food being the material from which all the tissues of the body are formed, — the crystalline humors of the eye, the exquisitely-delicate substance of the brain and nerves, the finely-wrought muscles, — unless this food is well prepared before it enters the circulation to be distributed over the frame, it is in vain to expect organs which are sound to the core; it is in vain to expect muscles, compacted to the power of greatest endurance, or acuteness of the senses, or nerves quick answering to the commands of the will. A spinner, from wool half combed, half carded, and full of knots and tangles, may as well expect to draw out an even and beautiful thread; a weaver, from a thread, here sleazy, and there twisted to a wire, now coarse as cord, and now attenuated to a spider's line, may as well expect to form the elegant product of the loom; and a manufacturer, through all the stages of whose work the unskilfulness of each preceding process has redoubled the difficulties and imperfections of all succeeding ones, may as well expect to command the highest prices in the market, or to win the highest premiums at the fair, as any one, subjected to the universal law of mortality, who thus violates the very preliminaries and antecedents of health, can expect to attain to that vigor and robustness of limb and frame, or to reach the full term of life, or to enjoy the mental capacities, for which a bounteous Providence had originally endowed him.

Yet how many of our social regulations pertaining to diet are a systematic infraction of these laws of Nature! Some of them could not have contravened those laws more had such been the express purpose of their adoption. The arrangements of many families, the short intermissions of our schools, and, in some instances, of our churches and other public assemblies, the haste of travellers, the brief time occupied in eating in boarding-houses for work-people, whether mechanics in shops, or laborers on public works, or operatives in factories;

all these practices tend powerfully to depress the standard of health amongst us, and to expose us on all sides to the invasion of disease. In all these and in other particulars, the customs of our people have been adopted in ignorance of the laws of physiology, and they never will be reformed until that ignorance is dispelled. Passengers in railroad-cars and on board steamboats seem to eat with a rapidity suggested by their new powers of locomotion, as though the processes of Nature could be expedited by their impatience of delay. Students in academies and colleges, when eating at a common table, are no exceptions to this general statement; and though an hour of mental relaxation and of social excitement — *of hilarity, genial yet gentlemanly* — is needed in an especial manner by students at their meals, yet, in many of our literary institutions, they are subjected to the Auburn and Sing-Sing discipline of eating in perfect silence.

Another wide departure from Nature's "Health Regulations," in regard to diet, consists in eating at unseasonable times. Different nations, ancient and modern, as well as different classes in the same nation, vary greatly from each other in respect both to the hours of meals and the frequency of their succession; and much has been said of the relative propriety of their customs. But a universal rule, as it regards the individual, is, never to eat, either while the previous meal is still undergoing the process of digestion, or immediately after that process is completed. After food is received into the stomach, it is warmed if too cold, it is cooled if too warm, until it acquires the temperature of about 100°. If too dry, the stomach demands moisture; if too watery, the water is drained off until it is prepared to be mingled with the gastric juice. In a healthy adult, the process of digesting a hearty meal occupies from three to five or six hours, according to the more or less digestible quality of the food. Now, when the follicles of the stomach have given out what gastric juice they contain, when the work of digestion has so far advanced that the qualities of the food are chemically changed from what they were when received,

what can be more unnatural or absurd than to introduce a new mass of raw material, which requires a new exuding of, and saturation by, the gastric juice, already exhausted, and which must be mingled by the action of the stomach with the food of the preceding meal, now half prepared or nearly prepared to leave the organ? If in any culinary preparation an equal quantity of new raw material were introduced just as the process of cooking the original should be completed, it would hardly make the compound more unsavory to the palate than this practice makes the chyme unhealthful to the body. Yet how often is this done, either through ignorance, or to gratify appetite, or to subserve some temporary convenience about meals, or, what is worse than all, for the monstrous purpose of eating a meal or two *in advance!* To wrap ourselves in furs and flannels during the heats of summer, as a preparation for winter's cold, would not be a greater outrage against Nature than to eat in advance of hunger. A rule, never violated without incurring serious penalties, either immediate or remote, is, not to eat a second time until the previous contents of the stomach have been digested and are passed away, and that organ has had a season of repose. Alternate action and rest is the universal law of every power and faculty, both of body and mind. So, too, after taking even a moderate meal, all severe exertion, whether mental or physical, should, for a brief season, be remitted. Especially is this important in regard to students and others who lead sedentary lives.

Following the course of Nature, I should be next led to trace the steps by which the digested food is carried to the blood, to be distributed through the circulation for the growth and nourishment of every part of the body. But my present object being only to show the practical and every-day value of physiological knowledge, I pass by, with a single remark, those wonderful processes which Nature performs in the secret laboratory of the system. Whoever feels delight in tracing effects to causes, or loves to contemplate the wisdom and beneficence of the Creator, will find, in this department of his works, an

inexhaustible source of intellectual gratification; and, at every step of his progress, exclamations of thankfulness and adoration will burst spontaneously from his lips. But it must suffice to observe, that after the aliment, in a fit state for nutrition, has been passed from the stomach, and has received the appropriate secretions from the liver and pancreas, it is then taken up, or drawn out from the great alimentary canal, through tubes or ducts which are microscopically fine and inconceivably numerous. These tubes or ducts (technically called lacteals, from the Latin word *lac*, signifying milk, because the substance which they take up very nearly resembles milk in its color and consistence), after traversing winding passages, and passing through various ganglia, are at length all gathered into one tube or channel called the thoracic duct, which ascends behind the heart in a direction towards the left shoulder, and empties its precious contents into the left subclavian vein, just before that vein pours the returning blood of the whole system into the heart.

Over our nourishment, after it passes from the stomach, until its stream is mingled with the blood, and reaches the heart, we have no control, except through medicinal agents. On leaving the stomach, it descends, as it were, into subterranean channels, beyond our reach or direction; and, in the invisible recesses of the body, it passes through organs whose uses are not known, and is subjected to chemical changes which the art of the physiologist has not yet detected; but, on reaching the heart, that vital stream may be said to re-appear upon the surface, because in that organ it is directly subject to mechanical action from without.

The human heart is sometimes said to be a double organ; but by this it is only meant that its right and left sides perform different operations, the right side of the heart propelling the blood into the lungs, and the left side propelling it over the rest of the body. These sides of the heart, though similar in their general structure and uses, and constituting the same general organ, are yet, *as to the course of the blood*, distant from

each other the entire leugth of their respective circulations; that is, the blood iu the right side of the heart cannot reach its left side (although separated only by a thin partitiou) without going through the lungs, and the blood in the left side cannot reach the right side without going round the whole system, except through the lungs.

But when the blood, now enriched with nourishment from the food, enters the lungs, it is emphatically ours. Here, in a large sense, our strength, our health, our life, are placed iu our own keeping. Here is an organ by whose proper use a vast portion of all the diseases which afflict humanity may be prevented. Here is a point, too, where many diseases may be met aud cured. Here we are invested with almost unlimited power over health and life, and attached to this power is a corresponding responsibility.

That our blood is our *life* is not only the declaration of Scripture, but the common conviction of mankind. But no part of our animal organism, no part of animated nature with which wc are acquainted, is so short-lived as the blood. The insects which live but for a season, the tribes of ephemera which die on the day of their birth, are common emblems of the brevity of life; but the shortest of their terms of existence is longevity, compared with the vital principle of the blood. Water, milk, the expressed juices of vegetables, unfermented liquors, will ordinarily remain for hours unchanged; but the blood will perish irrecoverably in a few minutes, if not renovated by a foreign power. It is probably the most perishable of all organized living substances. Yct this blood has inexhaustible resources of life in pure air. On this element it constantly relies. Without air, the life of the blood cxpires, like the flame of a candle beneath an extinguisher; bnt give it air, and its vital power will subsist for days aud sometimes for weeks, even though no food or drink is taken into the system. Let the lacteals pour into the blood the results of their most perfect elaboratiou, and, without air, it dies forthwith, and the process of corruption or putrefactiou commences. Food is an

occasional want, air a perpetual one. So indispensable, so continual, so instant at all times, is the necessity of pure air to vitalize the blood and sustain the life of man!

In the course of its circulation, the blood comes to the lungs in search of life, that is, of pure air. From the trunk, from the brain, from all the extremities, it is hastened onward to the lungs, just as a diver ascends to the surface of the water in quest of breath. As the blood is driven into the lungs by the strong propulsion of the heart, so the air is forced downwards into the same organs by a pressure equal to a weight of fourteen pounds on the surface of each square inch. The lungs are the common ground where these two great life-sustaining agents meet; and here they are sure to meet, unless forcibly kept from each other by the most egregious folly and wickedness of man. If air is admitted into the lungs to greet the blood on its arrival there, and to impart its vital properties to that fluid, then the blood flows back rejoicingly to every part of the body, carrying health, spirits, strength, activity, endurance, and bountifully dispensing a gladsome sense of existence wherever it goes. But if, on the other hand, the air is debarred from admission into the lungs, or if only impure air is admitted, then the blood flows back in its course, languid, infectious, inflicting torpor upon every sense, and disease upon every organ. Hence it is not too much to say, that the relation of the blood and the air to each other, and the mechanism of the lungs where these wonder-working agencies meet to reciprocate benefits, constitute one of the most valuable as well as most interesting departments of worldly knowledge.

The air, as it is seen and felt and breathed, appears to be a simple, uncompounded body; but, in reality, it is composed of three ingredients, as different from each other as light from darkness, or fire from ice: and a chemist will separate these three elements from each other as readily as an expert seamstress will untwist a cord composed of three different-colored threads. These three ingredients are oxygen, nitrogen or azote, and carbonic-acid gas. The oxygen constitutes *twenty-*

one parts in a hundred of the whole bulk. Dr. Combe says, that about *seventy-eight* parts in a hundred are nitrogen; and the residue only, or one per cent, is carbonic-acid gas. Some physiologists differ a little from this authority in regard to the proportion of carbonic acid in the air. But this is not material. Dr. Combe further says, that, at every breath, "*eight* or *eight and a half* per cent of the oxygen or vital air has disappeared, and been replaced by an equal amount of carbonic acid." This being the case, it follows that breathing the *same* air only three or four times successively would exhaust it of all its oxygen, and leave carbonic acid in its place.

The oxygen of the air is the supporter of human life. Every thing else may be as it should be, — perfectness of organization, soundness in every part, nourishment, temperature, — but take away oxygen, and almost instantaneously the strongest man is a corpse. This ingredient, which is the supporter of life, is identically the same with that which supports combustion. Wherever the flame of a candle will of itself go out, a man will die. Keeping this universal truth in view, that it is the same principle which supports human life and which supports combustion, and every individual will have a thousand illustrations at hand to show the relation in which he stands to this vital element of the air. Few persons are unacquainted with the experiment of letting down a candle into a stagnant well, vault, or pit of any kind; and it is understood, that if, in such places, a candle will not burn, a man will not live. Carbonic acid being much heavier than an equal bulk of oxygen or nitrogen, it settles in the lowest places. It therefore fills up any depressions or excavations which remain for a long time unoccupied or unopened. It becomes the sediment of the atmosphere as mud is the sediment of water. When a stream flows rapidly, the earthy particles or impurities which it may contain are mingled with the whole mass of the water; but, if the stream expands into a quiet lake, the earthy materials subside to the bottom. So in regard to the air: whenever it is in motion, the carbonic acid is held in mechanical solution with its

whole body; but this ingredient will rest at the bottom of unoccupied vaults, wells, &c., until it is expelled from them by some mechanical force, or neutralized by some chemical agency. If ever there were any one who had so little philosophy in his composition as to apply an extinguisher to a candle without thinking why he succeeds in putting out its flame, he has only to learn that it is because the extinguisher cuts off the stream of air that sustained the blaze. Our lungs are in precisely the same condition: if isolated from the air, we perish by suffocation; but, organically speaking, it is not, as most people suppose, because life departs, but because *it ceases to come.* If Othello "put out the light" of the candle by an extinguisher before smothering Desdemona in her bed, he only repeated in the second operation, so far as the natural laws are concerned, what he had done in the first. We kindle our fires by repeated blasts from the mouth or from a hand-bellows; we apply a sheet-iron blower to a grate; all our stoves and furnaces are so constructed that we can graduate the current of admitted air; and we should at once discard the workman as a bungler, who should fail in any of the contrivances for that purpose. The smith and the forger increase the intensity of heat for their respective operations by the use of a stationary bellows worked by the arm or by steam; the engineers of the steamship and locomotive admit a quantity of air into the fire-chamber exactly proportioned to the amount of work to be done; and in all these cases we say, colloquially, that we increase the draught of air; but it is an increase of the quantity of oxygen only which produces these results. Let the draught which is applied consist of nitrogen, or of carbonic acid, and the fire, instead of being roused, will be extinguished in an instant. Even gunpowder will not burn without oxygen. It is not the seventy-nine hundredths, therefore, of nitrogen and of carbonic acid, but the twenty-one hundredths of oxygen, to which we are alike indebted for the mechanical power of steam, for the brilliant flame of lamps, the genial heat of fires, and for our own physical existence from minute to minute. And yet, with all these

proofs and examples continually before our eyes, we fly, as a people, from the invigorating influence and exhilarations of the open sky; there is a more and more eager quest for indoor and enervating employments; we strive to circumvent Nature by occupying winter apartments whose doors and windows are almost hermetically sealed; we sleep in narrow and close rooms; we send our children to inhale disease in unventilated schoolhouses; we attend the lecture-room or other large assembly, where there are no provisions for a change of air; and many mechanics and operatives, although they know, from constant experience, that their own machinery will cease to move if fresh air is not supplied to the engine, still breathe an atmosphere themselves which would hardly keep their own fires alive. Amid an almost universal want of knowledge respecting the physical laws, each man's ignorance is kept in countenance by that of his fellows.

It was remarked above, that, keeping the fact in view that the oxygen of the air is alike the supporter of life and of combustion, every man could find numberless illustrations, in his daily experience, of his constant dependence upon this element for the continuance of life. The application of this truth is still more direct and significant when we consider that it is no other than this very process of combustion itself by which the degree of warmth necessary to our existence is kept up in our bodies. In healthy lungs and blood-vessels, no less than in the fireplaces and furnaces of our dwellings, or in smitheries, forges, and locomotives, is there a constant combustion going on while life lasts. Strange as it may seem, yet it is still true, that every living man is on fire, though in some, as we might naturally infer from their torpidity and sluggishness, there are only a few smouldering and decaying embers, enveloped in their own soot and cinders, and on the verge of extinction. The standing temperature of our bodies, at all seasons of the year, is 98°. If our temperature falls below that, and so continues, the machinery will no longer play, and life ceases. The mean temperature of our atmosphere, for the whole year, is

about 47°. Sometimes, however, it falls to a dozen or more degrees below zero, making, in such cases, a difference of one hundred and ten or more degrees between our own temperature and that of the air by which we are surrounded. Our persons are just like any other substance enveloped in a medium colder than itself. It is a universal law that there is a constant tendency to equilibrium among bodies of different temperatures, and, of course, a constant loss of heat on the part of the warmer body. Whenever, therefore, the temperature of the atmosphere is below 98° (and, in our climate, it is always so, except during a very few hours of a very few days in the year), heat is constantly radiating from our bodies into the surrounding air. With the thermometer below zero, and with lungs and blood as much exposed to the open air as in a living subject, a man of ordinary size, if instantly struck dead, would probably lose every particle of his warmth in half an hour. And yet, with sufficient food, and a proper quantity of exercise, many men — travellers, shipwrecked sailors, and others — have been known to sustain the system at the life-point of 98° for hours and even days together, without any aid from artificial fires. This striking result is effected by the generation of heat — that is, literally by fires — within themselves. Material capable of being burned — in this connection, it would be strictly correct to call it *fuel* — is derived from our food, and from the tissues of the body previously formed from the food. This fuel is carried into the blood. In the lungs, the oxygen of the air is also absorbed into the blood; and here, therefore, the combustible material and the supporter of combustion meet. Fire is kindled, by means of which the temperature of our bodies is raised to 98°. And not only so, but a quantity of surplus heat is generated sufficient to repair the immense loss occasioned by our being immersed in an atmosphere so much colder than ourselves, and which is constantly stealing from us so much of our warmth.

This combustible material is called *carbon*. Chemically, it is the same material with the combustible part of our wood,

coal, peat, or other fuel. The blood of every person in health is richly freighted with it. A part of this carbon is obtained directly from our food; a portion of it is obtained from the waste or used-up particles of the body. In a healthy subject, every organ is undergoing a rapid process of waste and renovation. All muscular efforts, all nervous activity, cause a loss of the very substance of the muscles and nerves themselves; but new particles, fresh, young, and vigorous, take the place of the old ones. The old, however, though detached and cast off from the living tissues, are not worthless. They are thrown into the current of the blood; and as they consist, to a considerable extent, of carbon, they are burned. This is the same economy which a man practises when he repairs or pulls down his old house; he uses the waste materials of the old dwelling to keep up a fire to warm himself in the new one.

If any one doubts that an active fire is sustained in the interior of the body, let him explain how it is that the lungs of a person in health *are never cold*. Such a person may remain for hours in an atmosphere below zero: he breathes eighteen or twenty times a minute, and, therefore, eighteen or twenty times a minute he admits a blast of this ice-like atmosphere into the whole substance of the lungs. Frost may fringe his eyes; icicles depend from his mouth; his ears, cheeks, and nose may be frozen: and yet his lungs will experience no sensation of coldness. Suppose the interior of our hands, our arms, or our feet, were, like the lungs, permeated by tubes, or hollowed out like honeycomb, and that an atmosphere below the point of congelation were constantly rushing into these tubes, or cells, abstracting their heat and imparting its own cold, — how long before they would be frost-bitten? Nothing but the genial warmth generated in the lungs by the carbon of the body and the oxygen of the air saves them, during any cold winter's day, from such a fatal catastrophe.

In bulk, the principal ingredient of the air is nitrogen. It constitutes more than seven-tenths of the whole mass of the air. This ingredient, so far as the lungs are concerned, seems

to have no active properties. It is a mere diluent. If oxygen composed the whole body of the air, almost every thing, except ice and granite, would be consumed in it. A common candle would be burnt out in a few minutes. Should fire ever escape from our control, it would end in a universal conflagration. By the stimulus of pure undiluted oxygen, received into the lungs, all vital movements would be so accelerated, that life would be consummated in a few days. But nitrogen reduces the stimulus of the air to that precise degree which conduces at once to the greatest activity and the longest duration of existence.

Carbonic acid constitutes but a very little of the whole bulk of the air, being estimated by some chemists at one per cent, though by others at somewhat more. Its properties are strikingly distinct from those of either of the ingredients with which it is combined. Oxygen, as has been said, is the supporter of life; nitrogen is neutral; but carbonic acid is a deadly poison. Constituting, however, so small a portion as it does, and being equally diffused through the whole mass of what we call pure air, it works no mischief. It is only when breathed by itself, or when it is a large proportional of what we breathe, that its destructive properties are manifested. When breathed alone, death immediately ensues.

Whenever combustion takes place, this carbonic acid, this deadly poison, is generated rapidly and in great quantities. When oxygen and carbon combine in the body, they evolve heat, *and carbonic acid also*. It is the same operation precisely which is carried on when a brazier or pan of charcoal is burned in our rooms. The oxygen of the air in the room combines with the carbon in the coal, and gives out heat and carbonic acid. So in the body, the oxygen of the air received into the blood through the lungs combines with the carbon already in the blood, and gives out both the heat and the gas. If, then, there were not some mode of expelling this gas as fast as it is formed, we should soon be killed by a poison of our own creating. It has been said that the blood goes to the

lungs in quest of oxygen. That, however, is not its only errand. It goes there, also, to discharge the carbonic acid which has been generated by the combustion that has taken place during the circulation of the blood around the body. The lungs, therefore, are a contrivance not only to introduce oxygen into the blood, but to take carbonic acid out of it. We know that if we burn coal in a close room, and breathe the gas which it exhales, it will produce suffocation and death. So if the lungs were closed, that is, if we should cease to throw off the carbonic acid produced by the burning of carbon in the blood, it would equally cause suffocation and death. Hence a chimney for its egress, and a current of inflowing air, are necessary to carry off this deadly ingredient from our rooms; and many persons are aware of this fact, who seem to be either ignorant or heedless that a similar current of pure air is equally necessary to remove this fatal poison from their lungs.

From the above, it will be perceived that every breathing thing is a laboratory where the work of destroyiug the vital property of the air, and of producing poison in its stead, is constantly going on. And although the quantity of the air is exceedingly great, — being said to cover the whole globe to the height of fifty miles, and doubtless existing, though in an extremely rarefied state, to the height of a hundred miles or more, — yet, in process of time, with all the myriads of lungs which belong to all the orders of animated nature unceasingly at work, why should not its whole mass be gradually changed from wholesomeness to poison, from life to death? At any rate, as carbonic acid is much heavier than oxygen or nitrogen, why should it not accumulate upon the surface of the earth, filling all its valleys, overflowing its plains, and rising, like a deluge, along its hill-sides, until, at length, the last island peak of the highest mountain should be submerged, and universal silence and death reign over animated nature, — self-destroyed by converting into poison the very element which had been given for its existence.

But in this case, as in all others, where a presumptuous

philosophy has conjectured that Divine Providence was at fault in any of its arrangements, that philosophy has only to push its researches farther, to turn the very difficulties which it encountered into new evidences of adorable wisdom. In the economy of Nature, ample provision is made for the reconversion of the carbonic acid into carbon and oxygen. This process may take place spontaneously in order to restore the equilibrium between them; and, during the operation, as much heat may be absorbed, and pass into a latent state, as had been given out in the formation of the acid. The most obvious and beautiful provision, however, consists in the relation which the animal and vegetable worlds hold to each other. Animal and vegetable nature constitute a whole. Each is the supplement of the other. Oxygen is the life of the animal kingdom; carbonic acid is the nutriment of the vegetable. All breathing existences consume the oxygen, and produce the acid, while vegetable existences consume the acid, and produce the oxygen. The countless myriads of lungs, in their ceaseless heavings, are constantly absorbing the latter from the air, and ejecting a stream of the former, compared with which the volume of the Mississippi or the Amazon would be but a rill. But, on the other hand, the tenfold myriads of the blades of grass and the leaves which make verdant the forest and the field absorb our poison as their nourishment; and, in its stead, they elaborate and pour forth a flood of oxygen for the sustentation of the animated world. Thus decomposition and recomposition are equal. The ebb and flow of the mighty tide of conscious and unconscious life are mutually sustained. As water is evaporated from the surface of the ocean and the land into the sky, to be thence precipitated in fertilizing showers, and, after gladdening the earth and replenishing the sea, is again carried upwards on its perpetual circuit of beneficence; so the animal and vegetable worlds prepare, each for the other, these elements of their respective existences, and pass them backward and forward, as from hand to hand, in continual exchange; the ever-restless winds being the unchartered medium of the beneficent commerce.

For maintaining the wonderful relationship which exists between the corruptible blood within us and the life-preserving air without, the lungs are the appropriate and principal organ. Doubtless, the air is brought into contact with the blood through the skin, especially when that important and *vital* organ is kept clean; but this can be effected only to a very limited extent. The common mart, where the air goes to exchange its oxygen for carbonic acid, and where the blood goes to exchange its carbonic acid for oxygen, is the lungs.

To an ignorant observer, the lungs are a large, unshapely, unattractive mass, of a reddish hue, having neither beauty of form, structure, or coloring. But the philosophic observer cannot look upon them for a moment, and consider their curious internal construction and their important functions, without an overflow of that intellectual delight which springs from seeing an adaptation of the simplest means to accomplish ends of extraordinary niceness and difficulty.

The lungs are very large, occupying the whole internal cavity of the chest (with the exception of the heart, which is, ordinarily, only about the size of the owner's clinched hand), and therefore filling almost all the space between the breast-bone and the shoulder-blades, and between the bottom of the neck and the diaphragm, or middle line of the trunk. It is, therefore, obvious that, in a full-sized man, they are of sufficient capacity to hold many quarts of air and blood. Their internal structure is spongy and porous in the highest degree. This sponginess of structure results from the fact, that, throughout their whole substance, they are pervaded by three sets of vessels; the first two being for the blood, the third for the air. The blood is driven from the right side of the heart into the lungs through one channel only, — the pulmonary artery; but, as soon as this artery reaches the lungs, it branches out into a countless number of tubes, which spread and divide until they permeate every part of the whole mass of the organ. Should we imagine a tree with its trunk branching out into limbs, and its limbs branching out into twigs, until the latter became so thick

as almost to exclude the light by their crossings and interlacings, such a tree would be a good representation of the manner in which the pulmonary artery branches out into blood-vessels on reaching the lungs. But, when the blood reaches the extremities of its thread-like vessels, it does not stop and return back to the heart by the same passages which conveyed it out. It flows onward and *through* the lungs; the second set of vessels being only a continuation of the first. The tubes which carried the blood outwards, after reaching their extreme point, bend and turn backwards towards the heart; and as in going out they had become more and more numerous by division, so, on their return, they become fewer and fewer by union with each other, until, at last, they are all gathered into one channel, — the pulmonary vein, — and returned to the left side of the heart. As in the one case they were divided from a trunk into branches, and from branches into twigs; so, in the other, they are united from twigs into branches, and from branches into a trunk. It is like one great thoroughfare leading into a city, which, on reaching its confines, begins to divide and diverge into numberless streets, lanes, and alleys; and these, after traversing every part of the place, converge towards a common outlet, which leads from the city on the opposite side by another great thoroughfare. Such are the two sets of blood-vessels, — arterial and venous, — which occupy the body of the lungs; and from whose number and closeness to each other, one might suppose that no room would be left for any thing else. But the spaces for the reception of the air are almost as numerous as those for the reception of the blood.

The air finds access to the lungs through the mouth and nostrils. It descends through the windpipe, which, at the bottom of the neck, divides into two branches, one going to the right, the other to the left lung. As soon as these two air-passages reach the body of the lungs, they branch out in the same manner that the blood-vessels do; so that, throughout the whole substance of these organs, an air-cell lies side by side with a

blood-vessel. The sides or walls which separate the air-cells from the blood-vessels are exceedingly thin, filmy, and gauze-like. They are so strong as to keep the air and the blood each in its own passages, and yet of so fine a texture as to allow the carbonic acid of the blood to escape into the air-cells, and the oxygen of the air to be absorbed into the blood-vessels. They allow each one to come to the other, which is life; they prevent each one from extravasating into the other, which is death. The air which we inhale at a single breath, if received into the circulation, would destroy life in a minute. The blood which at any one time occupies the lungs, could it burst its bounds, would also destroy life instantaneously. Yet in this receptacle of the lungs do these two necessary yet opposite elements meet, while life lasts, to reciprocate benefits, — each approaching the very limits of danger, but never transgressing them without some fault or improvidence on our part.

One fact must be noticed in this connection, the importance and bearing of which will be seen hereafter. The air does not, like the blood, flow *through* the lungs. Its egress is by the same passages as its ingress.

It is necessary here to introduce a single paragraph in relation to another vital organ of the body. Although this may seem a digression, yet it will not be found so in the sequel.

The briefest outline of physiological science would be radically defective if it took no notice of the *skin*. Surprising as it may at first seem, this simple envelope of the body is a vital organ; because, if any considerable proportion of it were to be destroyed, death would ensue, as certainly as though we were to remove the brain, or take out the heart. The skin consists of three layers, or coats. The exterior coat is a comparatively rough, hard substance, and is insentient. Its object is the protection of the two interior coats, as the bark or rind of a tree protects those fibres of the wood in which the processes of vegetable life are carried on. The second coat contains that coloring-matter which gives to different races or individuals their peculiar hue or complexion. It is often said that differ-

ences in regard to human rights and privileges are founded upon the skin, but this is not philosophically correct; for, as far as any such differences are founded on color, — all the coloring-matter residing in one only of the three membranes, — those differences are obviously founded only on a third part of the skin. The interior coat is the living or true skin. It is pervaded by nerves and blood-vessels. In a healthy person, these blood-vessels, although invisible to the eye, are in a state of the greatest activity. The three coats — or the whole membrane — are perforated by an inconceivable number of apertures called pores. Through these pores a great deal of the waste matter of the system is excreted or discharged. While taking vigorous exercise, perspiration flows out from the body through these orifices, and collects in drops. This is called *sensible* perspiration, because its quantity is so great as to be perceptible to the senses. The phenomenon of sensible perspiration is an occasional one, essential to health, but more or less frequent according to the habits of the individual. But there is an *insensible* perspiration, which is habitual. Languor, cold, numbness, seize every part of the body if its insensible perspiration is checked; and, unless it can be revived, these sensations of coldness and torpor will prove the harbingers of death. The watery particles exuded through the pores are a combination of hydrogen which we take into our stomach with our food, and of oxygen which we inhale through the lungs. But the perspiration is far from being pure, limpid water. It contains salts, fatty or unctuous matter, and other impurities. It collects dust also as its particles fly through the air and come in contact with the skin, or as they are communicated to our persons by our clothes. The heat of the body vaporizes the watery part of the perspiration, and, in so doing, it leaves a sediment at the mouth of every pore, like a sand-bar at the mouth of a river. Unless this sediment is removed by frequent washings and friction of the whole person, it will accumulate, harden, and incrust the entire surface, and form a loathsome and disgusting amalgam of dirt and grease. But when exercise is taken sufficient to throw out the

waste parts of the system through the pores, and then these nauseous obstructions are removed by daily ablution, the currents of life will flow out to the surface, and to all the extremities, full, deep, and majestically strong. The jockey understands this perfectly well in regard to his horses, though so ignorant of it in regard to himself; and a gentleman who rarely washes or brushes his own person would discharge a groom who should neglect to wash and curry his horses. The best antidote and remedy for most cutaneous disorders or eruptions is cleanliness. We are accustomed to call such maladies diseases of the skin; but they are often no more diseases of the skin than a burn is. They are diseases of unclean habits. For their removal or prevention, the practices of the community must be altered; but this will not be done without the diffusion of physiological knowledge.

I hope I have now given such an outline of the principal vital organs and functions as will render the practical remarks which are to follow intelligible and instructive.

It is manifest from what has been said, brief and incomplete as it is, that the health, vigor, and longevity of the human family are almost entirely dependent upon three things: —

1. A sufficient quantity of wholesome and nutritious food, well prepared before it is sent into the stomach.

2. The due vitalization of the blood in the lungs.

This vitalization of the blood is effected by our inhaling the necessary amount of pure air, which, as I shall presently show, is utterly impossible without active exercise.

3. Personal cleanliness, by which is meant cleanliness of the whole surface of the body.

And surely it is a truth fitted to awaken our most fervent gratitude to the Author of our existence, that he has placed these three great conditions of our physical well-being under our own control. Of the nature or essence of the vital principle we are as yet ignorant. Some of the internal ganglia also are mysteries to the profoundest science. Of the more subtile

movements in the interior of the system, we can take no available cognizance. These inward vital processes are not subject to our volition. The heart will not continue to beat, nor the blood to flow, at the bidding of the mightiest of the earth. The sculpture-like outline of the body; its gradual and symmetrical expansion from infancy to manhood, every day another and yet the same; the carving and grooving of all the bones and joints; the weaving of the muscles into a compact and elastic fabric, and their self-lubricating power, by which, though pressed together in the closest order and crossing each other in all directions, they yet play their respective parts without perceptible friction; the winding-up of the heart, so that it will vibrate the seconds of threescore years and ten without repair or alteration; the channelling-out of the blood-vessels, more numerous than all the rivers of a continent, and so thoroughly permeating every part, that there is no desert or waste spot left where their fertilizing currents do not flow; the triple layer of the skin with its infinite reticulations; the culling and exact depositing of the material of that most divinely-wrought organ, the brain, for whose exquisite workmanship it would seem as though air and light and heat and electricity had all been sifted and winnowed, and their finest particles selected for its composition; the diffusion of the nerves over every part of the frame, along whose darksome and attenuated threads the messengers of the mind pass to and fro with the rapidity of lightning; the fashioning of the vocal apparatus, so simple in its mechanism, and yet so varied in its articulation and its musical range and compass; the hollowing-out of the ear, which secures to us all the utilities and blessings of social intercourse; the opening of the eye, on whose narrow retina all the breadth and magnificence of the material universe can be depictured; and, finally, the power of converting the coarse, crude, dead materials of our food into sentient tissues, and miraculously enduing them with the properties of life, — over all these, as well as over various other processes of formation and growth, our will has no direct control. They will not be fashioned, or

cease to be fashioned, at our bidding. It was in this sense that the question was put, "Which of you, by taking thought, can add one cubit unto his stature?" It is not by "taking thought," but by using the prescribed means, — by learning and obeying the physical laws, — that the stature can be made loftier, the muscles more vigorous, the senses quicker, the life longer, and the capacity of usefulness almost indefinitely greater.

It is diet, oxygenation of the blood, and personal purity or cleanliness, which have the prerogative of accomplishing these objects; and these are in our power, within our legitimate jurisdiction: and, if we perform our part of the work faithfully and fully in regard to these things, Nature will perform her part of the work faithfully and fully in regard to those subtler and nicer operations which lie beyond our immediate control.

On the first point, — that of diet, — I have already said as much as the limits of this Report will warrant.

In regard to the second point, — the proper oxygenation of the blood, — a few observations will make it apparent that this vital operation may be defeated in any one of three different ways, or, with more fatal despatch, in all of them acting together.

1. Even when the lungs are sound and of good size, the blood may fail to be vitalized by our breathing impure air, — that is, air of which less than twenty-one hundredth parts are oxygen. As breathing the air once unfits it for being breathed again until it has come in contact with vegetation, or been otherwise renovated in the great laboratory of Nature, it follows that a quantity of new air should be supplied to the lungs just as fast as we exhale the old. This is most perfectly done under the open sky; and hence the universal fact, other things being equal, that those who live most out of doors enjoy the best health. In our apartments and houses, fresh air should be admitted just as fast as the oxygen of the old is destroyed by our own breathing, or by fires and lights; and it should be borne in mind, that, as the same process is going on in us and

in a common fire or flame, a few lights in a room will consume as much oxygen as a man. Now, the mother violates this rule when she sinks her babe in the pillows of a cradle or crib, and, by so covering it up as to impede the access of fresh air to its lungs, may with almost literal truth be said to bury it alive; because, in such case, the infant is compelled to breathe the same air the second time, or, perhaps, many times. Parents violate this rule when, for the sake of guarding against what they call the inclemency of the season, they make their children sleep, or sleep themselves, in a small room, with closed doors, and with windows carefully calked in order to keep out the cold. A child who has been physically well trained will not suffer so much by sleeping with the windows of its apartment open, when the thermometer is at zero, as by habitually lying all night in a close, pent-up apartment. This law is flagrantly violated when children are kept in-doors for days together, although the weather be as cold as our latitude will permit, instead of being sent out daily, and several times a day, to take such vigorous exercise as will keep them warm, in the open air; or, at least, in some place where the sun's light can come.* This law is most absurdly and cruelly violated by teachers who supply only impure air for their pupils to breathe, at the same time that they require them to study. An engineer might as well require his locomotive to go when he shuts off the draught from the fire-chamber. The Pharaohs who demand intelligent study in the absence of pure air are as tyrannical as the Pharaoh who exacted a full tale of bricks without straw, with the aggravating circumstance against them, that this tyranny is exercised upon children instead of men. A great many of our private dwellings, especially those which are used as boarding-houses, and, almost universally, our public edifices, are constructed in open disregard of the laws of physiology.

The immediate effects of breathing impure air are lassitude

* The Neapolitans have an excellent proverb, that where the sun does not come the physician must.

of the whole system, incapability of concentrated thought, obtuseness and uncertainty of the senses, followed by torpor, dizziness, faintness, and, if long continued, by death. When great mental efforts are put forth simultaneously with the inhalation of impure air, so much black blood is forced into the brain in order to sustain its energies, that a fit of apoplexy at once closes the scene. Instances of this will occur to every observant mind. That of the late Chief Justice Parker of Massachusetts, of Mr. Emmet of New York, and Mr. Pinckney of Charleston, were obviously cases of this kind. Had their court-rooms been well ventilated, it may be considered as almost certain that neither of these melancholy events would have happened. Those great men were sacrifices to the barbarous manner in which the court-rooms of a community calling itself civilized had been constructed. They were profoundly learned in the laws of the land, but as profoundly ignorant or disregardful of the laws of Nature. The eminent and excellent Chief Justice of Massachusetts was just as much the victim of a violated law as the malefactors whom he was trying when he died.*

Different races of animals exhibit to our daily observation the consequences of a more or less perfect oxygenation of the blood. Frogs, toads, lizards, and reptiles generally, are so constituted or organized, that only a part of their blood flows through their lungs at each circulation. The residue of it, therefore, goes round twice, thrice, or even more times, without imbibing oxygen or throwing off carbonic acid. Hence their general character of inactivity, dulness, and stupidity. They remain in one position and almost motionless during the greater part of their lives, and exhibit a very low form of animated existence. The standing temperature of their blood is

* In the British House of Commons, during the memorable session of 1835, when the importance of the interests at stake, and the equal balancing of parties, occasioned an unusually close attendance and very lengthened sittings, the lives of several of the members were sacrificed in consequence of the bad condition of the air; and the health of many more, even the most robust among them, was very seriously impaired. — *Dr. A. Combe.*

several degrees lower than that of most other animals, — the natural consequence of its imperfect oxygenation. But, on the other hand, the organization and structure of most birds are such, that they breathe, in proportion to their bulk, a far greater quantity of air than man. Their standard of temperature is several degrees higher than that of the human species. Hence their vivacity and celerity of motion, or, rather, their incapability of rest. They are much upon the wing, or flitting from spray to spray, overflowing with music which seems to pour out of itself; and they evince an existence crowded with gladsome emotions. Just so far as we, by our architectural arrangements, or by our confinement of children within doors, administer impure air for their breathing; just so far do we take from them the warmth, vivacity, and joyousness of birds, and inflict upon them, in its stead, the coldness, torpor, and stupidity of frogs, toads, and lizards.

2. The second cause which prevents that due oxygenation of the blood which is so essential to health, vigor, and length of days, is *a deficiency in the size of the lungs themselves.* Men of a lively expression, florid countenance, and such great muscular activity as makes motion a pleasure, and inaction a pain, and who are so ardent that their common feelings are almost passions, — that is, men of a high sanguineous temperament, — always have a large chest. A large chest is synonymous with large lungs; for, if not interfered with, the lungs determine the size of the chest, as the brain determines the size of the cranium. Just in proportion as the capacity, or roominess, of the lungs is lessened, must the quantity of the air which is brought into contact with the blood be diminished. And, as the quantity of the air admitted to contact with the blood is diminished, in the same ratio must the oxygenation of that fluid be reduced. To have small lungs, therefore, or, what is the same thing, a small chest, is a calamity to the health, as well as a deformity to the person. All animals, in their highest state of physical development, have a full, capacious chest. Indeed, the greatest energy of the digestive organs, the richest

nutrition carried by the blood to the various parts of the system, and especially the greatest quickness and power of tension in the muscles, cannot exist without large lungs, — that is, without a large chest. As well might vegetation flourish without heat or moisture. What a deep and capacious chest have the highest specimens of that noble animal, the horse! It is in that spacious laboratory that his fleetness and endurance are generated; and generated so rapidly, that he champs the bit and becomes impatient of the reins that debar him from giving loose to his pent-up energies. So of the ox, whether the wild buffalo of the prairies, or the domesticated animal which is so serviceable to man. In those emblems of beauty, which, in all ages, have delighted the sculptor, the painter, and the poet; in the lion, the swan, the dove, or the wild pigeon which cuts the air with such amazing speed, and sustains itself so long upon the wing, — in all these, the first feature which catches the artist's eye is the broad, expanded, full-rounded chest. This part of the body, then, is not only the seat of the highest energy, but the type of the most perfect elegance. Such was the universal sentiment amongst those worshippers of beauty, the Greeks. Had Phidias or Praxiteles sculptured a Jupiter with a narrow and sunken chest, or a Venus whom a contracted zone would clasp, not all the renown of their previous works, nor their countrymen's idolatry of genius, could have saved them from public insult or judicial ostracism.

Persons suffer under the misfortune and ugliness of small lungs from different causes. They come by hereditary transmission. If both the parents have small lungs, it is almost certain that their offspring will be afflicted with the same deformity. In such cases, however, the infirmity of the children may, to a great extent, be remedied by inducing them to take much exercise, especially of the chest and upper extremities, in the open air. This, if continued through childhood and youth, will result in a great expansion of these organs; for, under favorable circumstances, Nature always seems anxious to retrieve her losses.

There are also certain mechanical trades in which the body is continually bent forward, or confined in a sitting posture, the hands being fixed at one point, and the shoulders forced round towards that point, as though they were striving to look at each other; all of which tends to cramp the chest, and to make its interior and fore part convex instead of concave, and, of course, to dwarf the size and impede the play of the lungs. In such cases, the workman should stand as much as possible, instead of sitting; and, when not engaged in his employment, should practise counteracting exercises.

The growth of the lungs may also be impeded by artificial or mechanical compression, in perverse imitation of the Chinese, who swathe the foot from birth, and confine it through life in a small, inelastic shoe; or of the tribe of Flathead Indians, who deform the head by fastening a hard board upon the frontal portion of the cranium. And the victim of Chinese fashion may as well expect to walk or dance with the grace and lightness of a Camilla, or the tribe of Flatheads to attain the intellectual stature of Lord Bacon or Dr. Franklin, as any one can expect to enjoy vigor of body, buoyancy of spirits, or energy of intellect, who is doomed by any tyrant, whether of law or of custom, to interdict the free motion and enlargement of this vital organ, the lungs. It is matter for rejoicing that those monsters of cruelty who invented the iron boot and the thumbscrew for the torture of their victims did not understand enough of physiological laws to know that they could inflict far more various and enduring tortures by enclosing the whole body in one thick-ribbed incasement, and thus, at once, counterwork all vital processes. Such a contrivance, too, would have caused not merely pain to the individual, but deterioration of the progeny; and, for all those who had any pride of family, would have been far more effectual in entailing bodily and mental imbecility, and consequent obscurity and disgrace, upon their descendants, than any attainder of blood, or act of outlawry.

To obviate the dwindling and debilitating effects of this

practice upon the race, the community must allow its children to grow up without any obstruction to the development of this vital part of their frame. The main hope of remedy lies in a better training of the young, in keeping the yoke from the necks of those who have never been degraded and enfeebled by it; for so enervating to the whole system is this practice, so deeply injurious to intellectual and moral manifestations is it to send continually, and for years, a current of unoxygenated, black blood to the brain, that the victims of the custom become almost unable to appreciate any argument or persuasion addressed to their reason or religion. The minds of such persons run to fancies and vagaries, while common sense seems obliterated. This, indeed, might be predicted from a knowledge of physiological laws. Sapping, as the habit does, the *vital force* alike of body, intellect, and moral sentiments, it belongs to that class of offences which seem, in the very act of commission, to take away from the offender both the desire and the ability to reform, and which inflict the last act of degradation, — a willing bondage.

Let any one who has not robbed himself of the power of reflection consider, for a moment, the collocation or juxtaposition of four of the great vital organs, — the lungs, heart, stomach, and liver, — upon which a compression around the upper and central part of the body directly acts. On the right and left sides of the chest, from the neck to the diaphragm, or midway line of the trunk, are situated the lungs. Between their right and left lobes, and a little backward towards the spine, is suspended the heart, which, in its ceaseless and uninterrupted play, provides for itself just as much space as it needs. Immediately below is the stomach, which, when distended with food, is only separated from the heart and the lungs by that thin membrane the diaphragm. On the right of the stomach, and backwards to the spine, is the liver, whose secretions are so essential to the formation of healthy chyle, and to the action of the abdominal viscera. The healthy stomach, after a meal, is in continual motion, contracting and

expanding, rolling, lifting itself up, first at one end and then at the other, until the work of digestion is completed, and the organ has disburdened itself of its contents. The heaving and subsiding of the lungs at every breath, and the systole and diastole of the heart, as it alternately receives and ejects the vital stream, have, as every one knows, neither intermission nor pause from birth till death. Indeed, any intermission or pause in the action of these organs *is* death. If permitted to fulfil the wise ordinations of Nature, each one provides for itself ample space for all its movements. Neither interferes with or molests its fellow. They rather assist each other. The full distention of the lungs in breathing helps the contractile muscles of the stomach; and the pressure of the chyme, as it passes along the duodenum, forwards the biliary secretions.

No mechanism ever invented by the art of man runs so quietly, so forcibly, or so long. There is no clogging, no stifling, no friction. The ribs are hung on hinges, which, at every act of inhalation, open like the bows of a bellows, to enlarge the apartment where these vital organs are plying their work, and preparing the precious pabulum of life. But suppose the walls which enclose these busy operators to be so contracted, that all, in their desire for the necessary space, begin to encroach upon each other's limits. Suppose, by further compression, each one to become like a man in a crowd, unable to move hands or feet. Encumbered, choked, thwarted in its exertions, each organ will strive to thrust the others from a space which is too straitened for all; and thus the force which every one needs for completing and perfecting its own work is expended in hostile though useless aggressions upon its allies. The stomach cannot stir up the food, move it from side to side, and mingle it with the gastric solvent. The lungs from above press upon it with a dead weight. The heart can but half open for the admission, and therefore cannot contract vigorously for the swift propulsion, of the blood; and thus the momentum of its current is lost before it reaches the extremi-

ties. The liver cannot concoct its secretions, and such as it prepares are driven from it at unseasonable times. The fine lacteal ducts find only coarse and half-prepared material for nourishment, and this chokes and inflames their minute channels as they bear it onward laboriously to the blood. As an inevitable consequence, innutritious blood is poured into the right side of the heart. But, rich and strong blood being the natural stimulus of that organ, it now works languidly in forcing the stream forward to the lungs, both from want of room and of the appropriate excitement. When the lazy current of blood reaches the lungs to throw off its poisonous carbonic-acid gas, and to seek that life-giving elixir, the oxygen of the air, it finds all the air-cells crowded together and almost closed, or occupied only by corrupted air; and hence it is obliged to return to the left side of the heart almost as black and lifeless as when it emerged from the right: or, to illustrate the subject by a metaphor before used, the diver, having in vain come to the surface after air, is compelled, though at the risk of suffocation, to sink again to the bottom without refreshment. From the left side of the heart, the blood now starts upon its course a second time, without vitalization; and hence it issues in a tardy, pestiferous stream, diffusing a painful sense of languor over all the limbs, and blunting the acuteness of every sense, until at last its muddy current ascends to the sacred temple of the brain, to spread clouds and darkness through all its mansions. From this capitol of the realm it returns, again to contend with the same obstructions, and, instead of being the antagonist, to become the ally of all the chemical forces in their attack upon the citadels of life.

A single additional remark will suffice to show, that any constriction around any part of the body will impede the current that drives the machinery of life. As a general rule, the arteries, through which the blood is propelled outward from the heart, lie deep beneath the surface. This course serves to secure them from external injuries; and as the blood flows

more freely from an opened artery than from a vein, and is with more difficulty stanched, our exposure to its loss is greatly diminished by such an arrangement. Most of the veins, on the other hand, lie at or near the surface. In persons of high health, the veins start out, and exhibit themselves above the common surface; and this seems to have been carefully regarded by the ancient sculptors in their representations of physical strength. From the fact that so much of the blood flows near the surface, on its return to the heart and lungs, it is easy to see that any ligature around trunk or limb must impede the current as it hastens onward to renew the life which it has lost. Suppose the engine-men of the fire-department, when called out to extinguish a conflagration, should lay heavy weights all along upon the hose through which the water ought freely to flow: could they reasonably expect to subdue the flames, and save property and life from destruction? Certainly with as much reason as any person who obstructs the free flow of the blood by bands or ligatures over any part of the body can expect to enjoy a full measure of health.

The injury, however, of constricting the blood-vessels by pressure upon the surface, is different in different parts. A tight cord around the neck is fatal. Hence this mode has been adopted by several nations for executing the punishment of death upon criminals. If the structure of the human system were understood, a severe mechanical compression around the body would be considered a misfortune and a disgrace next in order to a noose about the neck. It is a less speedy process, indeed, for extinguishing life, than strangulation; but, in its effects upon the criminal and upon offspring, it inflicts the pain of a hundred deaths.

But any tight band or ligature — a hat, neck-cloth, glove, boot, shoe — fastened around any part of the body is proportionally injurious. That painful and disabling malady — swelled limbs — is oftentimes occasioned by the ignorant practice of binding something so tight upon or around the limb as

to prevent the free flow of the blood back to the heart. A rule, as universal as it is intelligible, in regard to the closeness of our garments, is, that they should always allow a free motion of the parts beneath them. If, for instance, the sleeve of a coat fits so tightly to the arm that the arm cannot turn within the sleeve without turning the sleeve also, then it is so tight as to check the circulation and to injure health. And so of any other part of the dress. But, when the body and the limbs move freely within the dress, a friction on the skin is caused which is highly salutary.

3. The third cause of an imperfect oxygenation of the blood is *the want of exercise.*

A person may have well-developed lungs, and live constantly in pure air; and yet, *without exercise*, his blood will be but half oxygenated, and he will suffer consequent debility of body and mind.

A few simple propositions will place the relation in which we stand to active exercise in a clear light.

1. Every muscular exertion is necessarily attended by a compression of the muscle exerted; that is, every muscle in a state of tension is more compact, and therefore occupies less space, than when it is relaxed. The muscles are respectively surrounded by or enclosed in a membranous sheath or coat, just as the arm, finger, or other part is surrounded by its skin. This sheath is always so well lubricated, that although the different muscles are close-packed together, yet they slide upon each other without embarrassment. Of the rapidity with which they must play upon one another, we may form some conception in looking at a juggler's arms or a musician's fingers. Within these sheaths (or *fascia*, as they are technically called) the whole body of the muscle, when we exercise, is compressed; or, to use a familiar but more expressive phrase, it is *squeezed.* This compression of the muscle sends out its blood, just as the compression of any flexible tube or cylinder would send out its contents. The blood, for a reason hereafter to be stated, can move only in one direction. In the general

circulation (as distinguished from the pulmonary), the arterial blood moves outward towards the extremities. When it reaches the extremities, it passes from the arteries, through capillary tubes of almost inconceivable fineness, into the veins, where, losing its arterial character, it becomes venous blood, and flows backwards to the heart. Hence the obvious effect of every muscular effort is to quicken the circulation of the blood.

2. The blood being the natural stimulus to the action of the heart, if more blood is received, the stimulus is increased, and, of course, the pulsations of that organ are increased also, both in frequency and force. The heart must throw out as much blood as it receives; and, when an increased volume is thrown into it by the compression of the muscles, its beat must be more rapid, and, as the organ is more distended also, it must throw out more at each beat.

3. As the blood thrown from the right side of the heart has no place of escape except into the lungs, and as this fluid is also the natural stimulus of the lungs, it follows, that, as the quantity of blood injected into these organs is increased, their motions also must be accelerated.

This statement has been or may be tested by every one for himself. Let a man, while sitting in a state of perfect repose at the bottom of Bunker-hill Monument, count the number of his pulsations per minute, and take note, as well as he can, of their force. Let him also note the number of his respirations per minute, and their depth, that is, the quantity of air which he inhales at each breath; and then let him ascend the staircase, though at a moderate step, to its summit, and there compare the frequency and strength of his pulsations, and the number and fulness of his respirations, with what they were before he started, and he will find how vastly the latter exceed the former! And so of any vigorous exercise. The whole philosophy of this is, that muscular exertion — or, which is the same thing, muscular compression — sends more blood to the heart; whereupon that engine increases the rapidity and length of its strokes, to propel the current forward towards the

lungs; and then the lungs are inflated to their lowest depths to meet the increased demand of the blood for oxygen. And what is remarkable is, that we cannot by any act of the will force ourselves to deep and rapid breathing for any considerable length of time, without exercise; nor can we prevent deep and rapid breathing while engaged in strong muscular efforts. This is a natural operation, and can be effected only by using the appointed natural means.

Observe the breathing of a person long unused to exercise. If the capacity of the lungs is such that they would require one, two, or more quarts of air for their *full* inflation, such a person, while in a state of repose, will inhale scarcely half a pint, and hence will defraud himself of at least three-fourths of the vital element which his system requires. An indolent person could enjoy a full measure of health and vigor, only on condition that the whole arrangement of his physical structure, and all the laws of Nature which pertain to it, should be reversed for his accommodation.

It was stated above, that, while the lungs contain two sets of vessels for the blood, — one for its ingress, the other for its egress, — they contain but one set for the air. Hence the air returns outward through the same passages by which it entered the lungs; or, to sacrifice dignity to expressiveness of phrase, *it goes out backwards*. The consequence of this is, that feeble and shallow breathing ventilates only the upper part of the lungs. But the principal bulk of these organs lies lower down in the chest. Hence the small quantity of air taken into the lungs by an indolent person at each successive breath reaches but a part of the blood which is flowing through them. The rest of the stream passes on, lifeless and corrupting. And hence, too, that general paleness of hue, that insecurity of step, that threatening to sink or drop down while attempting to stand or sit upright, that feeling of necessity for some mechanical support around the body in order to maintain it in an erect posture, and that universal heaviness of motion, as though all the muscular bands were stretching, instead of tightening, on the

application of force, which characterize those who disdain manual labor, and look upon active exercise as derogating from personal dignity. To the eye of the physiologist or lover of Nature, these signs of feebleness are more revolting than the deformity of a hump-back or a club-foot.

The reason why the blood, on a compression of the muscles, must be driven forward, and not backward, is, that the veins are provided, at brief intervals along their whole length, with valves, which allow this fluid to pass only in one direction. It flows forward freely through these valves; but they shut to prevent its retrogression. How, except by some such mechanical contrivance, could the blood of a full-grown man, while he is in a standing posture, ascend for a distance of fifty inches from his feet to his heart? Without these valves, the weight of the whole column of blood would press upon its base; and when we consider the meandering of its streams, and the fineness of the capillary tubes through which it must pass, a force sufficient to drive it upwards to the heart, unsupported by these valves, would be almost inconceivable.

So far as the circulation of the blood is concerned, these facts show the difference between passive exercise, such as riding in a carriage or sailing in a boat, and the athletic exertions of manual labor or of gymnastic sports. Every jolt of a vehicle, of course, will drive the blood forward a little, — just as any fluid is agitated by the motion of the vessel containing it, — and the valves in the veins will prevent its falling back; but how miserable a substitute is this for that alternate compression and relaxation of the muscles, which sends the blood forward in successive and beautiful jets, which also sends forward the whole mass of the blood, not allowing, *as is the case with all slothful*, *inactive persons*, any stagnant, noisome pool, or even particle, to remain behind to breed corruption and offence; and which rewards with the priceless boon of health the labors of the husbandman, the artisan, or the sailor!

On the due oxygenation of the blood, and on its lively circulation through the system, depends another result, and one, too,

of the most remarkable character in the whole animal organism. I refer to the growth of the body, and the constant reproduction of its tissues.

A vulgar opinion prevails, that every part of the body of a man is changed once in seven years; so that, speaking of the corporeal substance, it might be said that no part of our frame, however gray or decrepit with age we may appear, is more than seven years old. Whether this opinion may or may not be erroneous in one sense — that is, whether a man who dies at a hundred may not carry some atom, molecule, or monad, to the grave, which he brought into life — is what we have no certain means of determining, though it is highly probable that he does not; but there can be no doubt that the saying is grossly incorrect, in making a general allowance of seven years for the renewal of the system. How many times must the skin of an infant who weighs but six or eight pounds at birth be changed, in order to accommodate itself to the gradual enlargement of its owner, until he weighs a hundred and sixty or eighty pounds! it being kept in mind that the skin has made a good "fit" during all the time. This adaptation of the envelope to the daily growth of the owner is not effected by *stretching*, for whatever is stretched in one direction must be diminished in some other; but a square inch or square foot of the skin of an adult is heavier and thicker than that of a child. During the whole period of a child's growth, therefore, how many times must this entire integument change in every seven years, and even in a single year! The man most extravagant in his wardrobe prepares far fewer garments for his body than Nature prepares skins. And if the skin must be cast off and reproduced so many times in order to adapt itself to the growth of the parts it contains, then these parts must change nearly or quite as many times in order to suit the capacity of their covering. Look at the hands and feet of the infant and of the full-grown man, and consider with how many new pairs of each he must have been furnished for all the intermediate sizes.

But this is not all. It is supposed that every exertiou of a muscle is attended by an actual loss of a portion of its substance. In the adult state, when we retain substantially the same weight from year to year, the old material which is lost is replaced only by an equal quautity of new. But, during the season of growth, not only the material which is lost must be replaced, but such an additional quantity must be added as will increase the mass or weight of the individual from day to day. Perhaps this presents to us a better idea than any thing else can of the changes from old to new which are constantly going on in a healthy body. We see it with our eyes in regard to the nails and hair. The whole of the finger-nails are changed several times a year, at least; and the hair grows far more rapidly than the nails. The particles incorporated into our system are not designed to last long; but the beauty of the operation is, that the used-up portions are skilfully taken out, one after another, and new ones, larger, stronger, and better, substituted for them. No healthy person consists of precisely the same particles for any two successive days.

How infinitely superior is this to any specimen of human workmanship! If we cause friction in any part of a machine, as in the iron band or tire of a wheel, for instance, it wears away and is gone. Not so with the hand or the foot, or any part of the body: there is a repairing energy, a constructive faculty, in these, which has the power, not only of replacing what is lost by friction, but of thickening and hardening the exposed parts. Were there any such self-protecting ability in a wooden wheel, then, when its circumference should begin to wear away, it would, of its own vital efficiency, prepare and deposit a rim of iron to protect the wood; and if this, too, were in danger of being ground off, it would then defend itself by one of steel or platinum.

What a wonderful invention should we deem it to be, if a shipwright could discover some mode by which, whenever decay or dry-rot should attack the innermost timber of his vessel,

that vessel should be endued with the power of seizing the unsound atom, and of hurrying it along from point to point, until at last it should be thrown out into the sea; and, in the mean time, a sound particle should be seen winding its way among thick layers of iron and wood, changing its course, if need were, to avoid obstacles, though always holding on steadfast in the same general direction, until at last it should settle down in the precise place from which its predecessor had been ejected, whether that place were at the bottom of the keel or at the top of the mast! And the wonder would be immeasurably increased, if the new particles, while they imitated the shape, should exceed the size, of their predecessors, and the process should be repeated again and again, until a pleasure-boat became a steamship or a man-of-war. Yet a process exactly like this is going on, every moment, in the body of every healthy child, and with greater rapidity and frequency in proportion to the degree of health enjoyed.

This is not mere curious speculation. These facts have the greatest practical significancy. The change of material in the body is almost exactly proportioned to the quantity of pure air breathed, and to the amount of healthy exercise taken; because on these mainly depends the assimilation of the food. Without such change of matter, there cannot be any healthy growth; and hence the small bones and loose flesh — as soft and puffy as though it were wind-swollen — of those children who are delicately reared. Such children cannot have elastic, bounding muscles; for theirs are the old, flaccid muscles whose material ought to have been renewed months ago. They cannot have bright eyes and roseate cheeks; for the old, defaced lenses of the eye are still in use, and strong exercise in the open air has never projected the blood outward to fill the vessels of the true skin with the hues of beauty and the glow of health. In regard to those young men who have suffered the misfortune of a luxurious domestic training, who have been taught to disdain labor, and have hardly been allowed to wash their own faces or tie their own shoes, it is often alleged, as an excuse for

their inaptitude, their want of dexterity and resource, in the emergencies of life, that they have never been accustomed or disciplined to contrive and to think in the adaptation of means to ends, or in tracing relations between causes and effects. But this is far from being all. Their imbecility does not come merely from a want of practice, but from their being obliged to use an old brain, the substance of which ought to have been renovated — all its fibres taken up and relaid — many times by vigorous exercises, and by a responsible application to some department of business. In such persons the half-decayed nerves have become almost non-conductors of volition; and the brain, through the want of a renewal of its substance, is too loose and spongy for the manifestation of thought. This organ, too, like all other parts of the body, being dependent upon these changes for its growth, must be *small* as well as lifeless without them, or its growth will be only in the animal, instead of the intellectual and moral regions.

On this view of the subject may be founded the true philosophical definition of Youth and Old Age. Those who, by an intelligent attention to diet, pure air, exercise, and cleanliness, cause frequent changes in the particles of which the body is composed, may be said to be *young* at any age; while those who, by over-eating, uncleanliness of person, and a deficient oxygenation of the blood, whether by breathing impure air, by a compression of the chest, or by inactive habits of life, effect no such change in the constituent particles of which their bodies are composed, may, with equal truth, be called *old* at any age after the days of infancy have passed. In this sense it is often literally true that one individual at seventeen may be older than another at seventy; and some children of seven years of age are already superannuated.

In the account of the miraculous feeding of the children of Israel with manna in the wilderness, it is related that no skill could preserve the heaven-descended bread in a state of purity (with the exception of the Sabbath) but for a single day; and the sacred historian uses very pungent and unsavory words in

describing the odious qualities of that which was kept for a longer period; but the manna of the second or of the third day's keeping must have had ambrosial sweetness, as compared with the whole substance and animal economy of those who, by contemning useful labor, or thinking it ungenteel to practise vigorous exercises, fail *to renew*, *frequently*, *the whole substance of the body*.

Labor was appointed at the creation. At the same time that God made man, He made a garden, and ordered him to "dress it and keep it;" that is, to *work* in it, and, of course, to prepare the necessary utensils to aid him in its cultivation. Hence agriculture and the mechanic arts are coeval with the race, and are of divine institution. All mankind have been, now are, and we may suppose always will be, created with the same necessity for bodily exertion as Adam was. If labor were not necessary for the fruits it produces, it would be so for ourselves. Nor can I concede that those who would rear their children without some industrial occupation, or without systematic muscular exercise of some kind, are wiser than the Maker of the race; or that they love their offspring better than He loved our first parents before they had committed any transgression. Although, in a certain narrow sense, it is sometimes said that labor is a curse, yet, as it is the inevitable condition of our well-being in this life, those who strive to avoid this curse always incur a greater one.

Among the most pernicious consequences resulting from a general ignorance of Physiology is the prevalent opinion that a weakly child must be prepared for a profession, or apprenticed to some in-door occupation. The plain statement of this reasoning is, that, because a child is weak and puny at the beginning, he must be subjected by his training to further enervating processes. Instead of selecting an employment by which the feeble would be fortified, they are subjected to new debilitations. If deficiency of constitutional vigor is a plausible argument in favor of discarding healthful occupations in regard to one generation, it must be decisive for the next, and must

continue to gather force as the family deteriorates. Hence, to a great extent, that abandonment by our young men of the invigorating employments of agriculture and the handicrafts, the consequent crowding of the professions, and the eager competition for inactive occupations,— an evil self-aggravating, and reproductive of its own kind. If the weakly and ignorant father cannot work out of doors, he will be likely so to rear his children that they cannot work even in the house; and the grandchildren may be able to work nowhere. Each generation of such a lineage adds something to the stock of debility and disease which it inherits, and entails the whole upon its posterity.

The slightest acquaintance with the laws of health will teach us another most important fact. Every day we hear people, who are suffering under some form of indisposition, wondering what could have occasioned it, and protesting that they had subjected themselves to no more than ordinary exertions or exposures. This may be very true, and yet a fatal disease be contracted. *Life* is an active power; but it is constantly surrounded and assailed by the ever-active agencies of Nature, which, in a certain sense, are hostile to it. Hence, as soon as the body ceases to be animated, it is speedily decomposed by these natural agencies, and reduced to its original elements. Now, the vital force is subject to great changes. After severe bodily effort, after great mental anxiety and exhaustion, or after a change from active to inactive habits, from breathing pure air to breathing that which is impure, and from various other debilitating causes, the energy of the vital force is reduced; and it is then in danger of being overborne by exterior forces which before were harmless. Suppose the ordinary vital force to be represented by *one hundred*, and the usual assailing forces to be equal to *fifty*. It is obvious that, in such a case, the latter will be subordinated to the former, and become ministers to its welfare. But suppose, from any debilitating cause whatever, the efficiency of the vital force is reduced to *twenty-five;* then it is equally obvious that it must succumb

to the antagonist forces of Nature, — now twice as strong as itself, — and the individual who before had put forth exertions or confronted exposures with impunity is now instantaneously overborne in the encounter. A clear perception of this truth would shield our health from many dangers.

A man in perfect health may be said to be lord over the climate in which he lives; but, if health be broken down, the climate is lord over him. All Nature seems to wage war upon him, treating him as some tribes of wild animals are said to treat any one of their number which has broken a limb or become decrepit with age; all falling upon him to kill him. The food which before nourished now distresses him; the cold winds which once braced his frame, and exhilarated his spirits, now inflict consumption and asthma upon him; heat fevers his blood; and every pore becomes an inlet through which disease enters. Health alone can place us in harmony with external Nature.

Another prolific source of evil would be removed by a knowledge of Physiology. All ignorant people regard disease as some foreign substance or body which has effected a lodgement in one or another part of the frame, and whose removal is necessary to the restoration of health. They make no distinction between an organ and its function, between the agent and the office it performs. Hence their remedial measures are all designed to expel some intruder, instead of substituting a healthy for a diseased action in any vital organ. Their imaginations personify disease as an impurity in the blood or a foul accumulation in the stomach; and the impostors who prey upon their ignorance and credulity have no difficulty in creating evidence to confirm their belief by giving such medicines as make the dupes declare they do not wonder they were sick. If the simple difference between an organ and its functions were understood, it would put an end to an otherwise endless amount of quackery.

Suppose the intimacy of the relation which exists between the brain and the stomach to be generally known, and the very

selfishness as well as the reason and conscience of men would remonstrate against all intemperance, whether of appetite or of passion. The *pneumo-gastric* nerve connects the brain directly with the stomach, and establishes such a sympathy between them, that each becomes a sufferer from any abuse or misfortune of the other. Let a man in high health, with the keenest appetite, when sitting down to enjoy the most attractive meal, be suddenly informed of some great calamity which has befallen his reputation or his fortunes, and not only does his appetite vanish, but he is seized with intolerable loathing and nausea at the mere thought of the food which had before diffused so agreeable a stimulus over his system. This is the effect of the brain on the stomach, through the medium of the *pneumo-gastric* nerve. So, if any thing highly acrid or noxious is taken into the stomach of the greatest philosopher or statesman, his luminous and mighty mind is plunged into darkness: it reels, or is stricken with temporary madness or paralysis, beneath the injury. If these facts were really understood and believed as clearly as we understand and believe that fire will burn, what an argument would they furnish against malevolence or misanthropy! and what a dissuasive against bringing into contact with the delicate coats of the stomach — as the ignorant so often do — those fiery compounds of food or beverage, those hot and acrid condiments, which, if applied to the palms of the hands or the soles of the feet, would actually blister and excoriate them! Never did the crew of a foundering vessel shriek louder for help than the brain cries out for relief under such inflictions. Knowledge alone can interpret its powerful remonstrances.

Again: if the principles of Physiology were understood, every discreet man could modify their application to suit his varying circumstances of health or condition. No two individuals have identically the same constitution, or powers of action or of resistance. But a book cannot be written for every man. So no one individual remains always in the same condition of strength or health. But no man can always have

a medical adviser at his side. Each one, therefore, should be master of general principles, to be modified by himself according to ever-changing circumstances. Each man should know, too, that no great enlargement of his powers, either of body or mind, can be effected at once; but that almost any enlargement, however great, may be effected by degrees.

I have thus, although in a manner necessarily cursory and imperfect, glanced at certain leading principles and observances, the knowledge and practice of which are essential to the promotion of human health, the prolongation of human life, the extension of human usefulness, and the rearing of a nobler race of men. Restricted, however, within narrow limits, as compared with the extent of the subject, I have felt constrained to omit many considerations of an interesting and useful character. My only hope and object have been, so to exhibit the practical and immediate utility of understanding this subject, that every reader, even of this brief outline, would be stimulated to seek for more extensive and exact information.

As my whole life and studies have been devoted to pursuits foreign to that of the healing art, and as I have never enjoyed any greater opportunity to become acquainted with the laws of health and life than are possessed by almost any member of the community, I can hardly hope to have escaped all errors and mistakes in the views above presented. Still less can I suppose that I have unfolded the manifold merits of the subject, or given such attractiveness to its charms, or prominence to its importance, as any gentleman of the medical profession would have done. But, deeply commiserating those sufferings and calamities of my fellow-beings which seem to me to be no part of the ordination of a merciful Providence, but to be directly chargeable to human ignorance and error, I have felt an irresistible impulse to point out the way for their relief, or, at least, for their mitigation. Any degree of knowledge which shall begin the great work of enlightening the public mind on this theme must be accounted valuable. On this, as on all

other topics, limited acquisitions must precede higher attainments, as certainly as the twilight must come before the morning. It is no argument against attempting to diffuse knowledge, that it cannot be made perfect and universal at once. Three-quarters of a century ago, the fact of the identity of electricity and lightning was known to scarcely a dozen men in the world. Now, it is not only a matter of universal knowledge among the educated, but even children are familiar with it; and every individual in the community participates in the practical benefits of the discovery of Franklin. In the same way, an acquaintance with the fundamental laws of health and life may be and must be *popularized*. The reasons are far stronger in the latter case than in the former; for where lightning has ever destroyed one victim, or one dollar's worth of property, the infraction of the physical laws has destroyed its thousands of lives and its millions of wealth. It may be alleged, indeed, that, if a knowledge of Physiology should become the common possession of mankind, it would produce only partial benefits, because men will not *act* as well as they know how to act. But with equal truth it may be said that all men do not use those means of protection which are founded on the science of electricity. Yet it cannot be denied, on the other hand, that multitudes do avail themselves of that protection, and that an immense amount of life and property is thus annually saved, which would otherwise be lost. But let the truth of the allegation be admitted in its fullest extent: the answer is, *that men will never act better than they know;* and hence, though reform and amelioration may not, in all cases, follow knowledge, yet they will follow it in many, while they will precede it in none.

It may be said further, that the great body of our teachers are incompetent to give instruction in this science. The answer to this is, that, if not competent, they should become so; for no person is qualified to have the care of children, for a single day, who is ignorant of the leading principles of Physiology.

All writers on education maintain that the course of a pupil's instruction should be modified, to some extent, according to his future calling or destination in life; and the common sense of the community ratifies their opinion. All admit that the future mechanic should study the principles of natural philosophy; the future merchant, book-keeping; the sailor, navigation; and so forth. If all, then, ought to aim at the enjoyment of good health and long life, all ought to become acquainted with the principles of Physiology.

In bringing this Report to a close, I would add, that what I have said of the comparative merits of this study is not intended as the slightest disparagement of any other which is pursued in our schools. For all of them, in their appropriate places, I have a due appreciation. Nor would I have any of the common or elementary branches displaced for the introduction of this. But, when considered as a competitor for adoption among the more advanced studies now pursued, I believe that its intrinsic merits entitle it to an unquestionable priority. The greatest happiness and the greatest usefulness can never be attained, without that soundness of physical organization which confers the power of endurance, and that uninterrupted enjoyment of health which ransoms the whole of our time and means from sickness and its expenditures. In the great work of education, then, our physical condition, if not the first step in point of importance, is the first in the order of time. On the broad and firm foundation of health alone can the loftiest and most enduring structures of the intellect be reared; and if, on the sublime heights of intellectual eminence, the light of duty and of benevolence — of love to God and love to man — can be kindled, it will send forth a radiance to illumine and bless mankind.

REPORT FOR 1843.

GENTLEMEN, —

THE following is my Seventh Annual Report: —

During the past year I have collected some interesting statistics respecting the schoolhouses in the Commonwealth.

The number of schoolhouses *owned* by the towns and districts in the State is	2,710
The number *rented* is	192
Total	2,902

From fifteen to twenty towns made no return on this subject. Their houses, owned and rented, would increase the number of such as are occupied for the public schools of the Commonwealth to at least 3,000.

During the five years immediately following the communication, by the Board to the Legislature, of the Report on Schoolhouses, the amount of money expended by about two hundred and ninety of the three hundred and eight towns in the State, for the erection and permanent repairs of schoolhouses, was $634,326.80

Under the two heads, the items are as follows:

For erecting new houses, including the price of land, fixtures, and appurtenances	$516,122.74
For making permanent and substantial repairs on old ones	118,204.06
Total expended for schoolhouses in five years .	$634,326.80

The expenditure for this object in towns not heard from would swell this amount to more than six hundred and fifty thousand dollars. If we leave out the single city of Boston, the above expenditure is doubtless greater than the value of all the schoolhouses in the State at the time of the organization of the Board. The number of new houses erected in the towns heard from is four hundred and five. The number of old ones on which substantial and permanent repairs have been made is four hundred and twenty-nine.

SCHOOL-RETURNS

The number of towns which failed to make Returns the past year was eleven. This is a larger number than for several previous years. Hence all the aggregates are less than they should be, although the relative proportion among them is not materially affected.

Every town which fails to make its annual Return, as prescribed by law, forfeits its distributive share of the income of the school-fund. The number of delinquent towns shows the expediency of the law. If so many are remiss, notwithstanding the forfeiture, we might reasonably apprehend that the object of the law would be frustrated were the penalty forborne.

The Returns for the last school-year (1842–3) show a gratifying advancement in most of the elements that make up the general prosperity of common schools.

ATTENDANCE OF CHILDREN UPON SCHOOL.

In the school-year 1841–2, the number of children returned, as between the ages of four and sixteen, was	185,058
In 1842–3, the number between the same ages was	184,896
Less	162

In 1841–2, the number of children of all ages in all the schools *in summer* was	133,448
Do. in 1842–3	138,169
Increase in the numbers attending school *in summer*,	4,721
In 1841–2, the number of children of all ages in all the schools *in winter* was	159,056
Do. in 1842–3	161,020
Increase in the numbers attending school *in winter* .	1,964
In 1841–2, the average attendance in all the schools *in summer* was	96,525
Do. in 1842–3	98,316
Increase in the average attendance upon school *in summer*	1,791
In 1841–2, the average attendance in all the schools *in winter* was	117,542
Do. in 1842–3	119,989
Increase in the average attendance upon school *in winter*	2,447

From these facts it appears that the evils of absence from school have been slightly mitigated within the last year.

How great they still continue to be will appear from the following comparison: —

The whole number of children returned as between the ages of 4 and 16 is . .	184,896	
Deduct twelve thousand as the number supposed to be in attendance upon academies and private schools, and not depending upon the public schools for an education	12,000	
Number dependent upon the public schools		172,896

Number brought forward		172,896
Average attendance *in summer* of those between 4 and 16 (deducting those *under* four years of age, thus) . . .	98,316	
Number under four years of age . .	7,337	
		90,979
		81,917

Which gives 90,979 as the average attendance, *in summer*, of those between *four* and sixteen years of age, who are supposed to be wholly dependent for an education upon public schools; while the average absence of the same class was 81,917, or almost one-half.

Again, as before: —

Whole number of children in the State, between four and sixteen years of age . . .	184,896	
Deduct 12,000, as above, for those supposed to be in attendance upon academies and private schools, and not depending upon the public schools for an education,	12,000	
Number dependent upon public schools for an education		172,896
Average attendance *in winter* of those between four and sixteen (deducting those over sixteen years of age, thus)	119,989	
Number over sixteen years of age . .	12,526	
Average attendance *in winter*, of those between four and sixteen, who are supposed to be wholly dependent for an education upon the public schools, 107,463 out of 172,896, or a little less than *eleven-seventeenths*		107,463

What ought the mechanic, the manufacturer, or the farmer, on a large scale, to expect, if, from any cause, he should lose

the services of his operatives or laborers for almost one-half, or even for one-third, of the time, year after year? Could he expect or deserve any thing but ruin? And can all our valued institutions be upheld on cheaper conditions than belong to the common and material interests of life?

APPROPRIATIONS.

In 1841–2, the amount of money raised by taxes for the support of schools, that is, for paying the wages of teachers, and for board and fuel, was $516,051.89

Do. in 1842–3 . . . . 510,592.02

Difference $5,459.87

This shows an apparent falling-off; but the towns not heard from would increase the amount to a considerably larger sum than that for the year 1841–2. Besides, there was, in fact, a generous increase in the appropriations generally, throughout the State; the great *deficit* being in the city of Boston, which expended on this item $16,618.28 less for the last than for the preceding year.

The above-mentioned appropriations include only a part of our annual expenditures for public schools. If the cost of schoolhouses, of school-libraries, apparatus, &c., should be added, it would appear that Massachusetts now supports her public schools at an annual expense varying but little from one dollar a head for every man, woman, and child belonging to the State. This outlay being made, however, every child in the Commonwealth has a right to attend school without fee, or any further contribution whatever.

That this expenditure is not burdensome is manifest from two considerations: *first*, because it is voluntarily assessed by the inhabitants of the respective towns upon themselves; and, *secondly*, because a sum nearly equal to half as much more is annually paid by individuals to academies and private

schools, where, to a great extent, the same branches are taught as in the public schools.

In regard to the other items shown by the returns, there appears to be no material change from the last year.

The town of Brighton, in the county of Middlesex, stands this year, as it did the last, at the head of all the towns in the Commonwealth in regard to the liberality of its appropriations for the support of schools; having raised five dollars and ninety-nine cents for each child in the town between the ages of four and sixteen years.

Last year, the town of Dana, in the county of Worcester, stood at the foot of the list; but this year it has so increased its appropriation as to take an elevated and respectable stand among the towns in the State, having resigned its place at the bottom of the catalogue to the town of Pawtucket in the county of Bristol. The latter town raised but one dollar and eighteen cents for the education of each child belonging to it between the ages of four and sixteen.

SCHOOL-LIBRARIES.

From Jan. 1 to Dec. 31 (inclusive), 1843, the sum of money drawn by towns and school-districts from the school-fund, in behalf of school-libraries, in accordance with the resolves of March 3, 1842, and March 7, 1843, was $11,295.00

During the same time, there has been received into the State Treasury, in behalf of said fund, the sum of 12,400.24

So that, in addition to the inestimable benefits secured to the districts by a possession of the libraries, the capital of the school-fund has increased during the last year the sum of 1,105.24

A resolve of the legislature, of the 7th March, 1843, provided that a resolve of March 3, 1842, concerning school-

district libraries, should be "extended to every city and town in the Commonwealth, not heretofore divided into school-districts, in such manner as to give as many times fifteen dollars to any such city or town as the number sixty is contained, exclusive of fractions, in the number of children between the ages of four and sixteen years in said city or town; provided evidence be produced to the treasurer, in behalf of said city or town, of its having raised and appropriated for the establishment of libraries a sum equal to that which, by the provision of this resolve, it is entitled to receive from the school-fund." In regard to this resolve, my opinion has been asked, whether a town "not divided into school-districts" could make any such provision for *a part of its children* as would entitle it to receive the bounty of the State: that is, to make the case as simple as possible, suppose a town has one hundred and twenty children between four and sixteen; can it, by appropriating fifteen dollars in behalf of sixty of those children, make a valid demand for fifteen dollars upon the school-fund? or must it appropriate thirty dollars in behalf of the one hundred and twenty children before it can receive any thing from that fund? To this inquiry I have not hesitated to reply, that I believe a sound construction of the resolve, as well as sound policy, requires that a town not districted should appropriate a sum sufficient for all its children as a condition precedent to receiving any thing. Should a different construction prevail, the very object of the resolve might be defeated in regard to the most necessitous portion of our children. A few men, connected with wealthy and large schools in central and populous places, might raise the requisite sum for their own schools by voluntary contribution, and then vote against the granting of a town-tax for supplying libraries to the poor and sparsely-populated portions of the town; while such portions, having no corporate powers as districts, and feeling unable to raise the requisite amount by contribution, might for a long time, if not always, be deprived of the benefits of a library. When a town ad-

ministers its schools in its corporate capacity, it must legislate uniformly for all parts of its territory and for all its children.

Towards the close of the last year, but too late for an insertion of the fact in my last Annual Report, I was authorized and requested by the Honorable Martin Brimmer, the present mayor of the city of Boston, to cause to be printed, at his expense, such a number of copies of an excellent work on education, entitled "The School and the Schoolmaster," as would supply one copy each to all the school-districts, and one copy each to all the boards of school-committee-men, in the Commonwealth. This commission was most joyfully executed on my part; and, during the months of February and March last, the volumes were all prepared and ready for distribution. I authorized the school-committee-men of the respective towns to receive the donation in behalf of themselves and of the several districts within their jurisdiction; and by circulars, and in various other ways, the most extensive publicity to the fact was given. The work was of great value, having been prepared by the joint labors of the Rev. Dr. A. Potter, of Union College, Schenectady, N.Y., and of George B. Emerson, Esq., of Boston, Mass., — both distinguished writers and educators. The great body of the volumes was soon called for. They have been read extensively, and with great satisfaction and profit; and the gratitude of the community has been expressed, as with one voice, towards the donor, both for the generosity that prompted the gift, and the judgment that dictated the selection.

This brings to a close what I have to say in reference to the condition and progress of education in Massachusetts during the last year.

For the six years during which I have been honored with an appointment to the office of Secretary of the Board of Education, I have spared neither labor nor expense in fulfilling not only that provision of the law which requires that "the Secretary shall collect information," but also that injunction, not less important, that he shall "diffuse as widely as possible,

throughout every part of the Commonwealth, information of the most approved and successful methods of arranging the studies and conducting the education of the young." For this purpose, I have visited schools in most of the free States and in several of the slave States of the Union; have made myself acquainted with the different laws relative to public instruction which have been enacted by the different legislatures of our country; have attended great numbers of educational meetings, and, as far as possible, have read whatever has been written, whether at home or abroad, by persons qualified to instruct mankind on this momentous subject. Still I have been oppressed with a painful consciousness of my inability to expound the merits of this great theme in all their magnitude and variety, and have turned my eyes again and again to some new quarter of the horizon, in the hope that they would be greeted by a brighter beam of light. Under these circumstances, it was natural that the celebrity of institutions in foreign countries should attract my attention, and that I should feel an intense desire of knowing whether, in any respect, those institutions were superior to our own; and, if any thing were found in them worthy of adoption, of transferring it for our improvement.

Accordingly, early last spring, I applied to the Board for permission to visit Europe, *at my own expense*, during the then ensuing season, that I might make myself personally acquainted with the nature and workings of their systems of public instruction, — especially in those countries which had long enjoyed the reputation of standing at the head of the cause.

In addition to this, the severe and unmitigated labor which I had been called to perform during the last six years, in discharging the duties of my office, had exhausted my whole capital of health; and I felt, that, without some change or relief, my labors in the cause would soon be brought to an inevitable close.

I am happy to add that Gov. Morton, as Chairman of the Board, and all the other members of that body, signified their

cordial approval of my plan, and gave me their full consent.

Accordingly, on the 1st of May last, I embarked for Europe; and, before the end of thirteen days, I was visiting schools on the other side of the Atlantic.

In my travels, I visited England, Ireland, and Scotland; crossed the German Ocean to Hamburg; thence went to Magdeburg, Berlin, Potsdam, Halle, and Weissenfels, in the kingdom of Prussia; to Leipsic and Dresden, the two great cities in the kingdom of Saxony; thence to Erfurt, Weimar, Eisenach, &c., on the great route from the middle of Germany to Frankfort on the Maine; thence to the Grand Duchy of Nassau, of Hesse Darmstadt, and of Baden; and, after visiting all the principal cities in the Rhenish Provinces of Prussia, passed through Holland and Belgium to Paris.

In the course of this tour, I have seen many things to deplore and many to admire. I have visited countries where there is no national system of education at all, and countries where the minutest details of the schools are regulated by law. I have seen schools in which each word and process, in many lessons, was almost overloaded with explanations and commentary; and many schools in which four or five hundred children were obliged to commit to memory, in the Latin language, the entire book of Psalms and other parts of the Bible, neither teachers nor children understanding a word of the language which they were prating. I have seen countries in whose schools all forms of corporal punishment were used without stint or measure; and I have visited one nation in whose excellent and well-ordered schools scarcely a blow has been struck for more than a quarter of a century. On reflection, it seems to me that it would be most strange, if, from all this variety of system and of no system, of sound instruction and of babbling, of the discipline of violence and of moral means, many beneficial hints for our warning or our imitation could not be derived; and as the subject comes clearly within the purview of my duty, "to collect and diffuse information re-

specting schools," I venture to submit to the Board some of the results of my observations.

On the one hand, I am certain that the evils to which our own system is exposed, or under which it now labors, exist in some foreign countries in a far more aggravated degree than among ourselves; and if we are wise enough to learn from the experience of others, rather than await the infliction consequent upon our own errors, we may yet escape the magnitude and formidableness of those calamities under which some other communities are now suffering.

On the other hand, I do not hesitate to say, that there are many things abroad which we, at home, should do well to imitate; things, some of which are here, as yet, mere matters of speculation and theory, but which, there, have long been in operation, and are now producing a harvest of rich and abundant blessings.

Among the nations of Europe, Prussia has long enjoyed the most distinguished reputation for the excellence of its schools. In reviews, in speeches, in tracts, and even in graver works devoted to the cause of education, its schools have been exhibited as models for the imitation of the rest of Christendom. For many years, scarce a suspicion was breathed that the general plan of education in that kingdom was not sound in theory and most beneficial in practice. Recently, however, grave charges have been preferred aginst it by high authority. The popular traveller, Laing, has devoted several chapters of his large work on Prussia to the disparagement of its school-system. An octavo volume, entitled "The Age of Great Cities," has recently appeared in England, in which that system is strongly condemned; and during the pendency of the famous "Factories' Bill" before the British House of Commons, in 1843, numerous tracts were issued from the English press, not merely calling in question, but strongly denouncing, the whole plan of education in Prussia, as being not only designed to produce, but as actually producing, a spirit of blind acquiescence to arbitrary power, in things spiritual as well as temporal, — as

being, in fine, a system of education adapted to enslave, and not to enfranchise, the human mind. And even in some parts of the United States, the very nature and essence of whose institutions consist in the idea that the people are wise enough to distinguish between what is right and what is wrong, — even here some have been illiberal enough to condemn, in advance, every thing that savors of the Prussian system, because that system is sustained by arbitrary power.

My opinion of these strictures will appear in the sequel. But I may here remark, that I do not believe either of the first two authors above referred to had ever visited the schools they presumed to condemn. The English tract-writers, too, were induced to disparage the Prussian system from a motive foreign to its merits. The "Factories' Bill," which they so vehemently assailed, proposed the establishment of schools to be placed under the control of the church. Against this measure, the dissenters wished to array the greatest possible opposition. As there was a large party in the kingdom who doubted the expediency of any interference on the part of government in respect to public education, it was seen that an argument derived from the alleged abuses of the Prussian system could be made available to turn this class into opponents of the measure then pending in Parliament. Thus the errors of that system, unfortunately, were brought to bear, not merely against proselytizing education, but against education itself.

But, allowing all these charges against the Prussian system to be true, there were still two reasons why I was not deterred from examining it.

In the first place, the evils imputed to it were easily and naturally separable from the good which it was not denied to possess. If the Prussian schoolmaster has better methods of teaching reading, writing, grammar, geography, arithmetic, &c., so that, in half the time, he produces greater and better results, surely we may copy his modes of teaching these elements, without adopting his notions of passive obedience to government, or of blind adherence to the articles of a church. By

the ordinance of Nature, the human faculties are substantially the same all over the world; and hence the best means for their development and growth in one place must be substantially the best for their development and growth everywhere. The spirit which shall control the action of these faculties when matured, which shall train them to self-reliance or to abject submission, which shall lead them to refer all questions to the standard of reason or to that of authority, — this spirit is wholly distinct and distinguishable from the manner in which the faculties themselves should be trained; and we may avail ourselves of all improved methods in the earlier processes, without being contaminated by the abuses which may be made to follow them. The best style of teaching arithmetic or spelling has no necessary or natural connection with the doctrine of hereditary right; and an accomplished lesson in geography or grammar commits the human intellect to no particular dogma in religion.

In the second place, if Prussia can pervert the benign influences of education to the support of arbitrary power, we surely can employ them for the support and perpetuation of republican institutions. A national spirit of liberty can be cultivated more easily than a national spirit of bondage; and, if it may be made one of the great prerogatives of education to perform the unnatural and unholy work of making slaves, then surely it must be one of the noblest instrumentalities for rearing a nation of freemen. If a moral power over the understandings and affections of the people may be turned to evil, may it not also be employed for good?

Besides, a generous and impartial mind does not ask whence a thing comes, but what it is. Those who, at the present day, would reject an improvement because of the place of its origin, belong to the same school of bigotry with those who inquired if any good could come out of Nazareth; and what infinite blessings would the world have lost had that party been punished by success! Throughout my whole tour, no one principle has been more frequently exemplified than this, — that

wherever I have found the best institutions, — educational, reformatory, charitable, penal, or otherwise, — there I have always found the greatest desire to know how similar institutions were administered among ourselves; and, where I have found the worst, there I have found most of the spirit of self-complacency, and even an offensive disinclination to hear of better methods.

The examination of schools, schoolhouses, school-systems, apparatus, and modes of teaching, has been my first object, at all times and places. Under the term "schools," I here include all elementary schools, whether public or private; all normal schools; schools for teaching the blind and the deaf and dumb; schools for the reformation of juvenile offenders; all charity foundations for educating the children of the poor, or of criminals; and all orphan establishments, of which last class there are such great numbers on the Continent. When practicable and useful, I have visited gymnasia, colleges, and universities; but, as it is not customary in these classes of institutions to allow strangers to be present at recitations, I have had less inducement to see them.*

* When not engaged in visiting schools, I have visited great numbers of hospitals for the insane and for the sick, and also of prisons. This I have done not only from a rational curiosity to know in what manner these classes of our fellow-beings are treated abroad, but in the hope of finding something by which we might be enlightened and improved in the management of the same classes at home.

In regard to lunatic asylums, I have seen none superior, nor any in all respects equal, to our State institution at Worcester.

In regard to prisons, I have found them, almost uniformly, and especially on the Continent, in a most deplorable condition, — often worse than any of ours were twenty-five years ago, before the commencement amongst us of that great reform in prison discipline which has already produced such beneficent results. Great Britain, however, now furnishes some admirable models for the imitation of the world. In the city of Dublin, I visited a prison containing about three hundred female convicts. It was superintended by a female. The whole was a perfect pattern of neatness, order, and decorum; and the moral government was as admirable as the material administration. As the lady-principal conducted me to the different parts of the establishment, speaking to me with such sorrow and such hope of the different subjects of her charge, and addressing them as one who came to console and to save, and not to punish or avenge, — always in tones of the sweetest affection, yet modified to suit the circumstances of each offender, — I felt, more vividly than I had ever done before, to what a sublime height of excellence the female

I have seen no institution for the blind equal to that under the care of Dr. Howe, at South Boston; nor but one, indeed (at Amsterdam), worthy to be compared with it. In many of them, the blind are never taught to read; and in others they learn only a handicraft, or some mere mechanical employment. Generally speaking, however, music is taught; and in Germany, where the blind, like all other classes of society, are taught music very thoroughly, I saw a common mode of performance on the organ which is very unusual in America. The organs were constructed with a set of keys for the feet, so that the feet could always play an accompaniment to the hands.

In Paris, the new edifice for the blind now just completed is, in its architectural construction and arrangement, an admirable model for this class of institutions.

In regard to the instruction given to the deaf and dumb, I am constrained to express a very different opinion. The schools for this class, in Prussia, Saxony, and Holland, seem to me decidedly superior to any in this country. The point of difference is fundamental. With us, the deaf and dumb are taught to converse by signs made with the fingers. There, incredible as it may seem, they are taught *to speak* with the lips and tongue. That a person utterly deprived of the organs of hearing — who, indeed, never knew of the existence of voice or sound — should be able *to talk*, seems almost to transcend the limits of possibility; and surely that teacher is entitled to the character of a great genius as well as benefactor, who conceived, and successfully executed, a plan, which, even after it is accomplished, the world will scarcely credit. In the countries last named, it seems almost absurd to speak of the *dumb*. There are hardly any dumb there; and the sense of hearing, when lost, is almost supplied by that of sight.

character can reach, when it consecrates its energies to the work of benevolence. Amid these outcasts from society, she spends her days and her nights; but, with her convictions and sentiments of duty and of charity towards the lost, they must be days and nights which afford her more substantial and enduring happiness than queens, or those who by their fascinations govern the governors of man, can ever enjoy.

It is a great blessing to a deaf mute to be able to converse in the language of signs. But it is obvious, that, as soon as he passes out of the circle of those who understand that language, he is as helpless and hopeless as ever. The power of uttering articulate sounds — of speaking as others speak — alone restores him to society. That this can be done, and substantially in all cases, I have had abundant proof; nay, though an entire stranger, and speaking a foreign language, I have been able to hold some slight conversation with deaf and dumb pupils who had not completed half their term of study.

With us, this power of conferring the gift of speech upon the deaf and dumb is so novel a fact, and, as it seems to me, one of such intrinsic importance, that I feel authorized, if not required, to give a brief description of the mode in which it is effected.

It is a common opinion, in regard to deaf and dumb persons, that the organs of speaking, as well as the organs of hearing, are defective; but this is an error, the incapacity to speak resulting only from the incapacity to hear.

MODE OF TEACHING THE DEAF AND DUMB TO SPEAK BY THE UTTERANCE OF ARTICULATE SOUNDS.

An uninstructed deaf and dumb child must arrive at a considerable age before he would be conscious of the fact of breathing; that is, before his mind would propose to itself, as a distinct idea, that he actually inhales and exhales air. Having no ear, it would be still later before he would recognize any distinction between such inhalations and expulsions of the air as would be accompanied by sound, and such as would not. The first step, therefore, in the instruction of a deaf and dumb child, is to make him conscious of these facts. To give him a knowledge of the fact that he breathes, the teacher, seating himself exactly opposite to the light, takes the pupil upon his lap or between his knees, so that the pupil's eye shall be on a level with his own, and so that they can look each other directly

in the face. The teacher now takes the pupil's right hand in his left, and the pupil's left hand in his right. He places one of the pupil's hands immediately before his own lips, and breathes upon it. He then brings the pupil's other hand into the same position before his (the pupil's) lips, and, through the faculty of imitation, leads him to breathe upon that, just as his first hand had been breathed upon by the teacher. This exercise is varied indefinitely as to stress or intensity of breathing; and the lessons are repeated again and again, if necessary, until, in each case, the feeling caused by the expulsion of air from the pupil's mouth on the back of one hand becomes identical with the feeling on the back of the other hand caused by the expulsion of air from the teacher's mouth. Sometimes a little play mingles with the instruction; and a light object, as a feather or a bit of paper, is blown by the breath.

Another accompaniment of simple breathing is the expansion and subsidence of the chest, as the air is alternately drawn into it and expelled from it. To make the pupil acquainted with this fact, one of his hands is held before the teacher's mouth, as above described, while the other is laid closely upon his breast. The pupil readily perceives the falling motion of the chest when the air is emitted from the lungs, and the rising motion when it is inhaled. His hands are then transferred to his own mouth and chest, where the same acts, performed by himself, produce corresponding motions and sensations. These processes must, of course, be continued for a greater or less length of time, according to the aptitude of the scholar.

The next step is to teach the *fact of sounds*, and their effect or value. For this purpose, a third person should be present, standing with the back towards the teacher and pupil. The teacher and pupil being placed as before, and the teacher holding the back of one of the pupil's hands before his (the teacher's) mouth, and placing the other upon his breast, breathes as before. The only effect of this is the mere physical sensations produced upon the pupil's hands. But now the teacher

speaks with a loud voice, and the person present turns round to answer. The same effect would be produced by calling upon a dog or other domestic animal. Here the pupil perceives an entire new state of facts. The speaking is accompanied by a new position of the organs of speech, and by a greatly increased action of the chest; and it is immediately followed by a movement or recognition on the part of the third person. The pupil's hands are then transferred to his own mouth and chest, and he is led to shape his organs of speech in imitation of the teacher's, and to make those strong emissions of breath which produce sound. When this sound has been produced by the pupil, both the teacher and the third person intimate, by their attention and their approval, that a new thing has been done; and, from that moment, the peculiar effort and the vibrations necessary to the utterance of sounds are new facts added to the pupil's store of knowledge.

These exercises having been pursued for a sufficient length of time, the teacher begins to instruct in the elementary sounds. The letter *h* is the first taught, being only a hard breathing, and therefore forming the connecting link between simple breathing and the utterance of the vowel-sounds.

Here it is obvious that the teacher must be a perfect master of the various sounds of the language, and of the positions into which all the vocal organs must be brought in order to enunciate them. All the combined and diversified motions and positions of lips, teeth, tongue, uvula, glottis, windpipe, and so forth, must be as familiar to him as the position of keys or chords to the performer on the most complicated musical instrument. For this purpose, all the sounds of the language — and of course all the motions and positions of the organs necessary to produce them — are reduced to a regular series or gradation. The variations requisite for the vowel-sounds are formed into a regular sequence; and a large table is prepared in which the consonant-sounds are arranged in a scientific order. To indicate the difference between a long and a short sound, a long sound is uttered accompanied by a slow

motion of the hand, and then a short sound of the same vowel accompanied by a quick motion.

As the pupil has no ear, he cannot, strictly speaking, be said to learn sounds: he only learns motions and vibrations, the former by the eye, the latter by the touch. The parties being seated as I have before described, so that the light shines full upon the teacher's face, one of the pupil's hands is placed upon the teacher's throat, while he is required at the same time to look steadfastly at the teacher's mouth. The simplest sound of the vowel *a* is now uttered and repeated by the teacher. He then applies the pupil's other hand to his (the pupil's) throat, and leads him to enunciate sounds until the vibrations produced in his own throat resemble those which had been produced by the utterance of the teacher. At this stage of the instruction, the pupil understands perfectly what is desired; and, therefore, he perseveres with effort after effort, until at last, perhaps after a hundred or five hundred trials, he hits the exact sound, when, conscious of the same vibration in his own organs which he had before felt in those of the teacher, at the same moment that the teacher recognizes the utterance of the true sound, their countenances glow into each other with the original light of joy, and not only is a point gained in the instruction which will never be lost, but the pupil is animated to renewed exertions.

The sound of the German vowels being so different from our own, it is difficult to elucidate this subject to one not acquainted with the German language. But let any one lay his finger upon the middle of the upper side of the *pomum adami*, and press it against the wind-pipe, and then enunciate successively the sounds of the letters *a* and *e*, and he will instantaneously perceive how much higher that part of the throat is raised, and how much more it is brought forward, in the latter case than in the former. And not only is there a striking difference in the motions of the wind-pipe when these two vowels are sounded, but, in sounding the letter *e*, almost all the vocal organs are changed from the position which is necessary for

enunciating the letter *a*. The tongue is brought much nearer to the roof of the mouth, the lips are partially drawn together, and the whole under jaw is raised nearer to the upper. Thus every different sound in the language requires a different position and different motions of the vocal organs. Hence the work of teaching the deaf and dumb to speak consists in training them to arrange the organs of speech into all these positions, and to practise at will all this variety of motions. When the pupil looks at the organs of the teacher, and feels of them, then their positions and motions become to him a visible and tangible alphabet, just as our spoken alphabet is an audible one. For the guttural sounds, the hand must be placed upon the throat. For the nasal, the teacher holds one of the pupil's fingers lightly against one side of the lower or membranous part of the nose, and, after the vibration there has been felt, places another of his fingers against the same part of his own nose.

During all these processes, the eye is most actively employed. The teacher arranges his own organs in the manner necessary for the production of a given sound, and holds them in that position until the pupil can arrange his own in the same way. Sometimes the pupil is furnished with a mirror, that he may *see* that his own organs are conformed to those of the teacher. If any part of the pupil's tongue is unmanageable, the teacher takes his *spatula* (an instrument of ivory or horn in the shape of a spoon-handle), and raises or depresses it, as the case may require.

But some of the elementary sounds are begun or completed with closed lips; and in such case, the cheeks not being made of glass, the pupil cannot see the position or motions of the tongue. To obviate this difficulty, Mr. Reich of Leipsic uses a tongue made of Indian rubber, which he can bend or twist at pleasure, till it becomes a type or model of the form he wishes the pupil's tongue to assume.

Later in the course of instruction, the pupils are taught the meaning of Italic letters and emphasis. If a child asks for a

piece of white paper for instance, a piece of gray is given him; and, when he intimates that he asked for *white*, the question is written down with the word "white" underscored, and then a piece of white paper is given. Another exercise teaches him a corresponding stress of the voice in speaking.

An extraordinary fact, and one which throws great light upon the constitution of the mind, is, that the deaf and dumb, after learning to read, take great delight in poetry. The measure of the verse wakes up a dormant faculty within them, giving them the pleasure of what we call *time*, although they have no ear to perceive it.

Such is a very brief outline of the laborious processes by which the wonderful work of teaching the dumb to speak is accomplished; and so extraordinary are the results, that I have often heard pupils in the deaf and dumb schools of Prussia and Saxony read with more distinctness of articulation and appropriateness of expression than is done by some of the children in our own schools who possess perfect organs of speech, and a complement of the senses. Nay, so successful are the teachers, that in some instances they overcome, in a good degree, difficulties arising from a deficiency or malformation of the organs themselves, such as the loss of front teeth, the tied tongue, and so forth. In some of the cities which I visited, the pupils who had gone through with a course of instruction at the deaf and dumb school were employed as artisans or mechanics, earning a competent livlihood, mingling with other men, and speaking and conversing like them. In the city of Berlin, there was a deaf and dumb man named Habermaass, who was so famed for his correct speaking that strangers used to call to see him. These he would meet at the door, conduct into the house, and enjoy their surprise when he told them that he was Habermaass. A clergyman of high standing and character, whose acquaintance I formed in Holland, told me, that, when he was one of the religious instructors of the deaf and dumb school at Groningen, he took a foreign friend one day to visit it; and, when they had gone through the school, his friend

observed, that that school was very well, but that it was the deaf and dumb school which he had wished to see. Were it not for the extraordinary case of Laura Bridgman, — which has compelled assent to what would formerly have been regarded as a fiction or a miracle, — I should hardly venture to copy au account of the two following cases from the work of Mr. Moritz Hill, the accomplished instructor of the deaf and dumb school at Weissenfels. They refer to the susceptibility of cultivation of the sense of touch, which he asserts to be generally very acute in the deaf and dumb. The importance of this will be readily appreciated when we consider how essential light is to the power of reading language upon the lips and the muscles of the face. In darkness, the deaf and dumb are again cut off from that intercourse with humanity which has been given to them by this benevolent instruction. Mr. Hill gives an account of a girl whose facility in reading from the lips was so remarkable, that she could read at a great distauce by an artificial light, and even with very little light. She was found to be in the habit of conversing in the night with a maid-servant after the light was extinguished. And this was done only by placing her hand upou the naked breast of her companion. The other case was that of a boy who could read the lips by placing his hand upon them in the dark, in the same way that Laura reads the motions of another's fingers in the hollow of her own hand.

Mr. Hill also mentions iustances in which the facility acquired is so great, that the motious of the face can be read by the deaf and dumb when only a side view of the countenance can be obtained, and consequently only a partial play of the muscles seen.

The following are among the reasons which the German teachers of the deaf and dumb give for preferring the method of speaking by the voice to that of speaking by signs on the fingers and by pantomime : —

1. Loud speaking is the most convenient mode of intercourse, and the one most in accordance with humau nature.

2. The deaf and dumb, as well as the man possessed of all

his senses, has a natural impulse to express his feelings, thoughts, &c., by sounds.

In confirmation of this reason, I may say, that it is remarkably confirmed by the case of Laura Bridgman, who, though deaf, dumb, and blind, makes a different sound — though an inarticulate one, a mere noise — for each of her acquaintances.

3. Experience has long shown, that even those who are born deaf and dumb, and still more those who have become so later in life, can attain fluency in oral expression.

4. Experience has also shown, that, with the deaf and dumb who have acquired a facility in speaking, all subsequent instruction is more successful than with those who have been taught merely the language of signs and writing.

5. Loud speaking is of great use to the deaf and dumb, not only as a means of learning, but of imparting their knowledge. They learn by imparting, and thus obtain more definite ideas of what they already know. It is a means of further cultivation, also, even when it is wearisome, monotonous, inexpressive, or absolutely disagreeable; for people soon become accustomed even to such imperfect speech, as to the imperfect speech of a little child. The peculiar advantages even of a low degree of acquisition are, 1. The exercise and strengthening of the lungs. 2. The aid it gives to the comprehension and retaining of words, as well as to the power of recalling them to memory. 3. It has an extraordinary humanizing power; the remark having been often made, and with truth, that all the deaf and dumb who have learned to speak have a far more human expression of the eye and countenance than those who have only been taught to write.

6. Important as speaking is for easy intercourse with others, it is quite as important, indeed more so, to many of the deaf and dumb, to acquire a facility in comprehending what is spoken to themselves; because very few of those who have intercourse with the deaf and dumb have time, means, or inclination to hold written communication with them. But, if the deaf and dumb have acquired the art of reading language

from the mouth of the speaker, people will converse with them willingly, and they will then have a wide school in which to carry forward their acquisitions. For these reasons, it is desirable for the deaf and dumb to cultivate, with all assiduity, the observation of the language of the lips, even if they are obliged to relinquish speaking on account of being unintelligible.

As a consequence of the above views, the German teachers of the deaf and dumb prohibit, as far as possible, all intercourse by the artificial language of signs, in order to enforce upon the pupils the constant use of the voice. At a later period, however, all are taught to write.

I found a class in the school for the deaf and dumb in Paris, which the instructor was endeavoring to teach to speak orally; but it is not certain that the experiment will succeed in the French language, — that language having so many similar sounds for different ideas. With the English language, however, a triumph over this great natural imperfection might undoubtedly be won; and it was an object — certainly with *some* of the Trustees of the Perkins Institution for the Blind, when they petitioned the legislature last winter for power to incorporate upon that institution a department for the deaf and dumb — to exchange the limited language of signs for the universal language of words, in the instruction of this class of children in our State. Had the members of the legislature seen and heard what I have now often seen and heard, but which I then knew of only by report, I cannot but believe that that application would have found a different fate.

The success in teaching the deaf and dumb in Germany, and the means by which it is accomplished, furnish some invaluable hints in regard to the teaching of other children.

1. In teaching these children to speak, if difficult and complicated sounds are given before easy and simple ones, some of the vocal organs will be at fault, in regard either to position or motion; and, if the error is continued but for a short period, false habits will be acquired, which it will be almost impossible

for any subsequent skill or attention to eradicate. No uninstructed person, therefore, should tamper with this subject. No one should attempt to teach the deaf and dumb to speak who has not carefully read the best treatises upon the art, or witnessed the practice of a skilful master. The effect of false instruction in regard to the voice-producing muscles furnishes a striking analogy to that false mental instruction given by incompetent parents and teachers, by which all the intellectual and moral fibres of a child's nature are coiled and knotted into a tangle of errors, from which they can never be wholly extricated even by a life of exertion.

2. After a few of the first lessons, it is ordinarily found that the keenest relish for knowledge is awakened in the minds of the pupils. They evince the greatest desire for new lessons, and a pleasure that seems almost ludicrously disproportionate in the acquisition of the most trivial things. This arises, in the first place, from that appetite for knowledge which Nature gives to all her children; and, in the second place, from the teacher's arranging all subjects of instruction in a scientific order, and giving to his pupils, from the beginning, distinct and luminous ideas of all he teaches. Were instruction so arranged and administered in regard to other children, we might, as a general rule, expect similar results.

So ardent, indeed, is the thirst of the deaf and dumb children for knowledge, that one of the most frequent cautions given to teachers by the masters of the art is, not to indulge them in the gratification of their desires to such a degree as to impair health or produce injurious mental excitement.

3. Perhaps no relation in life illustrates the necessity or the value of love and confidence between teacher and pupil more strikingly than this. Conceive of a child placed before his teacher, watching every shade of muscular motion with his eye, catching the subtlest vibrations with his hand, and expending his whole soul in striving to conjecture what muscles are to be moved; and then suppose the feeling of shame or mortification, of fear or fright, to be superinduced, withdrawing

all attention from eye and hand, choking the utterance and paralyzing all the faculties; and, were the pupil to remain in this state till he became as old as Methuselah, he would never succeed in uttering even an elementary sound, unless it might be that of the interjection O! Such, though to a less extent, is the obstruction which fear, or contemptuous manners in a teacher, oppose to the progress of all children.

In comparing the present condition of the deaf and dumb and the blind with what it was only a few years ago, there is one fact too significant to be omitted. Judge Blackstone published his celebrated Commentaries on the English law in 1765. In vol. i., book 1, chap. 8, there occurs the following sentence, which was then the acknowledged law in Westminster Hall, and for which he quotes Lord Coke, Fitzherbert, and others: —

> "A man who is born deaf, dumb, and blind, is looked upon by the law as in the same state with an idiot; he being supposed incapable of any understanding, as wanting all those senses which furnish the human mind with ideas."

Surely it cannot be denied that education has done something for mankind since this doctrine was sent forth as a great principle of law.

One of the points of greatest importance which an educational survey of Europe suggests is this: —

WHAT ARE THE CONSEQUENCES TO A PEOPLE OF HAVING A UNIVERSAL OR ONLY A PARTIAL SYSTEM OF EDUCATION?

All institutions in the old countries (as they are sometimes called) have arrived at a greater degree of maturity than with us. What is good has had time and opportunity to work out a more full development of its benign effects; and what is evil, to inflict upon mankind a fuller measure of calamity. It is so, emphatically, in regard to education. *We* have the seeds of

the same evils and of the same benefits which there have germinated and been matured, and are now bearing luxuriant harvests of misery or of blessings. We shall do well, then, to look to their course, both for things to copy and things to avoid; because reason cannot predict any thing so certainly from its apparent natural tendencies as experience demonstrates it in its practical results.

Where government has not established any system of education, the whole subject, of course, is left to individual enterprise. In such cases, a few men, — always a small minority, — who appreciate the value of knowledge, will establish schools suited to their own wants. The majority will be left without any adequate means of instruction, and hence the mass will grow up in ignorance. Here the foundation of the greatest social inequalities is laid. Wherever this social inequality is once established, its tendency is to go on increasing and redoubling from generation to generation. And this is but a part of the evil. Suppose after the existence, though only for a short period, of such a state of things, some more philanthropic or more statesman-like class of the community attempts to substitute a universal for the partial system. Their wise and benevolent project immediately encounters the opposition of those who are already provided for. Why should we, say the latter, after having incurred trouble and expense in erecting schools suited to our wants, not only abandon them, but incur new trouble and expense in erecting schools for you. Your plan is untried, and we may well entertain doubts of its success. Besides, our children have already derived from our schools some cultivation of mind and some refinement of manners; and, even if you were to have schools, we could not allow our children to associate with yours. Our teachers, too, have been selected in reference to our own views in government and religion; and, before we unite with you in regard to literary and moral education, we must know whether you will unite with us in regard to political and religious. Thus the better educated classes of the community, who ought to be the promoters of knowledge

and refinement among their inferiors, stand as a barrier against improvements.

The private teachers form another obstacle. In such a state of things as I have supposed, they stand towards each other in the relation of competitors; but their interest prompts them to unite against the introduction of a new class of schools, which would diminish the patronage bestowed upon their own. When the "Central Society of Education," in England, were lately prosecuting their inquiries in relation to the relative number of children in school and out of school in different towns, they were obliged to proceed with the greatest caution, lest they should alarm the fears of the private teachers, and obtain either no answers or false answers to their questions; and, in some instances, the teachers combined, and sent on forged lists of schools and scholars, in order to diminish the force of the argument for a national system, by showing that schools enough already existed. This fact was communicated to me by a gentleman engaged in the inquiry.

Another evil is that the partial system, or rather the absence of system, so far from being attended with less expense than the universal, is always attended with greater. This is true in regard to the expense of schoolhouses as well as of tuition. In England, where there is no national system, I saw many schoolhouses, — in Birmingham, Bristol, Liverpool, and elsewhere, — not capable of accommodating more than from one hundred to four or at most five hundred pupils, which cost from one hundred thousand to three or four hundred thousand dollars apiece. One edifice for a private school, such as I have seen in England, — not capable of containing more than five hundred scholars, — cost as much as twenty of the plain and substantial grammar-school houses in Boston, each one of which will contain that number. Such is the natural difference of acting from a set of ideas or a frame of mind which embraces the whole people, or only a part of them, in its plans for improvement, — of acting from aristocratical or from republican principles. If the schoolhouses which I saw in the most

wealthy and populous cities of Prussia are a fair specimen of those in the rest of the kingdom, it would not take more than a hundred of such as I saw in England to equal the expense of all in the whole kingdom of Prussia, where the children of fourteen millions of people are almost universally in attendance.

Arrange the most highly civilized and conspicuous nations of Europe in their due order of precedence, as it regards the education of their people, and the kingdoms of Prussia and Saxony, together with several of the western and south-western states of the Germanic Confederation, would undoubtedly stand pre-eminent, both in regard to the quantity and the quality of instruction. After these should come Holland and Scotland; the provision for education in the former being much the most extensive, while in the latter, perhaps, it is a little more thorough. Ireland, too, has now a national system which is rapidly extending, and has already accomplished a vast amount of good. The same may be said of France. Its system for national education has now been in operation for about ten years: it has done much, and promises much more. During the very last year, Belgium has established such a system; and before the revolution of 1830, while it was united with Holland, it enjoyed that of the latter country. England is the only one among the nations of Europe, conspicuous for its civilization and resources, which has not, and never has had, any system for the education of its people. And it is the country where, incomparably beyond any other, the greatest and most appalling social contrasts exist; where, in comparison with the intelligence, wealth, and refinement of what are called the higher classes, there is the most ignorance, poverty, and crime among the lower. And yet in no country in the world have there been men who have formed nobler conceptions of the power and elevation and blessedness that come in the train of mental cultivation; and in no country have there been bequests, donations, and funds so numerous and munificent as in England. Still, owing to the inherent vice and selfishness of

their system, or their no system, there is no country in which so little is effected, compared with their expenditure of means; and what is done only tends to separate the different classes of society more and more widely from each other.

The statement of a few facts will show the amount expended, the inequality of the expenditure, and the comparatively little benefit derived therefrom.

A few years ago, a parliamentary commission was instituted to inquire into the amount and state of public charities in England and Wales. The commission sat for a long time, and made most voluminous reports, the mere digest or index of which fills two thousand three hundred and forty-one printed folio pages. From these I select the following facts: —

The annual income of the charity funds for schools is set down in these reports at £312,545; but some schools very richly endowed were not included in the investigation: and, in conversation with several most intelligent men, — members of parliament, and others, — I found their opinions to be, that, as the respective amounts of the charity funds were rendered by persons who had an interest in undervaluing them, the above aggregate was doubtless much below their real value; and that probably £500,000 would be a moderate estimate of their total annual income. This is equivalent to almost two million five hundred thousand dollars of our money. It is easy to see, that if this sum were consolidated, and then distributed on principles of equality, it would be productive of incomputable good. Yet in a country where such splendid endowments for the cause of education have been made, and their income is now annually disbursed, there are, according to the estimate of a late British writer, *more than a million and a half* of children, of a suitable age to attend school, who "are left in a condition of complete ignorance."

The following are instances of the present mode of distributing the income of the above-mentioned funds, the county and the town being given where the school exists which is supported by the fund named: —

At Dunstable, county of Bedford, £330 10s. annual income (a pound is equivalent to almost five dollars of our money) supports forty boys.

At Bedford, same county, a school with £90 income teaches four hundred and twenty children.

County of Berkshire, town of Reading, £1,043 15s. 9d. teaches twenty-two boys.

At Tilehurst, same county, £16 10s. 6d. teaches one hundred children.

County of Cambridge, town of Bassingbourne, £7 6s. 4d. teaches one hundred and sixty children; while in Ely, same county, £231 1s. teaches twenty-four only.

County of Cornwall, town of St. Stephen's, £192 13s. 4d. teaches six boys; and in the town of St. Bunyan, same county, £8 8s. teaches one hundred and fifty children.

County of Devonshire, town of Plymouth, £596 12s. 3d. teaches seventeen boys; while in Brixham, same county, £78 teaches two hundred children.

County of Hertfordshire, town of Berkhamstead, £269 teaches thirty children; while in Therfield, same county, £2 teaches forty.

County of Kent, town of Greenwich, £625 14s. 4d. teaches twenty boys; while in Sundridge, same county, £10 teaches seventy children.

County of Lancashire, town of Manchester, £2,608 3s. 11d. teaches eighty; while in Bibchester, same county, £20 teaches one hundred.

There is a single class of schools in England, — those founded for giving instruction in the Latin and Greek languages, — sixty-five of which have an income not exceeding £20, and fifteen have an income of more than £1,000. Several of this class have an income of four, five, or more thousand pounds per annum.

But this is enough to show how unequally the means of education are distributed in England, even where they are enjoyed at all, and how difficult it must be to introduce a general

system for the whole people, when many or most of the leading families already have schools of their own. Such, too, is the natural consequence of having no national system, — one in which the whole people can participate. These facts are full of admonition to us; for this is the state of things towards which, eight years ago, we were rapidly tending.*

* A few extracts from documents authenticated by the government itself will serve still further to show the inequality of the means of education which exists in England.

One of the late parliamentary committees on education describes the condition of a schoolroom in the following words: —

"In a garret, up three pair of dark, broken stairs, was a common day-school, with *forty* children, in a compass of ten feet by nine. On a perch, forming a triangle with a corner of the room, sat a cock and two hens; under a stump bed, immediately beneath, was a dog-kennel, in the occupation of three black terriers, whose barking, added to the noise of the children and the cackling of the fowls on the approach of a stranger, was almost deafening. There was only one small window, at which sat the master, obstructing three-fourths of the light. There are several schools in the same neighborhood which are in the same condition, filthy in the extreme."

In the same town, I saw a schoolhouse erected for the wealthier classes, which cost more than four hundred thousand dollars!

In the same report, it is said that "one master, being asked if he taught morals, answered, "That question does not belong to my school: it belongs more to girls' schools."

Another master, who stated that he used the globes, was asked if he had both, or one only. "Both," was the reply: "how could I teach geography with one?" It appeared that he thought both necessary, because one represented one half, and the other the remaining half, of the world. "He turned me out of school," says the agent, "when I explained to him his error."

It is thought unlucky for teachers to count their scholars. "It would," said a mistress, "be a flat flying in the face of Providence. No, no: you sha'n't catch me counting; see what a pretty mess David made of it when he counted the children of Israel!"

The Rev. Edward Field, inspector of national schools, in his report (1840), after speaking in commendation of certain schools, adds, "This guarded and qualified praise I am unable to extend to the teachers of dame schools. Too often, the rule of such schools, when any profitable instruction is given, is a harsh one; and, in others, the honest declaration of one dame would apply to many, — 'It is but little they pays me, and it is but little I teaches them.'"

Some of the accounts trace this ignorance, as a cause, to its legitimate effects.

"In the locality where, in the year 1838, the fanatic who called himself Sir William Courtenay raised a tumult which ended in the loss of his own life and the life of several of his deluded followers, out of forty-five children above fourteen, only eleven were, on investigation, found able to read and write; and, out of one hundred and seventeen under fourteen, but forty-two attended school, and several of these only occasionally. Out of these forty-two, only six could read and write."

A fact closely connected with the preceding is an enormous disproportion in the salaries of teachers; these salaries de-

In February, 1840, Mr. Seymour Tremenheere, assistant poor-law commissioner, reported on the state of education in that part of Wales in which the Chartists, under Frost, made a sudden rising. From this report, it appears that in five parishes, having an aggregate population of 85,000, there were but 80 schools, and only 3,308 children in attendance.

The following are extracts from a late report of the National (Church) School Society: —

"There is only one small school for the daily education of the poor in the whole parish, containing about 12,000 inhabitants; that school educates about 100. As one result of this neglect, the parish became last year the focus of Chartism; and the most bitter spirit of disaffection still exists among the lower classes."

"The population of the village of which I am the incumbent is not less than 20,000; there is no free school in the whole place; hundreds of children receive no education whatever."

"I am vicar of a parish which contains a population of 10,000 souls; and I grieve to say there is but one schoolroom in it."

"Our situation is briefly as follows: The parish contains 1,500 souls; there is nothing which can with propriety be called a school. The demoralization and extreme ignorance which prevail among this mass of human beings are truly deplorable. No language of mine can convey any idea of its extent."

"I find a population of 10,000 souls committed to my charge, with only one church, and a still smaller school in connection with the church."

"The population of the township is about 15,000; we have no definite school; we rent two small places, which swallows up the subscriptions."

"The district belonging to my church contains a population of 5,000; and I regret to say that the children are in a state of darkness and ignorance beyond description."

"This parish is without a building of any kind wherein to assemble the children, either for a Sunday or a week school."

"I am the curate of a poor parish with 3,000 of population; and there is no schoolhouse of any kind."

"This district has a population of 8,000. The only instruction which the children receive is given to about 100 for an hour or two on the Sunday."

Such quotations as the above might be almost indefinitely extended.

The Manchester Statistical Society, in their report on the state of education in York, remark, that "however imperfect the education received at Sunday schools may be, when compared with a reasonable or a foreign standard, it affords, nevertheless, the most valuable training within the reach of the great mass of the industrious population of England."

Upon this, an able writer, of the "Society for the Diffusion of Useful Knowledge," remarks, "Yet this training extends only to a few hours every week; is given by persons who are generally elevated only a little above their scholars, and whose only valuable recommendation is, that they are, in general, animated by a benevolent and pious spirit. There are, however, indirect effects which abate the good of Sunday schools, particularly in the spirit of sectarianism and bigotry, which, as at present constituted, they tend to foster; the undue opinion of themselves which they are apt to engender in the minds of the teachers; the rivalry which they excite and the jealousies which they keep

pending rather upon the endowment of the school than upon the qualifications of the teacher. I have seen a teacher who

up between different schools; and, above all, the pauperizing influence, which, more than other charity-schools, they exert on the scholars. So long, indeed, as scarcely any other book than the Bible is employed in Sunday schools, the training which they afford must be very defective, unapproached in its excellence as is that holy book when well understood and rightly used. But an exclusive acquaintance with it is not sufficient to expand the mind, and prepare it for the duties of life. Without the aid of other knowledge, it is not possible that those distinctions and qualifications should be made which parts at least of the Sacred Scriptures require, and which are rendered necessary by the lapse of ages and by the existence of a totally different order of circumstances. If these distinctions and qualifications are not made, the most erroneous conclusions may be drawn from the Bible, and the most unrighteous purposes may be in appearance made to receive a sanction from it. The Scottish Covenanters justified their murders by appealing to the severities practised by the Israelites. The German Anabaptists made use of the disinterestedness of the first Christians in sharing their property with the destitute in an emergency, in order to authorize their spoliation of the goods of others. The madman Thom appealed to the Bible in support of his delusions. Chartism flourished most vigorously, and in its most offensive form, in cases where the Scriptures were the textbook."

The civil commotion which has prevailed, during the greater part of the last year, over a considerable portion of Wales, affords a fresh instance of the perversion of the Bible in the hands of ignorance. Large bodies of the farmers of Wales, feeling themselves aggrieved by the number of turnpike-gates, and the high rates of toll exacted for passing through them, combined together, and commenced the work of midnight demolition. In the prosecution of their enterprise, several lives have been lost, and a vast amount of property destroyed. A military force has been marched into the country to put down the disturbances; and a judicial commission, raised to try the offenders, is now sitting. These violators of the law, and depredators upon private property, profess to be very religious. They derive their name, and justify their outrages, from Scripture. They call themselves "*Rebeccaites*," or "Rebecca and her Daughters;" and they quote the following text as a sanction of their proceedings: "And they blessed Rebecca, and said unto her, Thou art our sister: be thou the mother of thousands of millions, and let thy seed possess the *gate* of those which hate them." — Gen. xxiv. 61. According to their interpretation of this passage, they are the seed of Rebecca, and the owners of turnpike stock are "those which hate them;" whose "GATES," therefore, they are commanded to "possess," — that is, to *destroy*.

The following extract is from "The Thirty-fifth Report of the British and Foreign School Society:" —

"In the house of correction at Lewes, of 846 prisoners, 48 only could read and write well; 252 could read and write a little; only 8 had any idea of Christian doctrine; 294 knew nothing of our Saviour; 490 had heard of him, but knew little more than his name; 54 knew something of his history."

Such, in the end, are the inevitable consequences when the rich neglect the poor; the educated, the ignorant.

The history of the world is rife with proofs of the evils of ignorance; but the present condition of England demonstrates that ignorance becomes more and

received from eight to ten thousand dollars a year, by the side of one, apparently his equal, who had not half as many hundreds.

There is another and a most formidable evil resulting from the absence of a national system, and of that supervision of the schools which a national system imports. I refer to the character of the text-books for schools, which infamous compilers and infamous teachers conspire to introduce into them as one of the attractions for degraded children. Bad men, in any walk of life, always look to the market which they can supply, and not to the quality of the productions they offer for sale. When the education of a portion of the people is very high, while that of another portion is very low, some of the books prepared for the schools will be very good, while it is quite as certain that others will be as bad as human iniquity can make them. In some of the book-shops in England, I saw text-books for schools, on no single page of which should a child ever be allowed to look, — books for the young, filled with vile caricatures and low ribaldry, at once degrading to the taste, and fatal to the moral sensibilities.

Before the establishment of the present National Board of Education for Ireland, the same evils existed there. In one of the reports of the commissioners for inquiring into the state of the Irish schools, they say, "We have already adverted to the deplorable want of such qualification in a great majority of those who now teach in the common schools, and to the pernicious consequences arising from it. Their ignorance, we have reason to believe, is not seldom their least disqualification; *and the want of proper books often combines with their own opinions and propensities in introducing into their schools such as are of the worst tendency.*" Again: speaking of the advantages to be derived from the establishment of a Board of Education who should exercise a supervisory power over the books

more dangerous just in proportion to the freedom of the institutions amongst which it is allowed to exist. Shall we take warning from these examples, or are we of those "who will not be persuaded though one should rise from the dead"?

to be used, they say, " From the execution of this part of the plan, we anticipate advantages of the utmost importance to the whole country, inasmuch as we cannot doubt that the books thus prepared will, by degrees, be universally adopted in every school, whether public or private ; and, while education is thus facilitated by a uniform system of instruction, the evils arising from the want of proper books adapted to the inferior schools will be removed, *and the children be no longer exposed to the corruption of morals and perversion of principles too often arising from the books actually in use.*"

Such are some of the mature, full-grown calamities which result from the neglect of a state or nation to establish a general system of education for its people, and from leaving this most important of all the functions of a government to chance and to the speculations of irresponsible men.

We can never fully estimate the debt of gratitude we owe to our ancestors for establishing our system of common schools. In consequence of their wisdom and foresight, we have all grown up in the midst of these institutions ; and we have been conformed to them in all our habits and associations from our earliest childhood. A feeling of strangeness, of the loss of something customary and valuable, would come over us, were they to be taken away or abolished. How different it would be if these institutions were strangers to us ! if, every time we were called to do any thing in their behalf, we should violate a habit of thought and action instead of fulfilling one ! how different, if every appropriation for their support were a new burden ! if every meeting for their administration were an unaccustomed tax upon our time, and we were obliged to await the slow progress of an idea in the common mind for the adoption of any improvement ! Emphatically how different, if the wealthy and leading men of the community had gathered themselves into sects and cabals, each one with his hand against all the rest, unless when they should temporarily unite to resist the establishment of a system for the equal benefit of all ! It is in consequence of what was done for us two hundred years

ago that we are now carrying on a work with comparative ease, which in many of our sister States, as well as in some foreign countries, must be accomplished, if accomplished at all, with great labor and difficulty. Can there be a man amongst us so recreant to duty, that he does not think it incumbent upon him to transmit that system, in an improved condition, to posterity, which his ancestors originated for him?

Let any one examine those voluminous reports of the evidence, taken before parliamentary commissioners in England, on the subject of education, and he will be astonished to find men of the highest capacities, and of the most extensive attainments on other subjects, faltering and doubting on the easiest points of this, and groping their way after plans and arrangements, which here have not only been long reduced to practice, but are familiar to the whole body of the people.

SCHOOLHOUSES.

With the exception of the magnificent private establishments in England and France, I have seen scarcely a schoolhouse in Europe worthy to be compared even with the second-rate class of our own. And even those princely edifices were far inferior to ours in their fittings-up and their internal arrangements. In Scotland, and in some parts of England, the schools for the poorer classes were crowded to a degree of which we have never seen an example, and of which we can hardly form a conception. I have seen more than four hundred children in two rooms, only thirty feet by twenty each; and in Lancasterian schools, a thousand children in a single room. In Prussia, and in the other states of Germany which I visited, the schoolhouses were of a very humble character. I should here make one exception in favor of Leipsic, in the kingdom of Saxony, which, in addition to having one of the best systems of education, if not the very best, to be found in any city of Germany, has also excellent schoolhouses; and the one last erected as a charity-school for poor children is the best of these.

One most valuable feature, however, belongs to all schoolhouses of the larger kind. They are uniformly divided into class-rooms, and an entire room is appropriated to each class; so that there is no interruption of one class by another. But the rooms themselves are small in every dimension, excepting the distance between the scholars' seats and the floor. In this respect, they resemble those formerly built among ourselves. I saw scarcely one where the children, while seated at their desks, could touch the floor with their feet. In regard to their present and our old ones, it may be said, that if one of these low-studded rooms, with its enormously high seats, should by any chance be preserved for a thousand years, and should then be revealed to posterity as the ruins of Pompeii and Herculaneum have been to us, the antiquarians of that remote day would be likely to infer, from an inspection of the low ceiling and the great distance between the seats and the floor, that the children of their ancestors were a race of monsters, — giants at one end, and pygmies at the other.

Nor did I see a single public school in all Germany, in which each scholar, or each two scholars, had a desk to themselves. A few private schools only had adopted this great improvement. Backs to the seats, too, were almost as rare as single desks. The universal plan, whether for schools, gymnasia, or colleges, is to have one long bench, or form, on which ten or a dozen pupils can sit, with a table or desk before it of equal length, to be used in common by the occupiers of the seats. Each room has an aisle, or vacant space, along the wall on one side, and sometimes on both.

One striking peculiarity of almost all Prussian and Saxon schoolhouses is, that they contain apartments for the residence of the teacher and his family.

In many places in Holland, I found that arrangements had been made, on scientific principles, for warming and ventilating the schoolrooms; but in Germany never. In the schools of the latter country, whether high or low, there was an astonishing degree of ignorance or inattention to the laws of health

and life, so far as they depend upon breathing pure air. The atmosphere of the rooms was often intolerable. In the hottest summer-days, only one window of a room full of children would be open; and, when the door was opened for their egress or ingress, the window was closed. The stoves by which the rooms are warmed in winter resemble very much, in the principles of their construction, those which we call "air-tight;" and they are often so placed as to be fed at a door outside of the room, so as to prevent even that slight change of air which is caused when that in the room is used to sustain the combustion of the fuel. To my very frequent question, in what manner the rooms were ventilated, the universal reply was, "By opening a door or window," — a very insufficient theory, and one which, I fear, poor as it is, is seldom reduced to practice. When I surveyed the condition of things in Massachusetts, preparatory to making that part of my last report which relates to human physiology, I almost came to the conclusion that there could be no part of the civilized world where less attention was paid to the laws of health and life than among ourselves. My present opinion is, that, ignorant and inattentive as we are, there is no part of the world that is not as much or even more so. What benefits, then, must flow to mankind from a universal knowledge and practice of the principles of the beautiful and noble science of physiology!

Were one to attempt a philosophical explanation of that lethargy of character, that want of activity and enterprise, for which the Germans are so proverbial, I think he would fail of a just solution of the problem if he left out of the account the errors of their physical training. I visited a very great number of hospitals for poor children, orphans, &c., some of which were very extensive, containing a thousand children. The dormitories of all were large, common, generally unventilated rooms, with beds placed side by side, and as near each other as they could be conveniently arranged. I have often seen from a hundred to a hundred and fifty beds in the same apartment. But the bedding was the most extraordinary.

Though in the middle of summer, each child was supplied with two feather-beds; one for himself to lie on, the other to lie on him. The usual outfit which I saw in the hospitals and other places for children was one sheet and two feather-beds for each child; and these feather-beds would weigh from ten to twenty pounds each. Where the principal or assistant teacher of the school slept in the same room, the bed allotted to him had an increased weight of feathers, corresponding to the received ideas of his rank and dignity. In some instances, the enormous feather-beds under which the inhabitants sleep weigh forty or more pounds. In many of the best hotels in the first cities of Germany, such a thing as a woollen blanket is not to be found. Occasionally I found these in prisons; for it seems to be considered as a part of the punishment of a malefactor to be debarred from sleeping under a feather-bed. Such is the universal custom of the country. Every respectable man and child sleeps between two feather-beds, summer and winter. The debilitating effect of such a practice both upon body and mind must be incalculable. If the leading members of the Holy Alliance wish to abase their subjects into a voluntary submission to arbitrary power, if they design so to enervate their spirits that they will never pant for the joys and the immunities of liberty, and so to impair their vigor of body that they will have no energy to achieve it, they can do no one thing more conducive to these ends than to perpetuate this national custom of low ventilation and sleeping between feather-beds.*

* The only public edifice I saw in Europe which enjoys a perfect *luxury* of ventilation was the British House of Parliament. The arrangements for this object were conceived by that celebrated chemist, Dr. Reid, and executed under his superintendence. The plan is scientific, and the apparatus for executing it complete.

In the external wall of the House of Commons, a great number of orifices open into the out-door air; every alternate brick for a space of perhaps twenty feet square being removed from the wall. Through these orifices, the *crude air* or *unmanufactured article* is admitted. Stretched from above the upper line of these orifices, that is, from the ceiling of the room, into which they open inwardly, and reaching to the floor at an angle of 45°, is a sheet or screen of coarse cloth, through which all the air received is strained or sifted. By this means, all particles of coal-

READING-BOOKS.

I have made it a point to look particularly into the reading-books used in schools. Wherever I have been, I have observed

smoke, soot, or other impurity, held in mechanical solution with the atmosphere, are intercepted, and only pure external air is allowed to enter. Having passed through this sieve, or strainer, the air may now be conducted from this apartment in either one of two directions, as it requires or does not require to be warmed. If it requires to be warmed, it passes through a room filled with a great number of heated iron pipes, which raise it to the desired temperature. Another passage-way is provided when it does not require to be warmed; and, by opening different doors, it is directed into one or the other of these at pleasure. Here, too, it is fur ther purified from any admixture of foul gases by exposure to the action of chloride of lime; and, on great occasions, it is scented with cologne-water or other perfume. Further on, it passes through a third apartment, which is the identical place where Guy Fawkes was said to have hidden his gunpowder to blow up the British Parliament in 1605. In this room is a system of iron conduits, or water-pipes, lying upon the floor, and crossing each other after the manner of network, or meshes. At brief intervals along the whole course of these pipes are little perforated caps, like the top of a pepper-box. These pipes are filled with water, under a heavy pressure. On the turning of a grand cock, this water is driven out through the minute orifices above mentioned in beautiful, fine jets, which, striking the upper ceiling of the apartment, rebound and fall back to the floor in the finest drops. During hot days, this apparatus is kept playing all the time while the Houses are in session, thereby imparting a delicious coolness and freshness to the air before it enters the halls. In addition to these jets of water, designed to cool and freshen the air, bags of ice are suspended in this apartment, the melting of which, by absorbing the caloric of the atmosphere, acts as a refrigerator. The air, being now cleansed, purified, warmed, cooled, or scented, is prepared to enter the hall of the House. For this purpose it is carried beneath the whole extent of the floor. This floor is perforated throughout with small holes a little larger than a pipe-stem or goose-quill; and through these the air is filtrated, so to speak, into the room above. But, to prevent any current perceptible to the feet or limbs, the floor of the House is covered with a hair carpet, so that the air may rise imperceptibly through its meshes. Similar provision is also made for carrying a full supply of fresh air into the galleries, so that they are not dependent upon that which has ascended from the breathers below. The upper or over-head ceiling of the House is not tight, although, to one looking at it from below, it exhibits no opening. Through this ceiling, the foul air is carried off into the attic, though this foul air is far purer than that which common Londoners breathe; for it is thrown in in such quantities that only a very small portion of it reaches any human lungs. Funnels are also placed over the great gas-burners by which the House is lighted, and the current of air which rushes up through these is very rapid.

The arrangements for ventilating the House of Lords are almost precisely similar to those for the House of Commons, which I have described. When the foul or used-up air from both Houses has reached the attic, the currents are conducted into a common passage, or channel. Through this channel the air is now carried down to the level of the earth. Here it enters the lower end of a vast cylindrical brick tower, eighty feet in height. The diameter of the tower is perhaps fifteen or twenty feet at the bottom; but it tapers gradually to the top, so that it exhibits the

a marked distinction between the foreign and our own, as it regards the character of the selections of which they are com-

appearance of a truncated cone. About ten feet from the bottom, a grating of iron bars is laid across the interior of the tower, and on these a coal-fire is kept burning. Thus the tower acts as a chimney. The air, rarefied by the fire, rapidly ascends, creating a vacuum below, which causes the air from the attics of the two Houses to rush in, and then the pressure of the external air through the orifices first described keeps up the current through its whole course.

One or two men are constantly employed in superintending this apparatus, directing the currents of air, so that they may be admitted at the proper temperature, purified, cooled by the fountains, or warmed by the pipes, as the varying days or seasons of the year may require. Beneath the Houses, at places where the pressure or crowd on great state occasions is likely to be most dense, large fans are provided, which, being rapidly revolved, force up through the orifices in the floor a much greater quantity of air than would ascend from the natural effect of a mere difference of temperature.

It is now between six and seven years that an *hourly* register has been kept of the state of the thermometer and barometer, as they are affected by the air that enters the Houses. The velocity and volume of the air is also noted; all the great passages being so contrived, that they can be more or less opened and closed at pleasure. From the "woolsack," or speaker's chair, in the House of Lords, a vertical tube descends to the basement below. At the upper end of this tube, a thermometer is suspended for inspection by the members. The attendant in the basement, by means of a cord and pulley, can let down this thermometer at any moment, mark its condition in his register, and immediately replace it without its being missed in the hall above.

In summer, the members are not only cooled by the water and the ice in the rooms below, but also by the velocity of the current of air; that is, a current of air, at the temperature of 65°, may be so increased in velocity as to produce sensations of coolness as great as another less rapid current would do at the temperature of 60°. Sometimes a hundred and twenty cubic feet a minute are supplied to each pair of lungs.

All these circumstances are noted, from hour to hour, by clerks and superintendents; but it is left for the profound and scientific mind of Dr. Reid to strike the equations and evolve the grand results. That gentleman assured me, that, since the adoption of this system, hardly a cough had been heard in either House (excepting, I presume, all coughs prepense, for the suppression of speeches).

All the offices, committee-rooms, &c., belonging to the Houses, are ventilated substantially in the same way.

The provisions for warming and ventilating the new Houses of Parliament are on a still grander scale. The entire edifice, including the halls for the two Houses, offices, committee-rooms, &c., is 900 feet long; and, on the grand or principal floor, there are between two and three hundred rooms. At one end of the building is to be the clock tower, at the other end the Victoria tower. From the summit of these towers, as high above earthly impurities and miasms as is practicable, the air is to be taken. It is to pass down these towers — more or less down one or the other according to the course and strength of the wind — to the basement of the structure. Here it is to be turned and conducted, in a horizontal direction, to a spacious reservoir in the centre. While moving towards this cen-

posed. A great proportion of the pieces which make up our compilations consist of oratorical, sentimental, or poetical pieces. The foreign reading-books, on the other hand, partake more largely of the practical or didactic. Ours savor more of literature or belles-lettres; theirs, of science and the useful arts.

Perhaps the best mode of giving a definite idea of the character of the foreign reading-books would be to quote a specification of subjects from the table of contents of some specimen-book.

The following is from the table of contents of a German "First Reading Book, for the lowest classes in elementary schools:" —

"1st Part. Lesson 1, The parental home; 2, Building materials, stone, lime, wood; 3, Construction, iron and glass; 4, The four elements; 5, Comparison of building materials; 6, The inner parts of houses; 7, House utensils and tools; 8, Clothing; 9, Food; 10, Inhabitants of houses; 11, Household animals and their uses; 12, Continuation, — the winged tribe; 13, Injurious animals in the house; 14, Conduct towards beasts; 15, Language, advantage of man over beasts.

"2d Part. Qualities of Things. Lesson 1, Colors; 2, Forms; 3, Qualities which a house may have; 4, Qualities of some building materials; 5, Qualities which an apartment may have; 6, Qualities which tools may have; 7, Qualities which a road may have; 8, Qualities which water may have; 9, Qualities which food may have; 10, Qualities which articles of clothing may have; 11, Qualities which an animal may have, — bodily qualities; 12, What one learns from the actions of beasts; 13, Qualities which a man may have, — bodily qualities of a man; 14, Continuation, — moral qualities; 15, Qualities which man must not have."

A *selection* from the residue of the lessons follows: —

"Lesson 17, Sounds and tones of beasts; 19, Sounds of inanimate things; 20, Properties and actions of plants and animals; 21, Actions in school; 23, Household arrangements; 25, Country occupations; 26, Conduct of children towards others; 41, Adding to the name of a thing a word of quality.

tral point, it can be turned into any one of a number of channels, and receive such changes — warming, refrigeration, perfuming, medication, &c. — as may be desired. From this great heart, it is to be driven in all directions towards every part of the vast edifice; and, by a system of doors and valves, to be let into or shut off from any apartment of the many-mansioned building at pleasure.

"3d PART. MORAL INSTRUCTION. LESSON 2, Order in families; 3, Duties of parents," &c., &c.

Then follow "stories for exciting and cultivating moral ideas and sentiments;" and the book closes with songs and prayers "for the awakening and animating of religious feeling."

The following titles are from "A Course of Elementary Reading" by J. M. McCullock, D.D. Eleventh edition, Edinburgh, 1842: —

"1. PHYSICAL SCIENCE. On the pleasures of science; General properties of bodies, — Impenetrability, Extension, Figure, Divisibility, Inertia; Attraction of Cohesion; Attraction of Gravity; First lines of Mechanics; Motion; Momentum; Centre of Gravity; The Mechanical Powers; Pressure of Watery Fluids; Capillary Attraction; The Winds; Aqueous Vapor; Clouds and Mists, Rain, Dew, Snow, Hail; Powers of Vision; The Quantity of Matter in the Universe.

"2. CHEMICAL SCIENCE. Properties of Free Caloric; Radiation; Conductors; Chemical Attraction; Simple Bodies; Oxygen, Hydrogen, Nitrogen, Carbon, Sulphur, Phosphorus; The Metals; Compound Bodies, — Atmospheric Air; Water; Effects of Caloric, &c., &c.

"3. NATURAL HISTORY. The Three Kingdoms of Nature. Minerals: Diamond, Flint, Asbestos, Clay, Slate, &c., &c. The Malleable Metals: Platina, Gold, Mercury, Silver, Copper, Iron, &c., &c. Clothing from Animals: Fur, Wool, Silk, Leather. Vegetable Physiology: Motion of the Sap, Leaves, The Seed, Germination, &c. Circulation of the Blood. Vegetable Clothing: Flax, Hemp, Cotton. The Animal Economy," &c., &c.

The Fourth Part of this work consists of pieces classed under the head of "Geography and Topography;" then follow Religious, Moral, and Miscellaneous pieces, in prose and poetry, which complete the book.

There are hundreds, and perhaps thousands, of reading-books in the different languages abroad. I have selected the above as a fair specimen of what I saw; and I believe most educators will agree with me in thinking them far better suited to the tastes and capacities of the young than most of our own.

APPARATUS, ETC.

I have seen but little of school apparatus abroad which is not to be found in good schools at home. The blackboard is

a universal appendage to the schoolroom, and is much more used than with us. Indeed, in no state or country have I ever seen a good school without a blackboard, nor a successful teacher who did not use it frequently.

Generally speaking, the *infant* schools of England and Scotland are admirably supplied with abundant and appropriate apparatus. The schoolrooms are literally lined with cards from which to teach the alphabet, with short sentences in English, and a few texts of Scripture or moral maxims. Delineations of various plants, trees, animals, — beasts, birds, fishes; of different races of men, with their varieties of physiognomy and costume; of portraits of kings, queens, aud distinguished personages; a compass, a clock-face, &c., — are profusely provided.

In Holland, I saw what I have never seen elsewhere, but that which ought to be in every school, — the actual weights and measures of the country. These were used, not only as a means of conveying useful knowledge, but of mental exercise and cultivation.

There were seven different liquid measures, graduated according to the standard measures of the kingdom. The teacher took one in his hand, held it up before the class, and displayed it in all its dimensions. Sometimes he would allow it to be passed along by the members of the class, that each one might have an opportunity to handle it and to form an idea of its capacity. Then he would take another, and either tell the class how many measures of one kind would be equivalent to one measure of the other; or, if he thought them prepared for the questions, he would obtain their judgment upon the relative capacity of the respective measures. In this way he would go through with the whole series, referring from one to another, until all had been examined and their relative capacities understood. Then followed arithmetical questions founded upon the facts they had learned; such as, if one measure-full of wine costs so much, what would another measure-full cost (designating the measure), or four, or seven other measures-full. The same thing was then done with the weights.

It is easy to see how much more exact and permanent would be the pupil's knowledge of all weights and measures, obtained in this way, than if learned by heart from the dry tables in a book; and also how many useful and interestiug exercises could be founded upon them by a skilful teacher. I believe it would be difficult to find many men in the community, of middle age, who can now repeat all those tables of weights and measures, which, as school-boys, they could rehearse so volubly; or who, were they now to see actual sets of weights and measures, could call all the different ones by their true names, or could distinguish each denomination from the others if not seen in juxtaposition with them. Having learned the tables by rote, the words have long ago vanished from the mind, and the ideas never were in it.

Something of the same kind should be done also in our schools in reference to numbers. Children learn the numeration-table without any adequate notion of the rapid increase of the successive denominations, or how vast the numbers are which they rattle off with such volubility. I have often tested the knowledge of the older classes in our schools, as to their comprehensiou of large numbers, by asking them this question: If a man were to count one each second for ten hours in a day, how many days would it take him to count a million? And, in the same class, the answers have frequently varied from one day to thirty; and this when each one of the scholars could work any sum in the arithmetic. They had never learnt, by actual counting, the ratio of decimal increase; and nothing but practice will ever give an idea of it. Dr. Howe, of the Blind Institution at South Boston, says he considers "a peck of beans or corn an indispensable part of the apparatus of his school." If a boy says he has seen ten thousand horses, make him count ten thousand kernels of corn, and he never will see so many horses again.

In the public schools of Holland, too, large sheets or cards were huug upon the walls of the room, containing *fac-similes* of the inscription and relief — face and reverse — of all the cur-

rent coins of the kingdom. The representation of the gold coins were yellow; of the silver, white; and of the copper, copper-color.

In the schools both of Holland and Germany, I occasionally saw printed sheets suspended from the walls of the schoolroom, containing practical advice and directions respecting important emergencies or duties of life; such as the best mode of proceeding to resuscitate a drowned person, of curing a burn, of stanching a ruptured blood-vessel, &c., &c.

In all the class-rooms for little children in Germany were reading-frames or reading-boards for elementary instruction in language. These consist of parellel and horizontal laths, or bars (called in America slats, in England sloats), with grooves, into which small squares of pasteboard or blocks of wood, having letters printed upon them, could be inserted. The manner in which these are used will be described hereafter, under the head of "Reading."

In the schools for the deaf and dumb, I saw admirable collections of natural objects for the use of the pupils. These were not merely an assortment of shells and minerals, which generally fills up our conceptions of cabinets of this kind, but assemblages of different seeds of plants, particularly all those used for food or in the arts, of dried plants, &c., &c., arranged neatly in boxes, so that they could easily be handled without loss or injury. I found similar collections in other schools, but not on so large a scale; for it is peculiarly necessary that the deaf and dumb should *see* the objects of their lessons. These they are made to describe in spoken as well as in written words, and to connect their history with geographical knowledge.

In the deaf and dumb school at Dresden, I saw a very large collection of models of every description of utensil, also of many machines, mills, carts, &c., &c., made from wood by the pupils themselves. With the names and uses of every part of these they were made familiar. A vocabulary thus learned is much more fully impressed upon the memory than by any

other conceivable mode; and, as it regards a knowledge of the things themselves, it is the only way of imparting it.

In a large charitable establishment at the Hague, destined for poor young children, whose parents brought them to the school early in the morning and left them till night, when they were ready to return home from their day-labor, I saw an excellent collection of this sort, from which the youngest children could derive much practical and useful knowledge. The great Burger and Real schools are generally supplied with fine instruments for lessons and practice in natural philosophy, chemistry, and mechanics. In Carlsruhe, besides the admirable endowment of such apparatus, which both the State and the friends of education have furnished to this class of schools, the Grand Ducal cabinets, the physical cabinet, collections of natural objects, picture-gallery, botanic garden, even the palace-garden, and also the Grand Ducal court-library, library of the Grand Ducal physical cabinet, that of the directors of the technical courts, and also the workshops and manufactories of the city and environs, are open at all times to the pupils. Pupils studying in the forest department are taken to the governmental woodlands to study botany, &c., among the trees and flowers; those of the architectural schools, the mining schools, &c., are empowered and even enjoined by law to visit the public works in progress, in company with their teachers.

These facts, besides being valuable as suggestions to us, afford us an idea of the greater practical turn given to education in those countries than amongst ourselves.

Many of the charity-schools of Holland contained paintings of no inconsiderable excellence and value. In Germany, where every thing (excepting war and military affairs) is conducted on an inexpensive scale, the walls of the schoolrooms were often adorned with cheap engravings and lithographs of distinguished men, of birds, beasts, and fishes; and, in many of them, a cabinet of natural history had been commenced. And throughout all Prussia and Saxony, a most delightful impression was left upon my mind by the character of the persons

whose portraits were thus displayed. Almost without exception, they were likenesses of good men rather than of great ones, — frequently of distinguished educationists and benefactors of the young, whose countenances were radiant with the light of benevolence, and the very sight of which was a moral lesson to the susceptible hearts of children. In this respect, they contrasted most strongly with England, where the great always takes precedence of the good, and where there are fifty monuments and memorials for Nelson and Wellington to one for Howard or Wilberforce.

In the new building for the "poor school," at Leipsic, there is a large hall in which all the children assemble in the morning for devotional purposes. Over the teacher's desk, or pulpit, is a painting of Christ in the act of blessing little children. The design is appropriate and beautiful. Several most forlorn-looking, half-naked children stand before him. He stretches out his arms over them, and blesses them. The mother stands by with an expression of rejoicing such as only a mother can feel. The little children look lovingly up into the face of the Saviour. Others stand around, awaiting his benediction. In the background are aged men, who gaze upon the spectacle with mingled love for the children and reverence for their benefactor. Hovering above is a group of angels, hallowing the scene with their presence.

LANCASTERIAN OR MONITORIAL SCHOOLS.

I saw many Lancasterian or Monitorial schools in England, Scotland, and Ireland, and a few in France. Some mere vestiges of the plan are still to be found in the "poor schools" of Prussia; but nothing of it remains in Holland or in many of the German States. It has been abolished in these countries by a universal public opinion. Under such an energetic and talented teacher as Mr. Crossley, of the Borough Road School in London, or under such men as I found several of the Edinburgh teachers to be, and especially those of the Madras Col-

lege at St. Andrew's, the monitorial system — where great numbers must be taught at a small expense — may accomplish no inconsiderable good. But at least nine-tenths of all the monitorial schools I have seen would suggest to me the idea that the name "monitorial" had been given them by way of admonishing the world to avoid their adoption. One must see the difference between the hampering, blinding, misleading instruction given by an inexperienced child, and the developing, transforming, and almost creative power of an accomplished teacher; one must rise to some comprehension of the vast import and significance of the phrase "to educate," — before he can regard with a sufficiently energetic contempt that boast of Dr. Bell, "Give me twenty-four pupils to-day, and I will give you back twenty-four teachers to-morrow."

SCOTCH SCHOOLS.

There are some points in which the schools of Scotland are very remarkable. In the thoroughness with which they teach the *intellectual* part of reading, they furnish a model worthy of being copied by the world. Not only is the meaning of all the important words in the lesson clearly brought out, but the whole class or family of words to which the principal word belongs are introduced, and their signification given. The pupil not only gains a knowledge of the meaning of all the leading words contained in his exercise, but also of their roots, derivatives, and compounds, and thus is prepared to make the proper discriminations between analogous words whenever he may hear or read them on future occasions. For instance, suppose the word "*circumscribe*" occurs in the lesson: the teacher asks from what Latin words it is derived; and, being answered, he then asks what other English words are formed by the help of the Latin preposition "*circum.*" This leads to an explanation of such words as *circumspect*, *circumvent*, *circumjacent*, *circumambient*, *circumference*, *circumflex*, *circumfusion*, *circumnavigate*, *circumstance*, *circumlocution*, &c., &c. The same thing

would then be done in reference to the other etymological component of "*circumscribe*," — viz., "*scribo;*" and here the specific meaning of the words *describe*, *inscribe*, *transcribe*, *ascribe*, *prescribe*, *superscribe*, *subscribe*, &c., &c., would be given. After this might come the nouns, adjectives, and adverbs into which this word enters as one of the elements, such as *scripture*, *manuscript*, &c. The teacher says, "Give me a word which signifies to copy."

Pupils. Transcribe.

T. To write in a book, or on a tablet.

P. Inscribe.

T. To write upon, or on the outside of, as on a letter.

P. Superscribe.

T. To write beneath or under.

P. Subscribe.

T. A man goes around to obtain the names for a book or newspaper, or to get promises of money for stocks or for charity. What does he want?

P. Subscriptions.

T. And what are those called who give him their names?

P. Subscribers.

T. And what is a copy called?

P. Transcription.

T. Or by way of abbreviation?

P. Transcript.

The same is done when a derivative of the Latin word "*pes*" occurs, as in the words *impediment*, *pedestal*, *pediment*, *impede*, *expedite;* or of the word "*duco*," in *induce*, *produce*, *traduce*, *reduce*, *adduce*, *conduce*, *inducement*, *induction*, *deduction*, *reduction*, *production;* and then the names of the agents or persons performing these several acts are given.

So of words in which the Greek "*grapho*" is an element, as *geography*, *chirography*, *graphic*, *paragraph*, *telegraph*, *graphite* (a mineral), &c.

The same exercises take place in regard to hundreds of other words.

The Scotch teachers, the great body of whom are graduates of colleges, or have attended the university before beginning to keep school, are perfectly competent to instruct in this thorough manner. I think it obvious, however, that this mode of teaching may be carried too far, as many of our words, though wholly or in part of Latin or Greek derivation, have lost their etymological signification, and assumed a conventional one.

But all this — admirable in its way — was hardly worthy to be mentioned in comparison with another characteristic of the Scottish schools; viz., the mental activity with which the exercises were conducted, both on the part of teacher and pupils. I entirely despair of exciting in any other person, by a description, the vivid impressions of mental activity or celerity which the daily operations of these schools produced in my own mind. Actual observation alone can give any thing approaching to the true idea. I do not exaggerate when I say that the most active and lively schools I have ever seen in the United States must be regarded almost as dormitories, if compared with the fervid life of the Scotch schools; and, by the side of theirs, our pupils would seem to be hybernating animals just emerging from their torpid state, and as yet but half conscious of the possession of life and faculties. It is certainly within bounds to say that there were six times as many questions put and answers given, in the same space of time, as I ever heard put and given in any school in our own country.

But a few preliminary observations are necessary to make any description of a Scotch school intelligible.

In the numerous Scotch schools which I saw, the custom of place-taking prevailed, not merely in spelling, but in geography, arithmetic, reading, defining, &c. Nor did this consist solely in the passing-up of the one giving a right answer above the one giving a wrong. But, if a scholar made a very bright answer, he was promoted at once to the top of the class: if he made a very stupid one, he was sentenced no less summarily to the bottom. Periodically, prizes are given; and the fact of having been "*dux*" (that is, at the head of the class) the

greatest number of times is the principal ground on which the prizes are awarded. In some schools an auxiliary stimulus is applied. The fact of having passed up so many places (say ten or twelve) entitles the pupil to a ticket; and a given number of these tickets is equivalent to being "*dux*" once. When this sharper goad to emulation is to be applied, the spectator will see the teacher fill his hand with small bits of paste-board; and as the recitation goes on, and competition becomes keen, and places are rapidly lost and won, the teacher is seen occasionally to give one of these tickets to a pupil as a counter, or token that he has passed up above so many of his fellows; that is, he may have passed up above four at one time, six at another, and two at another: and, if twelve is the number which entitles to a ticket, one will be given without any stopping or speaking; for the teacher and pupil appear to have kept a silent reckoning, and, when the latter extends his hand, the former gives a ticket without any suspension of the lesson. This gives the greatest intensity to competition; and, at such times, the children have a look of almost maniacal eagerness and anxiety.

I have said that questions were put by the teacher with a rapidity almost incredible. When once put, however, if not answered, they are not again stated in words. If the first pupil cannot answer, the teacher rarely stops to say, "Next;" but — every pupil having his eye on the teacher, and being alive in every sense and faculty, and the teacher walking up and down before the class, and gesticulating vehemently — with his arm extended, and accompanying each motion with his eye, he points to the next, and the next, until perhaps, if the question is difficult, he may have indicated each one in a section, but obtained an answer from none. Then he throws his arm and eye around towards one side of the room, inviting a reply from any one; and, if still unsuccessful, he sweeps them across the other side: and all this will take but half a minute. Words being too slow and cumbrous, the language of signs prevails; and, the parties being all eye and ear, the interchange of ideas has an electric rapidity. While the teacher turns his face and

points his finger towards a dozen pupils consecutively, inviting a reply, perhaps a dozen arms will be extended towards him from other sections or divisions of the class, giving notice that they are ready to respond; and in this way a question will be put to a class of fifty, sixty, or eighty pupils in half a minute of time.

Nor is this all. The teacher does not stand immovably fixed to one spot (I never saw a teacher in Scotland sitting in a schoolroom); nor are the bodies of the pupils mere blocks, resting motionless in their seats, or lolling from side to side as though life were deserting them. The custom is for each pupil to rise when giving an answer. This is ordinarily done so quick, that the body of the pupil, darting from the sitting into the standing posture, and then falling back into the first position, seems more like some instrument sent suddenly forward by a mechanical force, and then rapidly withdrawn, than like the rising and sitting of a person in the ordinary way. But it is obvious that the scene becomes full of animation when — leave being given to a whole division of a class to answer — a dozen or twenty at once spring to their feet, and ejaculate at the top of their voices. The moment it is seen that the question has been rightly answered, and this is instantaneously shown by the manner of the teacher, all fall back, and another question is put. If this is not answered, almost before an attentive spectator can understand it, the teacher extends his arm and flashes his eye to the next, and the next, and so on; and, when a rapid signal is given to another side of the room, a dozen pupils leap to the floor and vociferate a reply.

Nor can the faintest picture of these exciting scenes be given without introducing something of the technical phraseology used in the school.

If a pupil is not prompt at the moment, and if the teacher means to insist upon an answer from him (for it will not do to pass by a scholar always, however dull), he exclaims, in no very moderate or gentle voice, "Come away," or "Come away now;" and if the first does not answer, and the next does, he

directs the latter to pass above the former by the conventional phrase, "Take him down." If a whole section stands at fault for a moment, and then one leaps up, and shouts out the reply, the teacher exclaims, "*Dux*, boy;" which means that the one who answered shall take the head of the class.

Suppose the teacher to be hearing his class in a reading-lesson, and that the word "impediment" occurs, something very like the following scene may take place: —

Teacher. "Impediment," from what Latin words?

Pupil. In and *pes.*

T. What does it mean?

P. To oppose something against the feet, — to keep them back.

T. How is the word "*pes*" used in statuary?

P. In pedestal, — the block on which a statue is raised.

T. In architecture?

P. Pediment.

T. In music?

P. Pedal, a part of an organ moved by the feet.

T. In botany?

P. Pedicle, or footstalk of a flower.

T. Give me a verb.

P. Impede.

T. A noun.

P. Impediment.

T. An adjective which imports despatch in the absence of obstacles.

P. Expeditious.

T. An adjective meaning desirable or conducive.

P. (Hesitates.) *T.* Come away. (To the next.) Come away. (He now points to half a dozen in succession, giving to each not more than a twinkling of time.)

Ninth pupil. Expedient.

T. Take 'em down. (This pupil then goes above eight.)

All this does not occupy half the time in the class that it takes to read an account of it.

In a school where a recitation in Latin was going on, I witnessed a scene of this kind. The room, unlike the rooms where the children of the common people are taught, was large. Seventy or eighty boys sat on deskless, backless benches, arranged on three sides of a square or parallelogram. A boy is now called upon to recite, — to pass a Latin noun, for instance. But he does not respond quite so quickly as the report of a gun follows the flash. The teacher cries out, "Come away." The boy errs, giving perhaps a wrong gender, or saying that it is derived from a Greek verb, when, in fact, it is derived from a Greek noun of the same family. Twenty boys leap forward into the area, — as though the house were on fire, or a mine or an ambush had been sprung upon them, — and shout out the true answer in a voice that could be heard forty rods. And so the recitation proceeds for an hour.

To an unaccustomed spectator, on entering one of these rooms, all seems uproar, turbulence, and the contention of angry voices, — the teacher traversing the space before his class in a state of high excitement; the pupils springing from their seats, darting to the middle of the floor, and sometimes, with extended arms, forming a circle around him, two, three, or four deep (every finger quivering from the intensity of their emotions), until some more sagacious mind, outstripping its rivals, solves the difficulty, — when all are in their seats again, as though by magic, and ready for another encounter of wits.

I have seen a school kept for two hours in succession in this state of intense mental activity, with nothing more than an alternation of subjects during the time, or perhaps the relaxation of singing. At the end of the recitation, both teacher and pupils would glow with heat, and be covered with perspiration, as though they had been contending in the race or the ring. It would be utterly impossible for the children to bear such fiery excitement if the physical exercise were not as violent as the mental is intense. But children who actually leap into the air from the energy of their impulses, and repeat this as often as once in two minutes on an average, will not suffer from suppressed activity of the muscular system.

The mental labor performed in a given period in these schools, by children under the age of twelve or fourteen years, is certainly many times more than I have ever seen in any schools of our own composed of children as young. With us, the lower classes do not ordinarily work more than half the time while they are in the schoolroom. Even many members of the reciting classes are drowsy and listless, and evidently following some train of thought — if they are thinking at all — whose scene lies beyond the walls of the schoolhouse, rather than applying their minds to the subject-matter of the lesson, or listening to those who are reciting, or feigning to recite it. But, in the mode above described, there is no sleepiness, no droning, no inattention. The moment an eye wanders, or a countenance becomes listless, it is roused by a special appeal; and the contagion of the excitement is so great as to operate upon every mind and frame that is not an absolute non-conductor to life.

One sees at a glance how familiar the teacher who teaches in this way must be with the whole subject, in order to command the attention of a class at all.

I was told by the Queen's Inspector of the schools in Scotland, that the first test of a teacher's qualification is his power to excite and to sustain the attention of his class. If a teacher cannot do this, he is pronounced, without further inquiry, incompetent to teach.

There are some good schools in England, such as the Normal School at Battersea, those of the Home and Colonial Infant School Society, and the Borough Road School, in London, and some others; but, as I saw nothing in these superior to what may be seen in good schools at home, I omit all remarks upon them.*

* The famous school at Norwood, — eight or ten miles from London, — where more than a thousand of the pauper children of London are collected, is an extraordinary sight, without being an extraordinary school.

PRUSSIAN AND SAXON SCHOOLS. — SUBJECTS TAUGHT. — MODES OF TEACHING, GOVERNING, ETC.

The questions which the friends of education in Massachusetts have been most anxious to hear answered in regard to the schools of Prussia, Saxony, and some other parts of Germany, are such as these: What branches are taught in them? What are the modes and processes of teaching? What incitements or motive-powers are employed for stimulating the pupils to learn? In fine, what is done when teacher and pupils meet each other face to face in the schoolroom? how is it done, and with what success?

In regard to the grand principles on which our own school-system is organized, we look for no substantial improvement. Our schools are perfectly free. A child would be as much astonished at being asked to pay any sum, however small, for attending our common schools, as he would be if payment were demanded of him for walking in the public streets, for breathing the common air, or enjoying the warmth of the unappropriable sun. Massachusetts has the honor of establishing the first system of free schools in the world; and she projected a plan so elastic and expansive in regard to the course of studies and the thoroughness of instruction, that it may be enlarged and perfected, to meet any new wants of her citizens, to the end of time. Our system, too, is one and the same for both rich and poor; for as all human beings, in regard to their natural rights, stand upon a footing of equality before God, so, in this respect, the human has been copied from the divine plan of government, by placing all citizens on the same footing of equality before the law of the land. For these purposes, therefore, we do not desire to copy or to study the systems of foreign nations, usually so different from our own: we hope, rather, that they will study and copy ours.

And further, in regard to the general organization and maintenance of the Prussian and other German schools, we already have extensive means of knowledge. The Report of M. Cousin,

formerly Minister of Public Instruction in France, upon the Prussian system; the Report of Dr. Bache, late President of Girard College, in regard to all kinds of charitable foundations for instruction in Europe; the admirable Report of Professor Stowe, made to the General Assembly of Ohio in 1837; together with various articles to be found in reviews and other periodicals published within the last twenty years, — will supply the general reader with all that he will care to know on these topics. My purpose, therefore, is to confine myself to those points respecting which we have not as yet adequate means of information; and to refer to what has been sufficiently detailed by other inquirers, only when necessary for the sake of giving unity and intelligibleness to my own remarks.

I ought to premise that I have visited but a small number of the thirty-eight German States, and seen comparatively but a few of the schools in that great Confederation. My tour was made through Prussia, Saxony, the Grand Duchy of Nassau, of Hesse-Darmstadt, Baden, and a few of the smaller States, together with Hamburg and Frankfort, the largest of the free cities belonging to the Confederation. This cautionary statement is necessary, because travellers are apt to generalize their facts, making particular instances represent whole countries; and perhaps readers are quite as prone to this generalization as writers. Prussia contains a population of fourteen or fifteen millions, Saxony about two millions; and, in the schools of these and other German States, I spent from six weeks to two months, using all practicable diligence in going from place to place, visiting schools and conversing with teachers and school-officers by day, and examining educational pamphlets, reports, &c., at night. But, of course, I could visit only a small part of the schools which represent a population of eighteen or twenty millions. Perhaps I saw as fair a proportion of the Prussian and Saxon schools as one would see of the schools in Massachusetts who should visit those of Boston, Newburyport, Lexington, New Bedford, Worcester, Northampton, and Springfield.

The authority and control assumed by the above-mentioned governments over the youth of the State are very extensive. The impartial observer, however, is bound to admit that this assumption is not wholly for the aggrandizement of the rulers; that authority is not claimed in the mere spirit of arbitrary power, but, to a great extent, for the welfare of the subject. A gentleman who formerly resided in one of the smaller German States, and who there exercised the office of judge, a part of whose functions was the appointment of guardians to minors and others (in this respect analogous to one of the duties of our Judges of Probate), told me that it was the common custom of himself and his brethren in office, when a guardian appeared to render his annual account, to require him to produce the ward, as well as the account, for the inspection of the court; and no final account of a guardian was ever settled without a personal inspection of the ward by the judge. In these interviews, uot a little could be learned, by the personal mauners, address, and appearance of the ward, as to the fidelity with which the guardian had attended to the health, habits, and education of his charge.

Another fact which will strike the visitor to these countries with mingled sorrow and joy is the number and the populousness of their orphan establishments. In the great cities, almost without exception, one or more of these is to be found. The wars of Europe have torn away the fathers from the protection of their families; and, for long periods, almost all that many thousands of children knew of the parent, who should have been their guide and couusellor uutil mature age, was, that he died in the camp, or added another unit to the slaughtered hosts of the battle-field. But it must be allowed that the governments have done something, however inadequate, to atone for their enormous guilt. The orphan-houses, originally established mainly for this class of bereaved children, have been, since the general pacification of Europe, appropriated to orphans of other classes. Here their living, including board, clothes, lodging, and excellent instruction in all the element-

ary branches, with drawing, music, &c., are gratuitously furnished.

In the Royal Orphan House, at Potsdam, for instance, there are a thousand boys, — all the children of soldiers. They seem collected there as a monument of the havoc which war makes of men. Connected with this, though in another place, is an establishment for the orphan daughters of soldiers. The institution for boys differed from most others of the same class which I saw, in paying great attention to physical training. As the boys are destined for the army, it is thought important to give them agility and vigor; and, at the age of fourteen, the institution discards those who are not healthy. It is not yet discovered that activity and energy are necessary in any occupation save that of killing our fellow-men. The boys practise gymnastic exercises, — such as climbing poles, ascending ropes, flinging their bodies round and round over a bar while they hold on only by the bend of the legs at the knee-joints, vaulting upon the wooden-horse, &c., — until their physical feats reach a point of perfection which I have never seen surpassed, except by professional circus-riders or rope-dancers. It is of these pupils that Dr. Bache says, "I have never seen a body of young men all so well physically developed; a result produced by constant attention to their education on this point." In the dormitories, however, I saw the same fearful assemblage of feather-beds as elsewhere, — a hundred and forty in a room. But the rooms had the redeeming circumstance of being well ventilated.

The Franke Institute, at Halle, founded about the beginning of the last century, now numbering nearly three thousand pupils (a small part only, at the present time, are orphans), is considered the parent of this class of institutions in Germany; and a more admirable establishment of the kind, or one conducted with more intelligence and utility, probably does not exist in the world.

Another class of institutions should challenge the admiration of all civilized people, and be imitated in every nation. I refer

to schools established in connection with prisons. When a Prussian parent has forfeited his liberty by the commission of a crime, and is therefore sequestered from society and from his family, his children are not left to abide the scorn of the community, nor abandoned to the tender mercies of chance. The mortification of having a disgraced parent seems enough, without the life-long calamity of a neglected youth. Hence such children are taken and placed under the care of a wise and humane teacher, who supplies to them that parental guidance which it has been their affliction to lose. Indeed, such care is taken in selecting the teachers of these schools, that the transfer into their hands generally proves a blessing to the children. Thus society is saved from the depredations and the expense of a second, perhaps of a third and a fourth generation of criminals, through these acts of foresight and prevention, — acts which are as clearly connected with sound worldly policy as with those higher moral and religious obligations which bind the conscience of every citizen and legislator.

Prussia and Saxony have still another class of institutions of the most beneficent description ever devised by man. These are reformatory establishments for youthful offenders; or, as they are most expressively and beautifully called in the language of the country, Redemption Institutes. The three principal establishments of this class which I visited were, one at Hamburg, under the care of Mr. Wichern; one just outside the Halle gate of the city of Berlin, superintended by Mr. Kopf; and one at Dresden under Mr. Schubert. At this latter place, for the first and only time in Germany, I heard correct physiological principles advocated in theory, and thoroughly carried out in practice. Here the feather-bed as a covering was disused and condemned, the woollen blanket being substituted for it: and the principal, not knowing my views upon the subject, began to defend his abandonment of the common practice with something of the zeal of a reformer.*

* At an orphan school, near by, woollen was also used as a covering instead of feathers; but here the principal apologized for the absence of the latter, by saying the children and the institution were too poor to afford them.

Some of the facts connected with the Redemption Institute at Hamburg are so extraordinary, and illustrate so forcibly the combined power of wisdom and love in the reformation of vicious children, that I cannot forbear detailing them.

The school of Mr. J. H. Wichern is called the Rauhe Haus, and is situated four or five miles out of the city of Hamburg. It was opened for the reception of abandoned children of the very lowest class, — children brought up in the abodes of infamy, and taught, not only by example but by precept, the vices of sensuality, thieving, and vagabondry, — children who had never known the family tie, or who had known it only to see it violated. Hamburg having been for many years a *commercial* and *free* city, and, of course, open to adventurers and renegades from all parts of the world, has many more of this class of population than its own institutions and manners would have bred. The thoughts of Mr. Wichern were strongly turned towards this subject while yet a student at the university; but want of means deterred him from engaging in it, until a legacy left by a Mr. Gercken enabled him to make a beginning in 1833. He has since devoted his life and all his worldly goods to the work. It is his first aim that the abandoned children whom he seeks out on the highway, and in the haunts of vice, shall know and feel the blessings of *domestic* life; that they shall be introduced into the bosom of a family: for this he regards as a divine institution, and therefore the birthright of every human being, and the only atmosphere in which the human affections can be adequately cultivated. His house, then, must not be a prison, or a place of punishment or confinement. The site he had chosen for his experiment was one enclosed within high, strong walls and fences. His first act was to break down these barriers, and to take all bolts and bars from the doors and windows. He began with three boys of the worst description; and, within three months, the number increased to twelve. They were taken into the bosom of Mr. Wichern's family: his mother was

their mother, and his sister their sister. They were not punished for any past offences, but were told that all should be forgiven them if they tried to do well in future. The defenceless condition of the premises was referred to, and they were assured that no walls or bolts were to detain them; that one cord only should bind them, and that the cord of love. The effect attested the all but omnipotent power of generosity and affection. Children from seven or eight to fifteen or sixteen years of age, in many of whom early and loathsome vices had nearly obliterated the stamp of humanity, were transformed not only into useful members of society, but into characters that endeared themselves to all within their sphere of acquaintance. The education given by Mr. Wichern has not been an æsthetic or literary one. The children were told at the beginning that labor was the price of living, and that they must earn their own bread if they would secure a comfortable home. He did not point them to ease and affluence, but to an honorable poverty, which, they were taught, was not in itself an evil. Here were means and materials for learning to support themselves; but there was no rich fund or other resources for their maintenance. Charity had supplied the home to which they were invited; their own industry must supply the rest. Mr. Wichern placed great reliance upon religious training; but this did not consist in giving them dry and unintelligible dogmas. He spoke to them of Christ, as the benefactor of mankind, who proved by deeds of love his interest in the race; who sought out the worst and most benighted of men to give them instruction and relief; and who left it in charge to those who came after him, and wished to be called his disciples, to do likewise. Is it strange that, enforced by such a practical exemplification of Christian love as their fatherly benefactor gave them in his every-day life, the story of Christ's words and deeds should have sunk deeply into their hearts, and melted them into tenderness and docility? Such was the effect. The most rapid improvement ensued in the great majority of the children; and even those whom long habits of idleness and

vagabondry made it difficult to keep in the straight path had long seasons of obedience and gratitude, to which any aberration from duty was only an exception.

As the number of pupils increased, Mr. Wiehern saw that the size of the family would seriously impair its domestic character. To obviate this, he divided his company into families of twelve; and he has erected nine separate buildings, situated in a semicircle around his own, and near to it, in each of which dwells a family of twelve boys or of twelve girls, under the care of a House-Father or House-Mother, as the assistants are respectively called. Each of these families is, to some extent, an independent community, having an individuality of its own. They eat and sleep in their own dwelling; and the children belonging to each look up to their own particular father or mother, as home-bred children to a parent. The general meeting every morning, — at first in the chamber of Mr. Wichern's mother, but afterwards, when the numbers increased, in the little chapel, — and their frequent meetings at work, or in the play-ground, form a sufficient, and, in fact, a very close bond of union for the whole community. Much was done by the children themselves in the erection of their little colony of buildings; and, in doing this, they were animated by a feeling of hope and a principle of independence in providing a dwelling for themselves, while they experienced the pleasures of benevolence in rendering assistance to each other. Mr. Wiehern mentions, with great satisfaction, the good spirit of the architect who came upon the premises to direct in putting up the first house. This man would not retain a journeyman for a day or an hour who did not conduct with the utmost decorum and propriety before the children who were assisting in the work.

Instruction is given in reading, writing, arithmetic, singing, and drawing; and, in some instances, in higher branches. Music is used as one of the most efficient instruments for softening stubborn wills, and calling forth tender feelings; and its deprivation is one of the punishments for delinquency. The

songs and hymns have been specially adapted to the circumstances and wants of the community; and it has often happened that the singing of an appropriate hymn, both at the gatherings in the mother's chamber, which were always more or less kept up, and in the little chapel, has awakened the first-born sacred feeling in obdurate and brutified hearts. Sometimes a voice would drop from the choir, and then weeping and sobbing would be heard instead. The children would say they could not sing; they must think of their past lives, of their brothers and sisters, or of their parents living in vice and misery at home. On several occasions, the singing exercise had to be given up. Frequently the children were sent out to the garden to recover themselves. An affecting narrative is recorded of a boy who ran away, but whom Mr. Wichern pursued, found, and persuaded to return. He was brought back on Christmas Eve, which was always celebrated in the mother's chamber. The children were engaged in singing the Christmas hymns when he entered the room. At first, they manifested strong disapprobation of his conduct; for he was a boy to whose faults special forbearance had been previously shown. They were then told to decide among themselves how he should be punished. This brought them all to perfect silence; and, after some whispering and consulting together, one who had formerly been guilty of the same fault of ingratitude, under still less excusable circumstances, burst out in a petition for his forgiveness. All united in it, reached out to him a friendly hand; and the festival of the Christmas Eve was turned into a rejoicing over the brother that had been lost, but was found. The pardon was not in words merely, but in deeds. No reference to the fact was afterwards made. A day or two after, he was sent away on an errand to the distance of half a mile. He was surprised and affected by this mark of confidence; and from that time never abused his freedom, though intrusted to execute commissions at great distances. But he could never after hear certain Christmas hymns without shedding tears; and long subsequently, in a confidential communication to Mr.

Wichern respecting some act of his former life (an unburdening of the overladen conscience, which was very common with the inmates, and always voluntary; for they were told on their arrival that their past life should never be spoken of unless between them and himself), he referred to the decisive effect of that scene of loving-kindness upon his feelings and character.

One peculiar feature of this institution is, that the children are not stimulated by the worldly motives of fame, wealth, or personal aggrandizement. The superintendent does not inflame them with the ambition, that if they surpass each other at recitation, and make splendid displays at public examinations, they shall, in the end, become high military officers or congressmen, or excite the envy of all by their wealth or fame. On the other hand, so far as this world's goods are concerned, he commends and habituates them to the idea of an honorable poverty; and the only riches with which he dazzles their imaginations are the riches of good works. He looks to them as his hope for redeeming others from the sphere whence they were taken; and there have been many touching instances of the reformation of parents and families, for whom the natural affection first sprang up in these children's hearts after they had learned the blessings of home.

One of the most interesting effects of this charity is the charity which it reproduces in its objects; and thus it is shown that, in the order of nature, the actions of good men, — provided they are also wise, — not less than good seed, will produce thirty or sixty or a hundred fold of beneficent fruit. Mr. Wichern makes a great point of celebrating Christmas; and the friends of the school are in the habit of sending small sums of money, and articles of various kinds, to adorn the festival. This money has often been appropriated, voluntarily, by the children, to charitable purposes. They frequently give away their pennies; and instances have happened where they have literally emptied their little purses into the hands of poverty and distress, and taken off their own clothes to cover the naked.

On one occasion, six poor children had been found by some of the scholars, and invited to the Christmas festival. There they were clothed, and many useful and pleasing articles made by the givers were presented to them. One of the boys read a passage from the history of Christ; and the Christmas songs and other songs of thanksgiving and praise were sung. To the sound of the organ which a friend had presented to the little chapel, some verses welcoming the strangers succeeded. The guests then departed, blessing the house and its kind inhabitants; but who can doubt that a voice of gladness more precious than all worldly applauses sprang up unbidden and exulting in the hearts of the little benefactors?

But, among numerous less conspicuous instances of the change wrought by wise and appropriate moral means in the character of these so lately abandoned children, the most remarkable occurred at the time of the great Hamburg fire, in May, 1842. In July, 1843, I saw the vast chasm which the conflagration had made in the centre of that great city. The second day of the fire, when people were driven from the city in crowds, and houseless and half-frantic sufferers came to the Rauhe House for shelter, the children — some of whom had friends and relatives in the city — became intensely excited, and besought Mr. Wichern for leave to go in and make themselves useful to the sufferers. Not without great anxiety as to the force of the temptations for escape or for plunder that might assail them in such an exposed and tumultuous scene, he gave permission to a band of twenty-two to accompany him, on condition that they would keep together as much as possible, and return with him at an appointed time. This they readily promised, nor did they disappoint him. Their conduct was physically as well as morally heroic. They rushed into the greatest dangers to save life and property; and, though sometimes pressed to receive rewards, they steadfastly refused them. At stated intervals, they returned to the appointed place to re-assure the confidence of their superior. On one occasion, a lad remained absent long beyond the time agreed upon; but at

last he appeared, quite exhausted by the labor of saving some valuable property. Mr. Wichern afterwards learned from the owner — not from the lad — that he had steadily refused the compensation offered to and even urged upon him. When the company returned home at the appointed time, he sent forth another band under the care of a House-Father; and these exerted themselves in the same faithful and efficient manner. This was done as long as the necessity of the case required. From this time, the Rauhe House was the resort of the poor and homeless; and not for days only, but for weeks. The pupils shared with them their food, and even slept upon the ground to give their beds to the destitute, sick, and injured. I can hardly refrain from narrating many other facts of a similar character connected with this institution; for if the angels rejoice over a rescued sinner, why should not we partake of that joy when it is our brother who is ransomed?

In his last report, Mr. Wichern says the institution was actually so impoverished by the demand made upon it at that time, and the demands upon public charity have since been so great in that unfortunate city, that the inmates have been almost reduced to suffering for the necessaries of life, particularly as they were induced to receive several children rendered homeless by that calamity. To this object, however, even the children of the house were ready and willing to contribute portions of their wardrobe, and they submitted cheerfully to other privations. Mr. Wichern regretted, above all other things, the necessity of refusing many applications; and it is but doing justice to the citizens of Hamburg to state, that, on an appeal made by him for funds to erect a new building, they were generously and promptly raised by those who had such unusual claims upon their charity.

A single remark I must be allowed to make. When an individual effects so much good, it seems to be often thought that he accomplishes it by virtue of some charm or magic, or preternatural influence, of which the rest of the world cannot partake. The superintendent of the Rauhe House is a refuta-

tion of this idea. Laboriously, perseveringly, unintermittingly, he uses MEANS for the accomplishment of his desired ends. When I put to him the question, in what manner he produced these transforming effects upon his charge, his answer was, "By active occupations, music, and Christian love." Two or three things should be stated in explanation of this compendious reply. When a new subject comes to the Rauhe House, he is first received into Mr. Wichern's own family. Here, under the wise and watchful guardianship of the master, he is initiated into the new life of action, thought, feeling, which he is expected to lead. His dispositions are watched, his character is studied; and, as soon as prudence allows, he is transferred to that one of the little colonies whose House-Father is best qualified to manage his peculiarities of temperament and disposition. Soon after the opening of the establishment, and the increase of its numbers, Mr. Wichern found that it would be impossible for him to bestow the requisite care and oversight upon each one of his pupils which his necessities demanded. He cast about for assistance; and though he was able to find those in the community who had enough of the spirit of benevolence and self-sacrifice to undertake the difficult labor to which his own life was devoted, yet he soon found that they had not the other requisite qualifications to make their benevolent purposes available. He could find enough well-intentioned persons to superintend the work-shops, gardens, &c.; but they had not intellectual competency. So he could find schoolmasters who could give good lessons; but they were not masters of any handicraft. He was therefore driven, as he says, to the expedient of preparing a class of teachers to become his auxiliaries in the work. For this end, he has superadded to his original plan a school for the preparation of teachers, — first to supply himself, then to send abroad to open other institutions similar to his own, and thirdly to become superintendents of prisons. This last object he deems very important. Questions about prison-architecture, he says, have given a new literature to the world; but as yet nothing, or but

little, is done to improve the character or increase the qualifications of prison-keepers. I have often felt the force of this remark in the numerous Continental prisons which I have visited. Though the masters of the prisons have generally appeared to be very respectable men, yet the assistants or deputy-turnkeys have very often seemed to belong to a low order of society, from whose manners, conversation, or treatment of the prisoners, no good influence could be expected.

This second institution of Mr. Wichern is in reality a normal school, which the necessities of his situation suggested, and forced him to establish.

During the ten years of the existence of this institution, there have been one hundred and thirty-two children received into it. Of these, about eighty were there on the 1st of July, 1843. Only two had run away, who had not either voluntarily returned, or, being brought back, had not voluntarily remained. The two unreclaimed fugitives committed offences, fell into the hands of the civil magistrate, and were imprisoned.

Who can reflect upon this history, where we see a self-sacrificing man, by the aids of wisdom and Christian love, exorcising, as it were, the evil spirits from more than a hundred of the worst children whom a corrupted state of society has engendered, — who can see this, without being reminded of some case, perhaps within his own personal knowledge, where a passionate, ignorant, and perverse teacher, who for the sake of saving a few dollars of money, or from some other low motive, has been put in possession of an equal number of fine-spirited children, and has, even in a shorter space of time, put an evil spirit into the bosom of them all? When visiting this institution, I was reminded of an answer given to me by the head master of a school of a thousand children in London. I inquired of him what moral education or training he gave to his scholars; what he did, for instance, when he detected a child in a lie. His answer was literally this: "I consider," said he, "all moral education to be a humbug. Nature teaches children to lie. If one of my boys lies, I set him to write some such copy as this: 'Lying is a

base and infamous offence.' I make him write a quire of paper over with this copy; and he knows very well, that, if he does not bring it to me in a good condition, he will get a flogging." On hearing this reply, I felt as if the number of things in surrounding society which needed explanation was considerably reduced.

What is most remarkable in reference to the class of institutions now under consideration is the high character of the men — for capacity, for attainments, for social rank — who preside over them. At the head of a private orphan house in Potsdam is the venerable Von Türk. According to the laws of his country, Von Türk is a nobleman. His talents and acquisitions were such, that, at a very early age, he was elevated to the bench. This was, probably, an office for life, and was attended with honors and emoluments. He officiated as judge for fourteen years; but, in the course of this time, so many criminal cases were brought before him for adjudication, whose only cause and origin were so plainly referable to early neglect in the culprit's education, that the noble heart of the judge could no longer bear to pronounce sentence of condemnation against the prisoners; for he looked upon them as men, who, almost without a paradox, might be called *guiltless offenders*. While holding the office of judge, he was appointed school inspector. The paramount importance of the latter office grew upon his mind as he executed its duties, until at last he came to the full conception of the grand and sacred truth, — that the vocation of the teacher, who saves from crime and from wrong, is much more intrinsically honorable than that of the magistrate, who waits till they are committed, and then avenges them. He immediately resigned his office of judge, with its life-tenure and its salary; travelled to Switzerland, where he placed himself under the care of Pestalozzi; and, after availing himself for three years of the instructions of that celebrated teacher, he returned to take charge of an orphan asylum. Since that time, he has devoted his whole life to the care of the neglected and destitute. He lives in as plain and inexpensive a style as our well-off

farmers and mechanics, and devotes his income to the welfare of the needy. I was told by his personal friends that he not only deprived himself of the luxuries of life, but submitted to many privations, in order to appropriate his small income to others whom he considered more needy; and that his wife and family cordially and cheerfully shared such privations with him for the same object. To what extent would our own community sympathize with or appreciate the act, if one of the judges of our higher courts, or any other official dignitary, should resign an office of honor and of profit to become the instructor of children!

Even now, when the once active and vigorous frame of this patriarchal man is bending beneath the weight of years, he employs himself in teaching agriculture, together with the branches commonly taught in the Prussian schools, to a class of orphan boys. What warrior, who rests at last from the labors of the tented field after a life of victories; what statesman, whose name is familiar in all the courts of the civilized world; what orator, who attracts towards himself tides of men wherever he may move in his splendid course, — what one of all these would not, at the sunset of life, exchange his fame and his clustering honors for that precious and abounding treasury of holy and beneficent deeds, the remembrance of which this good old man is about to carry into another world! Do we not need a new spirit in our community, and especially in our schools, which shall display only objects of virtuous ambition before the eyes of our emulous youth, and teach them that no height of official station, nor splendor of professional renown, can equal in the eye of Heaven, and of all good men, the true glory of a life consecrated to the welfare of mankind?

CLASSIFICATION.

The first element of superiority in a Prussian school, and one whose influence extends throughout the whole subsequent course of instruction, consists in the proper classification of the

scholars. In all places where the numbers are sufficiently large to allow it, the children are divided according to ages and attainments ; and a single teacher has the charge only of a single class, or of as small a number of classes as is practicable. I have before adverted to the construction of the schoolhouses, by which, as far as possible, a room is assigned to each class. Let us suppose a teacher to have the charge of but one class, and to have talent and resources sufficient properly to engage and occupy its attention, and we suppose a perfect school. But how greatly are the teacher's duties increased and his difficulties multiplied if he have four, five, or half a dozen classes under his personal inspection ! While attending to the recitation of one, his mind is constantly called off to attend to the studies and the conduct of all the others. For this, very few teachers amongst us have the requisite capacity ; and hence the idleness and the disorder that reign in so many of our schools, excepting in cases where the debasing motive of fear puts the children in irons. All these difficulties are at once avoided by a suitable classification,—by such a classification as enables the teacher to address his instructions at the same time to all the children who are before him, and to accompany them to the playground, at recess or intermission, without leaving any behind who might be disposed to take advantage of his absence. All this will become more and more obvious as I proceed with a description of exercises. There is no obstacle whatever — save prescription, and that *vis inertia* of mind which continues in the beaten track because it has not vigor enough to turn aside from it — to the introduction, at once, of this mode of dividing and classifying scholars in all our large towns.

METHOD OF TEACHING YOUNG CHILDREN ON THEIR FIRST ENTERING SCHOOL.

In regard to this as well as other modes of teaching, I shall endeavor to describe some particular lesson that I heard. The Prussian and Saxon schools are all conducted substantially upon

the same plan, and taught in the same manner. Of course, there must be those differences to which different degrees of talent and experience give rise.

In Professor Stowe's excellent report, he says, "Before the child is even permitted to learn his letters, he is under conversational instruction frequently, for six months or a year; and then a single week is sufficient to introduce him into intelligent and accurate plain reading." I confess, that, in the numerous schools I visited, I did not find this preparatory instruction carried on for any considerable length of time before lessons in which all the children took part were commenced.

About twenty years ago, teachers in Prussia made the important discovery, that children have five senses, together with various muscles and mental faculties, all which, almost by a necessity of their nature, must be kept in a state of activity, and which, if not usefully, are liable to be mischievously employed. Subsequent improvements in the art of teaching have consisted in supplying interesting and useful, instead of mischievous occupation for these senses, muscles, and faculties. Experience has now proved that it is much easier to furnish profitable and delightful employment for all these powers than it is to stand over them with a rod and stifle their workings, or to assume a thousand shapes of fear to guard the thousand avenues through which the salient spirits of the young play outward. Nay, it is much easier to keep the eye and hand and mind at work together than it is to employ either one of them separately from the others. A child is bound to the teacher by so many more cords, the more of his natural capacities the teacher can interest and employ.

In the case I am now to describe, I entered a classroom of sixty children of about six years of age. The children were just taking their seats, all smiles and expectation. They had been at school but a few weeks, but long enough to have contracted a love for it. The teacher took his station before them, and after making a playful remark which excited a light titter around the room, and effectually arrested attention, he gave a

signal for silence. After waiting a moment, during which every countenance was composed and every noise hushed, he made a prayer consisting of a single sentence, asking that, as they had come together to learn, they might be good and diligent. He then spoke to them of the beautiful day, asked what they knew about the seasons, referred to the different kinds of fruit-trees then in bearing, and questioned them upon the uses of trees in constructing houses, furniture, &c. Frequently he threw in sportive remarks which enlivened the whole school, but without ever producing the slightest symptom of disorder. During this familiar conversation, which lasted about twenty minutes, there was nothing frivolous or trifling in the manner of the teacher: that manner was dignified, though playful; and the little jets of laughter which he caused the children occasionally to throw out were much more favorable to a receptive state of mind than jets of tears.

Here I must make a preliminary remark in regard to the equipments of the scholars, and the furniture of the schoolroom. Every child had a slate and pencil, and a little reading-book of letters, words, and short sentences. Indeed, I never saw a Prussian or Saxon school, above an infant school, in which any child was unprovided with a slate and pencil. By the teacher's desk, and in front of the school, hung a blackboard. The teacher first drew a house upon the blackboard; and here the value of the art of drawing — a power universally possessed by Prussian teachers — became manifest. By the side of the drawing, and under it, he wrote the word "house" in the German script hand, and printed it in the German letter. With a long pointing-rod, — the end being painted white to make it more visible, — he ran over the form of the letters; the children, with their slates before them, and their pencils in their hands, looking at the pointing-rod, and tracing the forms of the letters in the air. In all our good schools, children are first taught to imitate the forms of letters on the slate, before they write them on paper; here they were first imitated on the air, then on slates, and subsequently, in older classes, on paper. The next

process was to copy the word "house," both in script and in print, on their slates. Then followed the formation of the sounds of the letters of which the word was composed, and the spelling of the word. Here the *names* of the letters were not given as with us, but only their powers, or the sounds which those letters have in combination. The letter *h* was first selected and set up in the reading-frame (the same before described as part of the apparatus of all Prussian schools for young children); and the children, instead of articulating our alphabetic *h* (aitch), merely gave a hard breathing, — such a sound as the letter really has in the word "house." Then the diphthong *au* (the German word for "house" is spelled "haus") was taken and sounded by itself in the same way. Then the blocks containing *h* and *au* were brought together, and the two sounds were combined. Lastly, the letter *s* was first sounded by itself, then added to the others; and then the whole word was spoken. Sometimes the last letter in a word was first taken and sounded, after that the penultimate, and so on, until the word was completed. The responses of the children were sometimes individual, and sometimes simultaneous, according to a signal given by the master.

In every such school, also, there are printed sheets or cards, containing the letters, diphthongs, and whole words. The children are taught to sound a diphthong, and then asked in what words that sound occurs. On some of these cards, there are words enough to make several short sentences; and, when the pupils are a little advanced, the teacher points to several isolated words in succession, which, when taken together, make a familiar sentence; and thus he gives them an agreeable surprise, and a pleasant initiation into reading.

After the word "house" was thus completely impressed upon the minds of the children, the teacher drew his pointing-rod over the lines which formed the house; and the children imitated him, first in the air, while they were looking at his motions, then on their slates. In their drawings, there was, of course, a great variety as to taste and accuracy; but each seemed

pleased with his own, for their first attempts had never been so criticised as to produce discouragement. Several children were then called to the blackboard to draw a house with chalk. After this, the teacher entered into a conversation about houses. The first question was, "What kind of a house was that on the blackboard?" Then the names of other kinds of houses were given. The materials of which houses are built were mentioned, — stone, brick, wood; the different kinds of wood; nails, and where they were made; lime, and whence it came, &c. When the teacher touched upon points with which the children were supposed to be acquainted, he asked questions; when he passed to subjects beyond their sphere, he gave information, intermingling the whole with lively remarks and pleasant anecdotes.

And here one important particular should not be omitted. In this as well as in all other schools, a complete answer was always required. For instance, if a teacher asks, "What are houses made of?" he does not accept the answer, "Of wood" or "Of stone;" but he requires a full, complete (*vollständig*) answer, as "A house may be made of wood." The answer must always contain an intelligible proposition, without reference to the words of the question to complete it. And here, also, the greatest care is taken that the answer shall always be grammatically correct, have the right terminations of all articles, adjectives, and nouns, and the right grammatical transpositions according to the idioms and structure of the language. This secures, from the beginning, precision in the expression of ideas; and if, as many philosophers suppose, the intellect could never carry forward its processes of argument or investigation to any great extent, without using language as its instrument, then these children, in their primary lessons, are not only led to exercise the intellect, but the instrument is put into their hands by which its operations are facilitated.

When the hour had expired, I do not believe there was a child in the room who knew or thought that his playtime had come. No observing person can be at a loss to understand

how such a teacher can arrest and retain the attention of his scholars. It must have happened to almost every one, at some time in his life, to be present as a member of a large assembly, when some speaker, in the midst of great uproar and confusion, has arisen to address it. If, in the very commencement of his exordium, he makes what is called a happy hit which is answered by a response of laughter or applause from those who are near enough to hear it, the attention of the next circle will be aroused. If, then, the speaker makes another felicitous sally of wit or imagination, this circle, too, becomes the willing subject of his power; until, by a succession of flashes, whether of genius or of wit, he soon brings the whole audience under his command, and sways it as the sun and moon sway the tide. This is the result of talent, of attainment, and of the successful study both of men and of things; and whoever has a sufficiency of these requisites will be able to command the attention of children, just as a powerful orator commands the attention of men. But the one no more than the other is the unbought gift of Nature. They are the rewards of application and toil superadded to talent.

Now, it is obvious, that, in the single exercise above described, there were the elements of reading, spelling, writing, grammar, and drawing, interspersed with anecdotes, and not a little general information; and yet there was no excessive variety, nor were any incongruous subjects forcibly brought together. There was nothing to violate the rule of "one thing at a time."

Compare the above method with that of calling up a class of abecedarians, or, what is more common, a single child; and while the teacher holds a book or a card before him, and, with a pointer in his hand, says *a*, and he echoes *a;* then *b*, and he echoes *b;* and so on until the vertical row of lifeless and ill-favored characters is completed; and then of remanding him to his seat to sit still and look at vacancy. If the child is bright, the time which passes during this lesson is the only part of the day when he does not think. Not a single faculty of the mind is occupied, except that of imitating sounds; and

even the number of these imitations amounts only to twenty-six. A parrot or an idiot could do the same thing. And so of the organs and members of the body. They are condemned to inactivity; for the child who stands most like a post is most approved, nay, he is rebuked if he does not stand like a post. A head that does not turn to the right or left, an eye that lies moveless in its socket, hands hanging motionless at the side, and feet immovable as those of a statue, are the points of excellence while the child is echoing the senseless table of *a*, *b*, *c*. As a general rule, six months are spent before the twenty-six letters are mastered, though the same child would learn the names of twenty-six playmates or twenty-six play-things in one or two days.

All children are pleased with the idea of a house, a hat, a top, a ball, a bird, an egg, a nest, a flower, &c.; and when their minds are led to see new relations or qualities in these objects, or when their former notions respecting them are brought out more vividly, or are more distinctly defined, their delight is even keener than that of an adult would be in obtaining a new fact in science, or in having the mist of some old doubt dispelled by a new discovery. Lessons on familiar objects, given by a competent teacher, never fail to command attention; and thus a habit of mind is induced of inestimable value in regard to all future study.

Again: the method I have described necessarily leads to conversation, and conversation with an intelligent teacher secures several important objects. It communicates information. It brightens ideas before only dimly apprehended. It addresses itself to the various faculties of the mind, so that no one of them ever tires or is cloyed. It teaches the child to use language, to frame sentences, to select words which convey his whole meaning, to avoid those which convey either more or less than he intends to express; in fine, it teaches him to seek for thoughts upon a subject, and then to find appropriate language in which to clothe them. A child trained in this way will never commit those absurd and ludicrous mistakes into

which uneducated men of some sense not unfrequently fall; viz., that of mismatching their words and ideas, of hanging, as it were, the garments of a giant upon the body of a pygmy, or of forcing a pygmy's dress upon the huge limbs of a giant. Appropriate diction should clothe just ideas, as a tasteful and substantial garb fits a graceful and vigorous form.

The above-described exercise occupies the eye and the hand as well as the mind. The eye is employed in tracing visible differences between different forms, and the hand in copying whatever is presented, with as little difference as possible. And who ever saw a child that was not pleased with pictures, and an attempt to imitate them? Thus the two grand objects so strenuously insisted upon by writers in regard to the later periods of education and the maturer processes of thought are attained; viz., the power of recognizing analogies and dissimilarities.

I am satisfied that our greatest error in teaching children to read, lies in beginning with the alphabet, — in giving them what are called the "Names of the Letters," *a*, *b*, *c*, &c. How can a child to whom Nature offers such a profusion of beautiful objects, of sights and sounds and colors, and in whose breast so many social feelings spring up, — how can such a child be expected to turn with delight from all these to the stiff and lifeless column of the alphabet? How can one, who as yet is utterly incapable of appreciating the remote benefits which in after-life reward the acquisition of knowledge, derive any pleasure from an exercise which presents neither beauty to his eye, nor music to his ear, nor sense to his understanding?

Although, in former reports and publications, I have dwelt at length upon what seems to me the absurdity of teaching to read by *beginning* with the alphabet, yet I feel constrained to recur to the subject again; being persuaded that no thorough reform will ever be effected in our schools until this practice is abolished.

When I first began to visit the Prussian schools, I uniform-

ly inquired of the teachers, whether, in teaching children to read, they began with the names of the letters as given in the alphabet. Being delighted with the prompt negative which I invariably received, I persevered in making the inquiry, until I began to perceive a look and tone on their part, not very flattering to my intelligence, in considering a point so clear and so well settled as this to be any longer a subject for discussion or doubt. The uniform statement was, that the alphabet, as such, had ceased to be taught, as an exercise preliminary to reading, for the last fifteen or twenty years, by every teacher in the kingdom. Whoever will compare the German language with the English will see that the reasons for a change are much stronger in regard to our own than in regard to the foreign tongue.

The practice of beginning with the names of letters is founded upon the idea that it facilitates the combination of them into words. On the other hand, I believe that if two children, of equal quickness and capacity, are taken, one of whom can name every letter of the alphabet at sight, and the other does not know them from Chinese characters, the latter can be most easily taught to read, — in other words, that learning the letters first is an absolute hinderance.

The advocate for teaching the letters asks if the elements of an art or science should not be first taught. To this I would reply, that the names of the letters are not elements in the sounds of words, or are so only in a comparatively small number of cases. To the twenty-six letters of the alphabet the child is taught to give twenty-six sounds, and no more. According to Worcester, however, — who may be considered one of the best authorities on this subject, — the six vowels only, have, collectively, thirty-three different sounds. In addition to these, there are the sounds of twenty consonants, of diphthongs and triphthongs. The consonants also vary in sound, according to the word in which they are used, as the hard and soft sound of *c* and of *g*; the soft and the hissing sound of *s*; the soft or flat sound of *x*, like *gz*; the soft and sharp sound of

th, as in *this* and *thin;* the different sounds of the same letters, as in *chaise*, *church;* and the same sounds of different letters, as in *tion*, *sion;* in *cial*, *tial*, *sial; cious*, *ceous*, *tious; geous*, *gious*, &c. It would be difficult, and would not compensate for the trouble, to compute the number of different sounds which a good speaker gives to the different letters and combinations of letters in our language, not including the changes of rhetorical emphasis, cadence, and intonation; but, if analyzed, they would be found to amount to hundreds. Now, how can twenty-six sounds be the elements of hundreds of sounds as elementary as themselves? Generally speaking, too, before a child begins to learn his letters, he is already acquainted with the majority of elementary sounds in the language, and is in the daily habit of using them in conversation. Learning his letters, therefore, gives him no new sound: it even restricts his attention to a small part of those which he already knows. So far, then, the learning of his letters contracts his practice; and were it not for keeping up his former habits of speaking, at home and in the play-ground, the teacher, during the six months or year in which he confines him to the twenty-six sounds of the alphabet, would pretty nearly deprive him of the faculty of speech.

But there is another effect of learning the names of the letters first, still more untoward than this. The letter *a*, says Worcester, has seven sounds, as in *fate*, *fat*, *fare*, *far*, *fast*, *fall*, *liar*. In the alphabet, and as a name, it has but one, — the long sound. Now, suppose the words of our language in which this letter occurs to be equally divided among these seven classes. The consequence must be, that, as soon as the child begins to read, he will find one word in which the letter *a* has the sound he has been taught to give it, and six words in which it has a different sound. If, then, he follows the instruction he has received, he goes wrong six times to going right once. Indeed, in running over a score of his most familiar words, — such as *pa*, *ma*, *father*, *apple*, *hat*, *cat*, *rat*, *ball*, *fall*, *call*, *warm*, *swarm*, *man*, *can*, *pan*, *ran*, *brass*, *glass*, *water*, *star*, &c., — he does not

find, in a single instance, that sound of *a* which he has been taught to give it in the alphabet. In an edition of Worcester's Dictionary before me, I find more than three thousand words whose initial letter is *a*; and yet, amongst all these, there are not a hundred words in which this initial letter has the long or alphabetical sound; that is, the cases are more than thirty where the young reader would be wrong, if he followed the instruction given him, to one where he would be right. This, surely, is a most disastrous application of the principle, that the elements of a science must be first taught.

The letter *e*, the most frequent vowel in the English language, has five sounds, as in *mete*, *met*, *there*, *her*, *fuel*; and the remarks above made in relation to the letter *a* apply in nearly their full force to this vowel. So of the rest. *Such* is the facility which learning the names of the letters gives to reading!

In regard to all the vowels, it may be said, not only that, in the very great majority of cases, their sounds when found in words are different from their names as letters, — so that, the more perfectly the child has learned them as letters, the more certain will he be to miscall them in words, — but that these different sounds follow each other in books in the most promiscuous manner. Were there any law of succession among these sounds, so that the short sound of any one vowel should universally follow the long sound; the obscure, the broad, &c.; or were one of the sounds used twice in succession, and then another of them once, and so on, following some rule of alternation, — the evil would be greatly mitigated. The sagacious thrower of dice, by retaining in his mind a long series of the throws last made, calculates with some approach to certainty what face will next turn up; for, in the long-run, the numbers of the different faces turned up will be nearly equal. But no finite power can tell by any calculation according to the doctrine of chances, or by proceeding on the law of exhaustion, what sound of any vowel will next turn up in reading a book of English. There is, too, in the human mind, a faculty corre-

sponding to the law of periodicity, sometimes followed by Nature, so that if an event in Nature happens every other year, or once in seven, or in forty years, the sagacious and philosophic mind penetrates to the law, and grasps it. But the succession of the different vowel-sounds in the English language is as lawless as chaos, and leaves all human acumen or perspicacity in bewilderment.

Did the vowels adhere to their own sounds, the difficulty would be greatly diminished; but not only do the same vowels appear in different dresses, like masqueraders, but, like harlequins, they exchange garbs with each other. How often does *e* take the sound of *a*, as in *there*, *where*, &c.; and *i*, the sound of *e*; and *o*, the sound of *u*; and *u*, the sound of *o*; and *y* and *i* are always changing places.

In one important particular, the consonants are more perplexing than the vowels. The very definition of a consonant, as given in the spelling-books, is, "a letter which has no sound, or only an imperfect one, without the help of a vowel." And yet the definers themselves, and the teachers who follow them, proceed immediately to give a perfect sound to all the consonants. If a consonant has "only an imperfect sound," why, in teaching children to read, should not this imperfect sound be taught them? And again: in giving the names of the consonants, why should the vowel be sometimes prefixed, and sometimes suffixed? In *b*, *c*, *d*, &c., the vowel follows the consonant, as *be*, *ce*, *de*; in *f*, *l*, *m*, &c., the vowel precedes it, as *ef*, *el*, *em*. But, when found in words, the vowel precedes the consonant in the first class of cases as often as it follows it; and, in the latter class of cases, it follows as often as it precedes. The name of the letter *b* is written *be*; but where is the sound of *be* in *ebb*, *web*, *ebony*, *ebullition*, *abode*, *abound*, and in hundreds of other cases? The name of the letter *c* is written *ce*: but, in the first place, *c* is always sounded like *s* or *k*; and, in the second place, where is there any similitude to the sound of *ce* in the words *cap*, *cite*, *cold*, *cube*, *cynic*? Where, too, is the sound of *ce* in words where either of the vowels precedes the

c, as in *accent*, *echo*, *ichthyology*, *occasion*, &c.? The principle of this remark applies to hundreds, probably to thousands, of cases. So, too, if *b* is *be*, then *be* is *bee*, the name of an insect; and if *l* is *el*, then *el* is *eel*, the name of a fish.

The name-sound of the letter *r*, as taught in the alphabet, is *ar;* but where is this sound in all those cases where *r* precedes the vowel in the formation of a syllable or word, as in *rain*, *rest*, *rich*, *rock*, *run*, *rye?* They are not sounded *ar-ain*, *ar-est*, &c.

If such an accumulation of evidence were insufficient to convince any reasonable person, it would be easy to go through with all the letters of the alphabet, and to show, — in regard to the vowels — that, when found in words, they receive only occasionally the sounds which the child is taught always to give them as letters; and, in regard to the consonants, that they never, in any case, receive the sounds which the child is taught to affix to them. I believe it is within bounds to say, that we do not sound the letters, in reading, once in a hundred times, as we were taught to sound them when learning the alphabet. Indeed, were we to do so in one-tenth part of the instances, we should be understood by nobody. What analogy can be pointed out between the rough breathing of the letter *h*, in the words *when*, *where*, *how*, &c., and the name-sound (aytch, aitch, or aych, as it is given by different spelling-book compilers) of that letter as it is taught from the alphabet?

This subject might be further illustrated by reference to other languages, — the Greek, for instance. Will the names of the letters, *kappa*, *omicron*, *sigma*, *mu*, *omicron*, *sigma*, make the word *kosmos?* And yet these letters come as near making that word as those given by the Rev. Mr. Ottiwell Wood, at a late trial in Lancashire, England, did to the sound of his own name. On Mr. Wood's giving his name to the court, the judge said, "Pray, Mr. Wood, how do you spell your name?" to which the witness replied, "O double T, I double U, E double L, double U, double O, D." In the anecdote, it is added that the learned judge at first laid down his pen in astonishment; and then, after

making two or three unsuccessful attempts, declared he was unable to record it. Mr. Palmer, from whose prize essay this anecdote is taken, gives the following account of the manner in which children were taught to read the first sentence in Webster's old spelling-book: *En-o*, no, *emm-ai-en*, man, *emm-ai-wy*, may, *pee-you-tee*, put, *o-double-eff*, off, *tee-aitch-ee*, the, *ell-ai-double-you*, law, *o-eff*, of, *gee-o-dee*, God.

Some defenders of the old system have attempted to find an analogy for their practice in the mode of teaching to sing by first learning the gamut. They compare the notes of the gamut, which are afterwards to be combined into tunes, to the letters of the alphabet to be afterwards combined into words. But one or two considerations will show the greatest difference between the principal case and the supposed analogy. In written music, there is always a scale consisting of at least five lines, and of course with four spaces between, and often one or two lines and spaces above or below the regular scale; and both the name of a note and the sound to be given it can always be known by observing its place in the scale. To make the cases analogous, there should be a scale of thirty-three places at least for the six vowels only; and this scale should be enlarged so as to admit the twenty consonants, and all their combinations with the vowels. Such a scale could hardly be crowded into an octavo page. The largest pages now used would not contain more than a single printed line each; and the matter now contained in an octavo volume would fill the shelves of a good-sized library. If music were taught as unphilosophically as reading, if its eight notes were first arranged in one straight vertical line, to be learned by name, and then transferred to a straight horizontal line, where they should follow each other promiscuously, and without any clew to the particular sound to be given them in each particular place, it seems not too much to say, that not one man in a hundred thousand would ever become a musician.

The comparison sometimes made between reading and arithmetic fails for the same reasons. In arithmetic, the Arabic figures, when standing by themselves, have an invariable value;

and, when combined, their value is always determined by a certain law of decimal progression. The figure 5 is always five. It may be 5 units, 5 tens, 5 hundreds, &c.; but it is always five, and whether it is 5 units, 5 tens, or 5 hundreds, is infallibly known by the place it occupies. If we knew that the vowel *a* would always be long if found at the end of a word, that it would be short if found one place to the left, grave if found two, and broad if found three, and so on, there would then be one element of comparison between the cases, and the argument might have, what it now seems to want, a shadow of plausibility.

There is one fact, probably within every teacher's own observation, which should be decisive on this subject. In learning the alphabet, children pronounce the consonants as though they were either preceded or followed by one of the vowels; that is, they sound *b* as though it were written *be*, and *f* as though written *ef*. But, when they have advanced ever so little way in reading, do they not enunciate words where the letter *b* is followed by one of the *other* vowels, or where it is *preceded* by a vowel, as well as words into which their own familiar sound of *be* enters? For example, though they have called *b* a thousand times as if it were written *be*, do they not enunciate the words *ball*, *bind*, *box*, *bug*, &c., as well as they do the words *besom*, *beatific*, &c.? They do not say *be-all*, *be-ind*, *be-ox*, *be-ug*, &c. Do they not articulate the words *ebb*, *web*, &c., where the vowel comes first, or the words *bet*, *bell*, *beyond*, &c., where the vowel is short or obscure, as well as they do those words which have their old accustomed sound of *b*, with the long sound of *e?* So of the letter *f*, which they have been accustomed to sound as though written *ef*. Do they not articulate the word *fig* as well as they do the first syllable of the word *effigy?* Nay, except they are very apt, and remember in a remarkable manner the nonsense that has been taught them, do they ever call *fig* ef-ig, or *father*, ef-ather? Happy incapacity of a bright nature to be turned into a dunce!

The teachers in Prussia and Saxony invariably practise what

is called by them the *lautir* (pronounced *lauteer*) method. In Holland, the same method is universally adopted. With us, it is known by the name *phonic*. It consists in giving each letter, when taken by itself, the sound which it has when found in combination; so that the sound of a regular word of four letters is divided into four parts, and a recombination of the sounds of the letters makes the sound of the word.

There are two reasons why this *lautir* or *phonic* method is less adapted to the English language than to the German: first, because our vowels have more sounds than theirs; and, secondly, because we have more silent letters than they. This is an argument, not against their method of teaching, but in favor of our commencing to teach by giving words before letters. And I despair of any effective improvement in teaching young children to read, until the teachers of our primary schools shall qualify themselves to teach in this manner, — I say, until they shall *qualify* themselves; for they may attempt it in such a rude and awkward way as will infallibly incur a failure. As an accompaniment to this, they should also be able to give instruction according to the *lautir* or *phonic* method. It is only in this way that the present stupefying and repulsive process of learning to read can be changed into one full of interest, animation, and instructiveness, and a toilsome work of months be reduced to a pleasant one of weeks.

Having given an account of the reading-lesson of a primary class just after they had commenced going to school, I will follow it with a brief account of a lesson given to a more advanced class. The subject was a short piece of poetry describing a hunter's life in Missouri. It was first read, the reading being accompanied with appropriate criticisms as to pronunciation, tone, &c. It was then taken up verse by verse, and the pupils were required to give equivalent expressions in prose. The teacher then entered into an explanation of every part of it, in a sort of oral lecture, accompanied with occasional questions. This was done with the greatest minuteness.

Where there was a geographical reference, he entered at large into geography; where a reference to a foreign custom, he compared it with their customs at home: and thus he explained every part, and illustrated the illustrations themselves, until, after an entire hour spent upon six four-line verses, he left them to write out the sentiment and the story in prose, to be produced in school the next morning. All this was done without the slightest break or hesitation, and evidently proceeded from a mind full of the subject, and having a ready command of all its resources.

An account of one more lesson will close what I have to say on the subject of reading. The class, consisting of young lads, belonged to a Burger school, which they were just about leaving. They had been reading a poem of Schiller, — a sort of philosophical allegory, — and, when it was completed, the teacher called upon one of them to give a popular exposition of the meaning of the piece. The lad left his seat, stepped to the teacher's desk, and, standing in front of the school, occupied about fifteen or twenty minutes in an extemporaneous account of the poem, and what he supposed to be its meaning and moral.

ARITHMETIC AND MATHEMATICS.

Children are taught to cipher, or, if need be, to count, soon after entering school. I will attempt to describe a lesson which I saw given to a very young class. Blocks of one cube, two cubes, three cubes, &c., up to a block of ten cubes, lay upon the teacher's desk. The cubes on each block were distinctly marked off, and differently colored, — that is, if the first inch or cube was white, the next would be black. The teacher stood by his desk, and in front of the class. He set up a block of one cube, and the class simultaneously said *one*. A block of two cubes was then placed by the side of the first, and the class said *two*. This was done until the ten blocks stood by the side of each other in a row. They were then counted backwards, the teacher placing his finger upon them, as a sig-

nal that their respective numbers were to be called. The next exercise was, "Two comes after one, three comes after two," and so on to ten; and then backwards, "Nine comes before ten, eight comes before nine;" and so of the rest. The teacher then asked, "What is three composed of?"

A. Three is composed of one and two.

Q. Of what else is three composed?

A. Three is composed of three ones.

Q. What is four composed of?

A. Four is composed of four ones, of two and two, of three and one.

Q. What is five composed of?

A. Five is composed of five ones, of two and three, of two twos and one, of four and one.

Q. What numbers compose six? seven? eight? nine? To the latter the pupil would answer, "Three threes make nine; two, three, and four make nine; two, two, and five make nine; three, four, and two make nine; three, five, and one make nine," &c. The teacher then placed similar blocks side by side, while the children added their respective numbers together, "two twos make four," "three twos make six," &c. The blocks were then turned down horizontally to show that three blocks of two cubes each were equal to one of six cubes. Such questions were then asked as, "How many are six less than eight? five less than seven?" &c. Then, "How many are seven and eight?" The answer was given thus: "Eight is one more than seven; seven and seven make fourteen, and one added makes fifteen: therefore eight and seven make fifteen."

Q. How many are six and eight?

A. Eight are two more than six; six and six make twelve, and two added make fourteen. Or it might be thus: Six are two less than eight; eight and eight are sixteen; two taken from sixteen leave fourteen; therefore eight and six are fourteen. They then counted up to a hundred on the blocks. Towards the close of the lesson, such questions as these were put, and readily answered: "Of what is thirty-eight composed?"

A. Thirty-eight is composed of thirty and eight ones, of seven fives and three ones; or sometimes thus, — of thirty-seven and one, of thirty-six and two ones, of thirty-five and three ones, &c.

Q. Of what is ninety composed?

A. Ninety is composed of nine tens, of fifty and forty, &c.

Thus, with a frequent reference to the blocks to keep up attention by presenting an object to the eye, the simple numbers were handled and transposed in a great variety of ways. In this lesson, it is obvious that counting, numeration, addition, subtraction, multiplication, and division were all included; yet there was no abstract rule or unintelligible form of words given out to be committed to memory. Nay, these little children took the first steps in the mensuration of superficies and solids by comparing the length and contents of one block with those of others.

When the pupils were a little farther advanced, I usually heard lessons recited in this way: Suppose 4321 are to be multiplied by 25.* The pupil says, five times one are five ones, and he sets down 5 in the unit's place; five times two tens, or twenty ones, are a hundred, and sets down a 0 in the ten's place; five times three hundred are one thousand and five hundred, and one hundred to be carried make one thousand six hundred, and sets down a 6 in the hundred's place; five times four thousand are twenty thousand, and one thousand to be carried make twenty-one thousand. The next figure in the multiplier is then taken, — twenty times one are twenty, and a 2 is set down in the ten's place; twenty times two tens are four hundred, and a 4 is set down in the hundred's place; twenty times three hundred are six thousand, and a 6 is set down in the thousand's place; twenty times four thou-

* Thus:
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  4321
    25
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 21605
 8642
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108025
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sand are eighty thousand, and an 8 is set down in the ten thousand's place. Then come the additions to get the product. Five ones are five, two tens are twenty, and these figures are respectively set down; four hundred and six hundred make a thousand, and a 0 is set down in the hundred's place; one thousand to be carried to six thousand makes seven thousand, and one thousand more makes eight thousand, and an 8 is set down in the thousand's place; eighty thousand and twenty thousand make one hundred thousand, and a 0 is set down in the ten thousand's place, and a 1 in the hundred thousand's place. It is easy to see, that, where the multiplier and multiplicand are large, this process soon passes beyond mere child's play.

So in division. If 32756 are to be divided by 75, the pupil says, How many hundred times are seventy-five, or seventy-five ones, contained in thirty-two thousand and seven hundred, or in thirty-two thousand and seven hundred ones? — four hundred times; and he sets down a 4 in the hundred's place in the quotient; then the divisor seventy-five is multiplied (as before) by the four hundred, and the product is set down under the first three figures of the dividend; and there are two thousand and seven hundred remaining. This remainder is set down in the next line, because seventy-five is not contained in two thousand seven hundred any number of hundred times. And so of the residue of the process.

When there is danger that an advanced class will forget the value of the denominations they are handling, they are required to express the value of each figure in full throughout the whole process, in the manner above described.

I shall never forget the impression which a recitation by a higher class of girls produced upon my mind. It lasted an hour. Neither teacher nor pupil had book or slate. Questions and answers were extemporaneous. They consisted of problems in Vulgar Fractions, simple and compound; in the Rule of Three, Practice, Interest, Discount, &c. A few of the first were simple; but they soon increased in complication and diffi-

culty, and in the amount of the sums managed, until I could hardly credit the report of my own senses, so difficult were the questions, and so prompt and accurate the replies.

A great many of the exercises in arithmetic consisted in reducing the coins of one State to those of another. In Germany, there are almost as many different currencies as there are States; and the expression of the value of one coin in other denominations is a very common exercise.

It struck me that the main differences between their mode of teaching arithmetic and ours consist in their beginning earlier, continuing the practice in the elements much longer, requiring a more thorough analysis of all questions, and in not separating the processes, or rules, so much as we do from each other. The pupils proceed less by rule, more by an understanding of the subject. It often happens to our children, that, while engaged in one rule, they forget a preceding. Hence many of our best teachers have frequent reviews. But there, as I stated above, the youngest classes of children were taught addition, subtraction, multiplication, and division, promiscuously. And so it was in the later stages. The mind was constantly carried along, and the practice enlarged in more than one direction. It is a difference which results from teaching, in the one case, from a book; and, in the other, from the head. In the latter case, the teacher sees what each pupil most needs, and, if he finds any one halting or failing on a particular class of questions, plies him with questions of that kind until his deficiencies are supplied.

In algebra, trigonometry, surveying, geometry, &c., I invariably saw the teacher standing before the blackboard, drawing the diagrams, and explaining all the relations between their several parts, while the pupils in their seats, having a pen and a small manuscript book, copied the figures, and took down brief heads of the solution; and at the next recitation they were required to go to the blackboard, draw the figures and solve the problems themselves. How different this mode of hearing a lesson from that of holding the text-book in the left

hand, while the fore-finger of the right carefully follows the printed demonstration, under penalty, should the place be lost, of being obliged to recommence the solution!

GRAMMAR AND COMPOSITION.

Great attention is paid to grammar, or, as it is usually called in the plan of studies, the German language. But I heard very little of the ding-dong and recitative of gender, number, and case, of government and agreement, which make up so great a portion of the grammatical exercises in our schools, and which the pupils are often required to repeat until they really lose all sense of the original meaning of the terms they use. Of what service is it for children to re-iterate and re-assert, fifty times in a single recitation, the gender and number of nouns, about which they never made a mistake even before a grammar book was put into their hands? If the object of grammar is to teach children to speak and write their native language with propriety, then they should be practised upon expressing their own ideas with elegance, distinctness, and force. For this purpose, their common every-day phraseology is first to be attended to. As their speech becomes more copious, they should be led to recognize those slight shades of distinction which exist between words almost synonymous; to discriminate between the literal and the figurative; and to frame sentences in which the main idea shall be brought out conspicuously and prominently, while all subordinate ones — mere matters of circumstance or qualification — shall occupy humbler or more retired positions. The sentences of some public speakers are so arranged, that what is collateral or incidental stands out boldly in the foreground, while the principal thought is almost lost in the shade, — an arrangement as preposterous as if in the senate-chamber, the forum, or the parade-ground, the president, the judge, or the commanding officer, were thrust into the rear, while a nameless throng of non-officials and *incognitos* should occupy the places of dignity and

authority. Grammar should be taught in such a way as to lead out into rhetoric as it regards the form of the expression, and into logic as it regards the sequence and coherency of the thoughts. If this is so, then no person is competent to teach grammar who is not familiar, at least, with all the leading principles of rhetoric and logic.

The Prussian teachers, by their constant habit of conversing with the pupils; by requiring a complete answer to be given to every question; by never allowing a mistake in termination or in the collocation of words or clauses to pass uncorrected, nor the sentence, as corrected, to pass unrepeated; by requiring the poetry of the reading-lessons to be changed into oral or written prose, and the prose to be paraphrased, or expressed in different words; and by exacting a general account or summary of the reading-lessons, — are, as we may almost literally say, constantly teaching grammar, or, as they more comprehensively call it, the German language. It is easy to see that composition is included under this head; the writing of regular "essays" or "themes" being only a later exercise.

Professor Stowe gives the following account of the manner of teaching and explaining the different parts of speech: —

"Grammar is taught directly and scientifically, yet by no means in a dry and technical manner. On the contrary, technical terms are carefully avoided, till the child has become familiar with the nature and use of the things designated by them, and he is able to use them as the names of ideas which have a definite existence in his mind, and not as awful sounds dimly shadowing forth some mysteries of science into which he has no power to penetrate.

"The first object is to illustrate the different parts of speech, such as the noun, verb, adjective, adverb; and this is done by engaging the pupil in conversation, and leading him to form sentences in which the particular part of speech to be learned shall be the most important word, and directing his attention to the nature and use of the word in the place where he uses it. For example, let us suppose the nature and use of the ad-

verb is to be taught: the teacher writes upon the blackboard the words *here*, *there*, *near*, &c. He then says, 'Children, we are all together in this room. By which of the words on the blackboard can you express this?'

"*Children.* 'We are all *here*.'

"*Teacher.* 'Now look out of the window, and see the church. What can you say of the church with the second word on the blackboard?'

"*Children.* 'The church is *there*.'

"*Teacher.* 'The distance between us and the church is not great: how will you express this by a word on the blackboard?'

"*Children.* 'The church is *near*.' The fact that these different words express the same sort of relations is then explained, and, accordingly, that they belong to the same class, or are the same part of speech. The variations of these words are next explained.

"*Teacher.* 'Children, you say the church is near; but there is a shop between us and the church: what will you say of the shop?'

"*Children.* 'The shop is *nearer*.'

"*Teacher.* 'But there's a fence between us and the shop. Now, when you think of the distance between us, the shop, and the fence, what will you say of the fence?'

"*Children.* 'The fence is *nearest*.' So of other adverbs. The lark sings *well*. Compare the singing of the lark with that of the canary-bird. Compare the singing of the nightingale with that of the canary-bird."

I heard excellent lessons on the different meanings which roots, or primitive words, assume, when used with different affixes or suffixes. An analogous lesson in our language would consist in giving the meanings of the different words which come from one root in the Latin; as, *convene*, *intervene*, *prevent*, *event*, *advent*, &c.; or *accede*, *recede*; *succeed*, *exceed*, *proceed*, *secede*, *precede*, *intercede*, &c.

WRITING AND DRAWING.

Such excellent hand-writing as I saw in the Prussian schools I never saw before. I can hardly express myself too strongly on this point. In Great Britain, France, or in our own country, I have never seen any schools worthy to be compared with theirs in this respect. I have before said that I found all children provided with a slate and pencil, and writing or printing letters, and beginning with the elements of drawing, either immediately or very soon after they entered school. This furnishes the greater part of the explanation of their excellent hand-writing. A part of it, I think, should be referred to the peculiarity of the German script, which seems to me to be easier than our own. But, after all due allowance is made for this advantage, a high degree of superiority over the schools of other countries remains to be accounted for. This superiority cannot be attributed in any degree to a better manner of holding the pen; for I never saw so great a proportion of cases in any schools where the pen was so awkwardly held. This excellence must be referred, in a great degree, to the universal practice of learning to draw contemporaneously with learning to write. I believe a child will learn both to draw and to write sooner and with more ease than he will learn writing alone; and for this reason, — the figures or objects contemplated and copied in learning to draw are larger, more marked, more distinctive one from another, and more sharply defined with projection, angle, or curve, than the letters copied in writing. In drawing, there is more variety; in writing, more sameness. Now, the objects contemplated in drawing, *from their nature*, attract attention more readily, impress the mind more deeply, and, of course, will be more accurately copied, than those in writing. And when the eye has been trained to observe, to distinguish, and to imitate, in the first exercise, it applies its habits with great advantage to the second.

Another reason is, that the child is taught to draw things with which he is familiar, which have some significance, and

give him pleasing ideas. But a child who is made to fill page after page with rows of straight marks, that look so blank and cheerless, though done ever so well, has and can have no pleasing associations with his work. The practice of beginning with making inexpressive marks, or with writing unintelligible words, bears some resemblance, in its lifelessness, to that of learning the alphabet. Each exhales torpor and stupidity to deaden the vivacity of the worker.

Again: I have found it an almost universal opinion with teachers of the art of writing, that children should commence with large hand rather than with fine. The reason for this I suppose to be, that, where the letters themselves are larger, their differences and peculiarities are proportionally larger; hence they can be more easily discriminated, and discrimination must necessarily precede exact copying. So to speak, the child becomes acquainted with the physiognomy of the large letters more easily than with that of the small. Besides, the formation of the larger gives more freedom of motion to the hand. Now, in these respects, there is more difference between the objects used in drawing and the letters of a large hand than between the latter and fine hand; and therefore the argument in favor of a large hand applies with still more force in favor of drawing.

In the course of my tour, I passed from countries where almost every pupil in every school could draw with ease, and most of them with no inconsiderable degree of beauty and expression, to those where less and less attention was paid to the subject; and, at last, to schools where drawing was not practised at all: and, after many trials, I came to the conclusion that, with no other guide than a mere inspection of the copy-books of the pupils, I could tell whether drawing were taught in the school or not; so uniformly superior was the hand-writing in those schools where drawing was taught in connection with it. On seeing this, I was reminded of that saying of Pestalozzi, — somewhat too strong, — that, "without drawing, there can be no writing."

But suppose it were otherwise, and that learning to draw retarded the acquisition of good penmanship, how richly would the learner be compensated for the sacrifice! Drawing, of itself, is an expressive and beautiful language. A few strokes of the pen or pencil will often represent to the eye what no amount of words, however well chosen, can communicate. For the master-architect, for the engraver, the engineer, the pattern-designer, the draughtsman, moulder, machine-builder, or head mechanic of any kind, all acknowledge that this art is essential and indispensable. But there is no department of business or condition in life where the accomplishment would not be of utility. Every man should be able to plot a field, to sketch a road or a river, to draw the outlines of a simple machine, a piece of household furniture or a farming utensil, and to delineate the internal arrangement or construction of a house.

But to be able to represent by lines and shadows what no words can depict is only a minor part of the benefit of learning to draw. The study of this art develops the talent of observing even more than that of delineating. Although a man may have but comparatively few occasions to picture forth what he has observed, yet the power of observation should be cultivated by every rational being. The skilful delineator is not only able to describe far better what he has seen, but he sees twice as many things in the world as he would otherwise do. To one whose eye has never been accustomed to mark the form, color, or peculiarities of objects, all external Nature is enveloped in a haze, which no sunshine, however bright, will ever dissipate. The light which dispels this obscurity must come from within. Teaching a child to draw, then, is the development in him of a new talent, — the conferring upon him, as it were, of a new sense, — by means of which he is not only better enabled to attend to the common duties of life, and be more serviceable to his fellow-men, but he is more likely to appreciate the beauties and magnificence of Nature which everywhere reflect the glories of the Creator into his soul. When accompanied by

appropriate instruction of a moral and religious character, this accomplishment becomes a quickener to devotion.

With the inventive genius of our people, the art of drawing would be eminently useful. They would turn it to better account than any other people in the world. We now perform far the greater part of our labor by machinery. With the high wages prevalent amongst us, if such were not the case, our whole community would be impoverished. Whatever advances the mechanic and manufacturing arts, therefore, is especially important here; and whatever is important for men to know, as men, should be learned by children in the schools.

But whatever may be said of the importance of this art, as it regards the community at large, its value to a school-teacher can hardly be estimated.

If the first exercises in reading were taught as they should be; if the squares of the multiplication-table were first to be drawn on the blackboard, and then to be filled up by the pupils as they should see on what reason the progressive increase of the numbers is founded; if geography were taught from the beginning, as it should be, by constant delineations upon the blackboard, — then every teacher, even of the humblest school, ought to be acquainted with the art of linear drawing, and be able to form all the necessary figures and diagrams not only with correctness, but with rapidity. And in teaching navigation, surveying, trigonometry, geometry, &c.; in describing the mechanical powers; in optics, in astronomy, in the various branches of natural philosophy, and especially in physiology, — the teacher who has a command of this art will teach incomparably better and incomparably faster than if he were ignorant of it. I never saw a teacher in a German school make use of a ruler, or any other mechanical aid, in drawing the nicest or most complicated figures. I recollect no instance in which he was obliged to efface a part of a line because it was too long, or to extend it because it was too short. If squares or triangles were to be formed, they came out squares or tri-

angles without any overlapping or deficiency. Here was not only much time gained or saved, but the pupils had constantly before their eyes these examples of celerity and perfectness as models for imitation. No one can doubt how much more correctly, as well as more rapidly, a child's mind will grow in view of such models of ease and accuracy, than if only slow, awkward, and clumsy movements are the patterns constantly held before it.

I saw hand-writing taught in various ways. The most common mode for young children was that of writing on the black-board for their imitation. In such cases, the copy was always beautifully written, and the lesson preceded by instructions and followed by corrections.

Another method which has had some currency in Germany is this: If the mark to be copied is a simple straight line, thus, / /, the teacher says, *one*, *one*, as words of command; and, at each enunciation of the word, the pupils make a mark simultaneously. The teacher accelerates or retards his utterance according to the degree of facility the class has acquired. If the figure to be copied consists of an upward and downward stroke, thus, 7, 7, the teacher says, *one*, *two; one*, *two* (one for the upward, the other for the downward motion of the hand); at first slowly, afterwards more rapidly. When the figure consists of three strokes, thus, ı, he pronounces *one*, *two*, *three*, as before. Letters are formed in the same way.

A supposed advantage of this method consists in its retarding the motions of those who would otherwise write too fast, and hastening those who would write too slow. But, for these purposes, the teacher must see that all keep time, otherwise the advantage is lost. And, on the whole, there is so much difference between the natural quickness of perception and of motion in different pupils, that there can be no such thing as a universal standard. Some scholars, whose thoughts and muscles are of electric speed, would be embarrassed by being obliged to write slowly; and others could not keep step, though the music played only common time. Neither in their physical nor in

their spiritual natures does the speed of children seem to have been graduated by any one clock.

The best method which I have ever seen of teaching penmanship to large scholars was that practised by Professor Newman, at the Normal School in Barre.*

In the schools I saw, orthography, punctuation, and the use of capitals, were early connected with the exercise of writing.

GEOGRAPHY.

In describing the manner in which geography was taught, I must use discrimination; for, in some respects, it was taught imperfectly, in others pre-eminently well.

The practice seemed to be uniform, however, of beginning with objects perfectly familiar to the child, — the schoolhouse with the grounds around it, the home with its yards or gardens, and the street leading from the one to the other. First of all, the children were initiated into the ideas of space, without which we can know no more of geography than we can of history without ideas of time. Mr. Carl Ritter of Berlin — probably the greatest geographer now living — expressed a decided opinion to me, that this was the true mode of beginning.

Children, too, commence this study very early, — soon after entering school, — but no notions are given them which they are not perfectly able to comprehend, reproduce, and express.

I found geography taught almost wholly from large maps suspended against the walls, and by delineations on the blackboard. And here the skill of teachers and pupils in drawing did admirable service. The teacher traced the outlines of a country on the suspended map, or drew one upon the blackboard, accompanying the exhibition by an oral lecture; and, at the next recitation, the pupils were expected to repeat what they had seen and heard. And in regard to the natural divisions of the earth, or the political boundaries of countries, a pupil was not considered as having given any proof that he

* See Common-school Journal, 2d vol., p. 345.

had a correct image in his mind, until he could go to the black-board, and reproduce it from the ends of his fingers. I witnessed no lesson unaccompanied by these tests.

I will describe, as exactly as I am able, a lesson which I heard given to a class a little advanced beyond the elements; remarking, that, though I heard many lessons given on the same plan, none of them were signalized by the rapidity and effect of the one I am about to describe.

The teacher stood by the blackboard, with the chalk in his hand. After casting his eye over the class to see that all were ready, he struck at the middle of the board. With a rapidity of hand which my eye could hardly follow, he made a series of those short, divergent lines, or shadings, employed by map-engravers to represent a chain of mountains. He had scarcely turned an angle, or shot off a spur, when the scholars began to cry out, "Carpathian Mountains, Hungary; Black-forest Mountains, Wurtemberg; Giant's Mountains (Riesen-Gebirge), Silesia; Metallic Mountains (Erz-Gebirge), Pine Mountains (Fichtel-Gebirge), Central Mountains (Mittel-Gebirge), Bohemia," &c.

In less than half a minute, the ridge of that grand central elevation which separates the waters that flow north-west into the German Ocean from those that flow north into the Baltic, and south-east into the Black Sea, was presented to view, — executed almost as beautifully as an engraving. A dozen crinkling strokes, made in the twinkling of an eye, represented the head-waters of the great rivers which flow in different directions from that mountainous range; while the children, almost as eager and excited as though they had actually seen the torrents dashing down the mountain-sides, cried out, "Danube, Elbe, Vistula, Oder," &c. The next moment I heard a succession of small strokes, or taps, so rapid as to be almost indistinguishable; and hardly had my eye time to discern a large number of dots made along the margins of the rivers, when the shout of "Lintz, Vienna, Prague, Dresden, Berlin," &c., struck my ear. At this point in the exercise, the spot which

had been occupied on the blackboard was nearly a circle, of which the starting-point, or place where the teacher first began, was the centre; but now a few additional strokes around the circumference of the incipient continent extended the mountain ranges outwards towards the plains, — the children responding the names of the countries in which they respectively laid. With a few more flourishes, the rivers flowed onwards towards their several terminations; and, by another succession of dots, new cities sprang up along their banks. By this time, the children had become as much excited as though they had béen present at a world-making. They rose in their seats, they flung out both hands, their eyes kindled, and their voices became almost vociferous as they cried out the names of the different places, which, under the magic of the teacher's crayon, rose into view. Within ten minutes from the commencement of the lesson, there stood upon the blackboard a beautiful map of Germany, with its mountains, principal rivers and cities, the coast of the German Ocean, the Baltic and the Black Seas; and all so accurately proportioned, that I think only slight errors would have been found, had it been subjected to the test of a scale of miles. A part of this time was taken up in correcting a few mistakes of the pupils; for the teacher's mind seemed to be in his ear as well as in his hand; and, notwithstanding the astonishing celerity of his movements, he detected erroneous answers, and turned round to correct them. The rest of the recitation consisted in questions and answers respecting productions, climate, soil, animals, &c.

Many of the cosmogonists suppose, that after the creation of the world, and when its whole surface was as yet fluid, the solid continents rose gradually from beneath the sea; first the loftiest peaks of the Andes, for instance, emerged from the deep, and, as they reached a higher and a higher point of elevation, the rivers began to flow down their sides, until, at last, — the lofty mountains having attained their height, the mighty rivers their extent and volume, and the continent its amplitude, — cultivation began, and cities and towns were built. The lesson

I have described was a beautiful illustration of that idea, with one advantage over the original scene itself, — that the spectator had no need of waiting through all the geological epochs to see the work completed.

Compare the effect of such a lesson as this, both as to the amount of the knowledge communicated, and the vividness, and of course the permanence, of the ideas obtained, with a lesson where the scholars look out a few names of places on a lifeless atlas, but never send their imaginations abroad over the earth; and the teacher sits listlessly down before them to interrogate them from a book, in which all the questions are printed at full length, to supersede on his part all necessity of knowledge.

Thoroughly and beautifully as I saw some departments of geography taught in the common schools of Prussia, traced out into their connections with commerce, manufactures, and history, I found but few of this class of schools in which *universal* geography could, with any propriety, be considered as a part of the course. The geography of their own country was minutely investigated. That of the western hemisphere was very little understood. But this should be said, that, as far as they professed to teach, they taught thoroughly and well.*

* The Germans seem to me to be the best map-engravers in the world. Their maps are at once beautiful and cheap. To show to what an extraordinary length they have gone in representing the results of science to the eye, I subjoin the titles of several maps which have been prepared by that distinguished artist, Professor Berghaus of Potsdam.

Map illustrating the diffusion of heat over the surface of Europe.

Map of the Atlantic Ocean, showing the currents, the great commercial thoroughfares, the diffusion of heat, banks, and portions of the bottom of the sea, &c.

Map of the Pacific Ocean, its currents, thoroughfares, and temperature.

Map representing the lines of equal intensity of magnetic power (isodynamic lines), according to the observations made between 1790 and 1830.

Map of Humboldt's system of isothermal curves.

Map of tides.

Map of the German Ocean, with the neighboring parts of the Atlantic, its tides, and the state of the bed of the sea.

Map of the volcanic bands, and the central groups of the Pacific.

Map. — Sketch of the geographical distribution of plants. Spread of plants in a perpendicular direction. Principal circumstances affecting the spread of vegetation. Relative curves of monocotyledonous and dicotyledonous plants on the

EXERCISES IN THINKING. — KNOWLEDGE OF NATURE. — KNOWLEDGE OF THE WORLD. — KNOWLEDGE OF SOCIETY.

In the "Study-Plans" of all the schools in the north of Prussia, I found most, and, in some of them, all, of the above

Swiss Alps. Graphic statistics of partieular families of plants. Outlines of some forms of plants.

Map of isothermal curves of the northern hemisphere.

Map. — General view of mean barometrieal heights near the seashore, and the variation of the weight of the atmosphere.

Map of German rivers, — the Rhine, Elbe, and Oder.

Map. — View of the distribution of the solid and fluid parts of the earth; also of the variety iu the form of surfaee, &e.

Map of isodyuamic lines in the horizontal projeetion, for the average point of the meridian of Paris, and of the parallels 60° of north and south latitude.

Map of the mean of the temperature upon the whole earth, founded upon observations in three hundred and seven plaees. Graphie deseription of the eourse of temperature, for daily and yearly periods, in all zones.

Map. — Currents of air on the North Atlantic Ocean to the western part of the Old and to the easteru part of the New World.

Map. — Hydro-historie survey of the state of the Oder in the half-century from 1781 to 1830.

Map. — Survey of the spread of the most important cultivable trees and shrubs, &c.

Map of the volcanic appearances of the Old World in and around the Atlantic Ocean.

Map of the "speeialia" of the voleanie band of the Atlantie Ocean.

Map. — Cireles of the spread of the most important eultivable growths, and also a notiee of the course of the isotheren and isoehimeneu (*or places which show the same degree of heat in summer and of cold in winter*).

Map of the tabular representation of the statisties of the vegetable kingdom in Europe.

Map. — Botanie, geographie, statistic map of Europe.

Map of winds for all the earth.

Map, physical, of the Indian Oeean.

Map of the voleanie kingdom of Guatimala, the Isthmus of Tehuantepee, Nicaragua, and Panama, and the eentral volcano of the Southern Ocean.

Map of the variations of the magnetic meridians and parallels, &e.

Map. — Survey of the proportions of rain in Europe.

Map. — Survey of the meteorological stations in Germany, Switzerland, the Netherlands, &e.

Map of the ideal profile of a part of the earth's rind with the plants and animals drawn by Joseph Fisher, aeeording to the seleetion aud arrangement of Dr. Buckland.

Map. — Botanic map of Germany, eontaining statistics of the most distinguished families of plants.

Map. — Hyetographic (*description of rain*) map of the earth.

Map. — Hyelomarisch (*denoting the quantity of dampness in the atmosphere*) observations.

subjects of lessons. To each was assigned its separate hour and place in the routine of exercises. For brevity's sake, however, and because the topics naturally run into each other, I shall attempt to describe them together.

These lessons consisted of familiar conversations between teacher and pupils, on subjects adapted to the age, capacities, and proficiency of the latter. With the youngest classes, things immediately around them, — the schoolroom, and the materials of which it had been built; its different parts, as foundation, floor, walls, ceiling, roof, windows, doors, fire-place; its furniture and apparatus; its books, slates, paper; the clothes of the pupils, and the materials from which they were made; their food and playthings; the duties of children to animals, to each other, to their parents, neighbors, to the old, to their Maker, — these are specimens of a vast variety of subjects embraced under one or another of the above heads. As the children advanced in age and attainments, and had acquired full and definite notions of the visible and tangible existences around them, and also of time and space, so that they could understand descriptions of the unseen and the remote, the scope of these lessons was enlarged, so as to take in the different kingdoms of Nature, the arts, trades, and occupations of men, and the more complicated affairs of society.

When visiting the schools in Leipsic, I remarked to the superintendent, that most accomplished educationist, Dr. Vogel, that I did not see on the "Study-Plan" of his schools the title "Exercises in Thinking." His reply was, "No; for I con-

Map. — The warm currents of the Atlantic and the cold stream of the Pacific, in parallels represented according to geographical situation and extent.

Map of Asia and Europe in reference to running waters, and their distribution into river-basins (Gebiete).

Map. — Comparative survey of the state of the Rhine, the Weser, the Elbe, and the Oder, from 1831 to 1840.

Map. — Geographic extent of thunder-storms in Europe.

Map. — River-basins of the New World.

Map. — Maelstrom, &c.

Map. — Mountain-chains in Asia and Europe.

Map. — Great mountain system of Europe.

Map. — Mountain-chains in North America.

sider it a *sin* in any teacher not to lead his pupils to think in regard to all the subjects he teaches." He did not call it an omission, or even a disqualification, in a teacher, if he did not awaken thought in the minds of his pupils; but he peremptorily denounced it as a "*sin.*" "Alas!" thought I, "what expiation will be sufficient for many of us who have had charge of the young!"

It is obvious, from the account I have given of these primary lessons, that there is no restriction as to the choice of subjects, and no limits to the extent of information that may be ingrafted upon them. What more natural than that a kind teacher should attempt to gain the attention and win the good-will of an active, eager-minded boy just entering his school, by speaking to him about the domestic animals which he plays with, or tends at home? — the dog, the cat, the sheep, the horse, the cow. Yet, without any interruption or overleaping of natural boundaries, this simple lesson may be expanded into a knowledge of all quadrupeds, their characteristics and habits of life, the uses of their flesh, skins, fur, bones, horns or ivory, the parts of the world where they live, &c. So if a teacher begins to converse with a boy about domestic fowls, there is no limit, save in his own knowledge, until he has exhausted the whole subject of ornithology, — the varieties of birds, their plumage, their uses, their migratory habits, &c. What more natural than that a benevolent teacher should ask a blushing little girl about the flowers in her vases or garden at home? and yet, this having been done, the door is opened that leads to all botanical knowledge, — to the flowers of all the seasons and all the zones, to the trees cultivated by the hand of man, or the primeval forests that darken the face of continents. Few children go to school who have not seen a fish, — at least a minnow in a pool. Begin with this, and Nature opposes no barrier until the wonders of the deep are exhausted. Let the schoolhouse, as I said, be the first lesson; and, to a mind replenished with knowledge, not only all the different kinds of edifices — the dwelling-house, the church, the court-house, the

palace, the temple — are at once associated, but all the different orders of architecture — Corinthian, Ionic, Doric, Egyptian, Gothic, &c. — rise to the view. How many different materials have been brought together for the construction of the schoolhouse! — stone, wood, nails, glass, bricks, mortar, paints, materials used in glazing, &c. Each one of these belongs to a different department of Nature; and, when an accomplished teacher has once set foot in any one of these provinces, he sees a thousand interesting objects around him, as it were, soliciting his attention. Then each one of these materials has its artificer; and thus all the mechanical trades may be brought under consideration, — the house-builder's, the mason's, the plumber's, the glazier's, the locksmith's, &c. A single article may be viewed under different aspects, — as, in speaking of a lock, one may consider the nature and properties of iron, its cohesiveness, malleability, &c., its utility, or the variety of utensils into which it may be wrought; or the conversation may be turned to the particular object and uses of the lock, and upon these a lesson on the rights of property, the duty of honesty, the guilt of theft and robbery, &c., be ingrafted. So, in speaking of the beauties and riches and wonders of Nature, — of the revolution of the seasons, the glory of spring, the exuberance of autumn, the grandeur of the mountain, the magnificence of the firmament, — the child's mind may be turned to a contemplation of the power and goodness of God. I found these religious aspects of Nature to be most frequently adverted to, and was daily delighted with the reverent and loving manner in which the name of the Deity was always spoken: "*Der liebe Gott*," "The *dear* God," was the universal form of expression; and the name of the Creator of heaven and earth was hardly ever spoken without this epithet of endearment.

It is easy also to see that a description of the grounds about the schoolhouse or the paternal mansion, and of the road leading from one of these places to the other, is the true starting-point of all geographical knowledge; and, this once begun, there is no terminus, until all modern and ancient geography,

and all travels and explorations by sea and land, are exhausted. So the boy's nest of marbles may be the nucleus of all mineralogy; his top, his kite, his little wind-wheel or water-wheel, the salient point of all mechanics and technology; and the stories he has heard about the last king or the aged king, the first chapter in universal history.

I know full well that the extent and variety of subjects said to be taught to young children in the Prussian schools have been often sneered at.

In a late speech, made on a public occasion, by one of the distinguished politicians in our country, the idea of teaching the natural sciences in our common schools was made a theme for ridicule. Let it be understood in what manner an accomplished teacher may impart a great amount of useful knowledge on these subjects, and perhaps awaken minds which may hereafter adorn the age, and benefit mankind by their discoveries, and it will be easily seen to which party the ridicule most justly attaches. "What," say the objectors, "teach children botany, and the unintelligible and almost unspeakable names, monandria, diandria, triandria, &c.? or zoölogy, with such technical terms as mollusca, crustacea, vertebrata, mammalia, &c.? the thing is impossible!" The Prussian children are not thus taught. For years, their lessons are free from all the technicalities of science. The knowledge they already possess about common things is made the nucleus around which to collect more; and the language with which they are already familiar becomes the medium through which to communicate new ideas, and by which, whenever necessary, to explain new terms. There is no difficulty in explaining to a child seven years of age the distinctive marks by which Nature intimates to us, at first sight, whether a plant is healthful or poisonous; or those by which, on inspecting the skeleton of an animal that lived thousands of years ago, we know whether it lived upon grass or grain or flesh. It is in this way that the pupil's mind is carried forward by an actual knowledge of things, until the time arrives for giving him classifications and nomenclatures.

When a child knows a great many particular or individual things, he begins to perceive resemblances between some of them; and they then naturally assort themselves, as it were, in his mind, and arrange themselves into different groups. Then, by the aid of a teacher, he perfects a scientific classification among them; bringing into each group all that belong to it. But soon the number of individuals in each group becomes so numerous, that he wants a cord to tie them together, or a vessel in which to hold them. Then, from the nomenclature of science, he receives a name which binds all the individuals of that group into one ever afterwards. It is now that he perceives the truth and the beauty of classification and nomenclature. An infant that has more red and white beads than it can hold in its hands, and, to prevent them from rolling about the floor and being lost, collects them together, putting the white in one cup and the red in another, and sits and smiles at its work, has gone through with precisely the same description of mental process that Cuvier and Linnæus did when they summoned the vast varieties of the animal and vegetable kingdoms into their spiritual presence, and commanded the countless hosts to arrange themselves into their respective genera, orders, and species.

Our notions respecting the expediency or propriety of introducing the higher branches, as they are called, into our common schools, are formed from a knowledge of our own school-teachers, and of the habits that prevail in most of the schools themselves. With us, it too often happens, that if a higher branch — geometry, natural philosophy, zoölogy, botany — is to be taught, both teacher and class must have text-books. At the beginning of these text-books, all the technical names and definitions belonging to the subject are set down. These, before the pupil has any practical idea of their meaning, must be committed to memory. The book is then studied, chapter by chapter. At the bottom of each page, or at the ends of the sections, are questions printed at full length. At the recitations, the teacher holds on by these leading-strings. He intro-

duces no collateral knowledge. He exhibits no relation between what is contained in the book and other kindred subjects, or the actual business of men and the affairs of life. At length, the day of examination comes. The pupils rehearse from memory with a suspicious fluency; or being asked for some useful application of their knowledge, some practical connection between that knowledge and the concerns of life, they are silent, or give some ridiculous answer, which at once disparages science, and gratifies the ill-humor of some ignorant satirist. Of course, the teaching of the higher branches falls into disrepute in the minds of all sensible men, as, under such circumstances, it ought to do. But the Prussian teacher has no book. He needs none. He teaches from a full mind. He cumbers and darkens the subject with no technical phraseology. He observes what proficiency the child has made, and then adapts his instructions, both in quality and amount, to the necessity of the case. He answers all questions. He solves all doubts. It is one of his objects at every recitation, so to present ideas that they shall start doubts and provoke questions. He connects the subject of each lesson with all kindred and collateral ones, and shows its relations to the every-day duties and business of life; and should the most ignorant man or the most destitute vagrant in society ask him "of what use such knowledge can be," he will prove to him, in a word, that some of his own pleasures or means of subsistence are dependent upon it, or have been created or improved by it.

In the mean time, the children are delighted. Their perceptive powers are exercised. Their reflecting faculties are developed. Their moral sentiments are cultivated. All the attributes of the mind within find answering qualities in the world without. Instead of any longer regarding the earth as a huge mass of dead matter, without variety and without life, its beautiful and boundless diversities of substance, its latent vitality and energies, gradually dawn forth, until, at length, they illuminate the whole soul, challenging its admiration for their utility, and its homage for the bounty of their Creator.

There are other points pertaining to the qualification of teachers, which would, perhaps, strike a visitor or spectator more strongly than the power of giving the kind of lessons I have described; but probably there is nothing, which, at the distance of four thousand miles, would give to a reader or hearer so adequate an idea of intelligence and capacity as a full understanding of the scope and character of this class of exercises. Suppose, on the one hand, a teacher to be introduced into a school, who is competent to address children on this great range and variety of subjects, and to address them in such a manner as to arouse their curiosity, command their attention, and supply them not only with knowledge, but with an inextinguishable love for it; suppose such a teacher to be able to give one, and sometimes two such lessons a day, — that is, from two hundred to four hundred lessons in a year, — to the same class, and to carry his classes, in this way, through their eight years' schooling. On the other hand, suppose a young man coming fresh from the plough, the workshop, or the anvil, or, what is no better, from Greek and Latin classics; and suppose his knowledge on the above-enumerated subjects to be divided into four hundred, or even into two hundred parts, and that only one two-hundredth portion of that stock of knowledge should be administered to the children in a day. Let us suppose all this, and we shall have some more adequate idea of the different advantages of children, at the present time, in different parts of the world. In Prussia, the theory, and the practice under it, are, not that three years' study under the best masters qualifies a talented and devoted man to become a teacher, but that three years of such *general* preparation may qualify one for that *particular* and *daily* preparation which is to be made before meeting a class in school. And a good Prussian teacher no more thinks of meeting his classes without this daily preparation than a distinguished lawyer or clergyman amongst ourselves would think of managing a cause before court and jury, or preaching a sermon, without special reading and forethought.

It is easy to see, from the above account, how such a variety of subjects can be taught simultaneously in school, without any interference with each other; nay, that the "common bond," which, as Cicero said, binds all sciences together, should only increase their unity as it enlarges their number.

BIBLE HISTORY AND BIBLE KNOWLEDGE.

Nothing receives more attention in the Prussian schools than the Bible. It is taken up early, and studied systematically. The great events recorded in the Scriptures of the Old and New Testament; the character and lives of those wonderful men, who, from age to age, were brought upon the stage of action, and through whose agency the future history and destiny of the race were to be so much modified; and especially those sublime views of duty and of morality which are brought to light in the gospel, — these are topics of daily and earnest inculcation in every school. To these, in some schools, is added the history of the Christian religion, in connection with contemporary civil history. So far as the Bible lessons are concerned, I can ratify the strong statements made by Professor Stowe in regard to the absence of sectarian instruction, or endeavors at proselytism. The teacher, being amply possessed of a knowledge of the whole chain of events, and of all biographical incidents, and bringing to the exercise a heart glowing with love to man, and with devotion to his duty as a former of the character of children, has no necessity or occasion to fall back upon the formulas of a creed. It is when a teacher has no knowledge of the wonderful works of God, and of the benevolence of the design in which they were created; when he has no power of explaining and applying the beautiful incidents in the lives of prophets and apostles, and, especially, the perfect example which is given to men in the life of Jesus Christ: it is then, that, in attempting to give religious instruction, he is, as it were, constrained to recur again and again to the few words or sentences of his form of faith,

whatever that faith may be; and, therefore, when giving the second lesson, it will be little more than a repetition of the first; and the two-hundredth lesson, at the end of the year, will differ from that at the begiuning, only in accumulated wearisomeness and monotony.

There are one or two facts, however, which Professor Stowe has omitted to mention, and without a knowledge of which, one would form very erroneous ideas respecting the character of some of the religious instruction in the Prussian schools. In all the Protestant schools, Luther's Catechism is regularly taught; and, iu all the Roman-Catholic schools, the catechism of that communion. Wheu the schools are mixed, they have combined literary with separate religious instruction; and here all the doctrines of the respective denominations are taught early and most assiduously. I well remember hearing a Roman-Catholic priest inculcating upon a class of very young children the doctrine of transubstantiation. He illustrated it by the miracle of the water changed to wine at the marriage-feast iu Cana, and said that He who could turn water into wine could turu his own blood into the same element, and also his body into bread to be eaten with it. Contrary, then, to the principles of our own law, sectarianism is taught in all Prussian schools; but it is nevertheless true, as Professor Stowe says, that the Bible can be taught, and is taught, without it.

MUSIC.

All Prussian teachers are masters not only of vocal, but of instrumental music. One is as certain to see a violin as a blackboard in every schoolroom. Generally speaking, the teachers whom I saw, played upon the organ also, and some of them upon the piano and other instruments. Music was not only taught in school as au accomplishment, but used as a recreation. It is a moral means of great efficacy. Its practice promotes health; it disarms anger, softens rough and turbulent natures, socializes, and brings the whole mind, as it were, into

a state of fusion, from which condition the teacher can mould it into what forms he will, as it cools and hardens.

Were it not that this Report is extending to so great a length, I should say much more on the advantages of teaching music in all our schools.

All the subjects I have enumerated were taught in all the schools I visited, whether in city or country, for the rich or for the poor. In the lowest school in the smallest and obscurest village, or for the poorest class in over-crowded cities; in the schools connected with pauper establishments, with houses of correction, or with prisons, — in all these, there was a teacher *of mature age*, of simple, unaffected, and decorous manners, benevolent in his expression, kind and genial in his intercourse with the young, and of such attainments and resources as qualified him not only to lay down the abstract principles of the above range of studies, but, by familiar illustration and apposite example, to commend them to the attention of the children.

I speak of the teachers whom I saw, and with whom I had more or less of personal intercourse; and, after some opportunity for the observation of public assemblies or bodies of men, I do not hesitate to say, that, if those teachers were brought together in one body, I believe they would form as dignified, intelligent, benevolent-looking a company of men as could be collected from the same amount of population in any country. They were alike free from arrogant pretension and from the affectation of humility. It has been often remarked, both in England and in this country, that the nature of a school-teacher's occupation exposes him, in some degree, to overbearing manners, and to dogmatism in the statement of his opinions. Accustomed to the exercise of supreme authority, moving among those who are so much his inferiors in point of attainment, perhaps it is proof of a very well-balanced mind if he keeps himself free from assumption in opinion, and haughtiness of demeanor. Especially are such faults or vices apt to spring

up in weak or ill-furnished minds. A teacher who cannot rule by love must do so by fear. A teacher who cannot supply material for the activity of his pupils' minds by his talent must put down that activity by force. A teacher who cannot answer all the questions, and solve all the doubts, of a scholar, as they arise, must assume an awful and mysterious air, and must expound in oracles which themselves need more explanation than the original difficulty. When a teacher knows much and is master of his whole subject, he can afford to be modest and unpretending. But when the head is the only text-book, and the teacher has not been previously prepared, he must, of course, have a small library. Among all the Prussian and Saxon teachers whom I saw, there were not half a dozen instances to remind one of those unpleasant characteristics — what Lord Bacon would call the "*idol* of the tribe," or profession — which sometimes degrade the name and disparage the sacred calling of a teacher. Generally speaking, there seemed to be a strong love for the employment, always a devotion to duty, and a profound conviction of the importance and sacredness of the office they filled. The only striking instauce of disingenuousness or attempt at deception which I saw was that of a teacher who looked over the manuscript books of a large class of his scholars, selected the best, and, bringing it to me, said, "In seeing one, you see all."

Whence came this beneficent order of men, scattered over the whole country, moulding the character of its people, and carrying them forward in a career of civilization more rapidly than any other people in the world are now advancing? This is a question which can be answered only by giving an account of the

SEMINARIES FOR TEACHERS.

From the year 1820 to 1830 or 1835, it was customary, in all accounts of Prussian education, to mention the number of these

seminaries for teachers. This item of information has now become unimportant, as there are seminaries sufficient to supply the wants of the whole country. The stated term of residence at these seminaries is three years. Lately, and in a few places, a class of preliminary institutions has sprung up, — institutions where pupils are received in order to determine whether they are fit to become candidates to be candidates. As a pupil of the seminary is liable to be set aside for incompetency, even after a three-years' course of study ; so the pupils of these preliminary institutions, after having gone through with a shorter course, are liable to be set aside for incompetency to become competent.

Let us look for a moment at the guards and securities, which, in that country, environ this sacred calling. In the first place, the teacher's profession holds such a high rank in public estimation, that none who have failed in other employments or departments of business are encouraged to look upon school-keeping as an ultimate resource. Those, too, who, from any cause, despair of success in other departments of business or walks of life, have very slender prospects in looking forward to this. These considerations exclude at once all that inferior order of men, who, in some countries, constitute the main body of the teachers. Then come — though only in some parts of Prussia — these preliminary schools, where those who wish eventually to become teachers go, in order to have their natural qualities and adaptation for school-keeping tested ; for it must be borne in mind that a man may have the most unexceptionable character, may be capable of mastering all the branches of study, may even be able to make most brilliant recitations from day to day, and yet, from some coldness or repulsiveness of manner, from harshness of voice, from some natural defect in his person or in one of his senses, he may be adjudged an unsuitable model or archetype for children to be conformed to, or to grow by ; and hence he may be dismissed at the end of his probationary term of six months. At one of these preparatory schools which I visited, the list of sub-

jects at the examination — a part of which I saw — was divided into two classes, as follows: 1. Readiness in Thinking, German Language, including Orthography and Composition, History, Description of the Earth, Knowledge of Nature, Thorough Bass, Calligraphy, Drawing. 2. Religion, Knowledge of the Bible, Knowledge of Nature, Mental Arithmetic, Singing, Violin-playing, and Readiness or Facility in Speaking.* The examination in all the branches of the first class was conducted in writing. To test a pupil's Readiness in Thinking, for instance, several topics for composition are given out, and, after the lapse of a certain number of minutes, whatever has been written must be handed in to the examiners. So questions in arithmetic are given; and the time occupied by the pupils in solving them is a test of their quickness of thought, or power of commanding their own resources. This facility, or faculty, is considered of great importance in a teacher.† In the second class of subjects, the pupils were examined *orally*. Two entire days were occupied in examining a class of thirty pupils, and only twenty-one were admitted to the seminary school; that is, only about two-thirds were considered to be eligible *to become eligible* as teachers, after three years' further study. Thus, in this first process, the chaff is winnowed out, and not a few of the lighter grains of the wheat.

It is to be understood that those who enter the seminary directly, and without this preliminary trial, have already studied, under able masters in the common schools, at least all the branches I have above described. The first two of the three years they expend mainly in reviewing and expanding their elementary knowledge. The German language is studied

* It was a matter of great surprise to me, that, among the variety of branches taught in the People's Schools, I nowhere found *astronomy* in the number. I know not how to account for the omission of a subject at once so enlarging to the intellect, and so stimulating to devotional feelings.

† The above-described is a very common method of examining in the gymnasia and higher seminaries of Prussia. Certain sealed subjects for an exercise are given to the students: they are then locked up in a room, each by himself, and, at the expiration of a given time, they are called out, and it is seen what each one has been able to make out of his faculties.

in its relations to rhetoric and logic, and as æsthetic literature; arithmetic is carried out into algebra and mixed mathematics; geography, into commerce and manufactures, and into a knowledge of the various botanical and zoölogical productions of the different quarters of the globe; linear drawing, into perspective and machine drawing, and the drawing from models of all kinds, and from objects in Nature, &c. The theory and practice, not only of vocal but of instrumental music, occupy much time. Every pupil must play on the violin; most of them play on the organ, and some on other instruments. I recollect seeing a normal class engaged in learning the principles of harmony. The teacher first explained the principles on which they were to proceed. He then wrote a bar of music upon the blackboard, and called upon a pupil to write such notes for another part or accompaniment as would make *harmony* with the first. So he would write a bar with certain intervals, and then require a pupil to write another, with such intervals, as, according to the principles of musical science, would correspond with the first. A thorough course of reading on the subject of education is undertaken, as well as a more general course. Bible history is almost committed to memory. Connected with all the seminaries for teachers are large model or experimental schools. During the last part of the course, much of the students' time is spent in these schools. At first they go in and look on in silence while an accomplished teacher is instructing a class. Then they themselves commence teaching under the eye of such a teacher. At last they teach a class alone, being responsible for its proficiency, and for its condition as to order, &c., at the end of a week or other period. During the whole course, there are lectures, discussions, compositions, &c., on the theory and practice of teaching. The essential qualifications of a candidate for the office; his attainments, and the spirit of devotion and of religious fidelity in which he should enter upon his work; the modes of teaching the different branches; the motive-powers to be applied to the minds of children; dissertations upon the differ-

ent natural dispositions of children, and consequently the different ways of addressing them, of securing their confidence and affection, and of winning them to a love of learning and a sense of duty; and especially the sacredness of the teacher's profession; the idea that he stands, for the time being, in the place of a parent, and therefore that a parent's responsibilities rest upon him, that the most precious hopes of society are committed to his charge, and that on him depends, to a great extent, the temporal and perhaps the future well-being of hundreds of his fellow-creatures, — these are the conversations, the ideas, the feelings, amidst which the candidate for teaching spends his probationary years. This is the daily atmosphere he breathes. These are the sacred, elevating, invigorating influences constantly pouring in upon his soul. Hence, at the expiration of his course, he leaves the seminary to enter upon his profession, glowing with enthusiasm for the noble cause he has espoused, and strong in his resolves to perform its manifold and momentous duties.

Here, then, is the cause of the worth and standing of the teachers whom I had the pleasure and the honor to see. As a body of men, their character is more enviable than that of either of the three so-called "professions." They have more benevolence and self-sacrifice than the legal or medical, while they have less of sanctimoniousness and austerity, less of indisposition to enter into all the innocent amusements and joyous feelings of childhood, than the clerical. They are not unmindful of what belongs to men while they are serving God, nor of the duties they owe to this world while preparing for another.

On reviewing a period of six weeks, the greater part of which I spent in visiting schools in the north and middle of Prussia and in Saxony (excepting, of course, the time occupied in going from place to place), entering the schools to hear the first recitation in the morning, and remaining until the last was completed at night, I call to mind three things about which I

cannot be mistaken. In some of my opinions and inferences, I may have erred; but, of the following facts, there can be no doubt: —

1. During all this time, I never saw a teacher hearing a lesson of any kind (excepting a reading or spelling lesson) *with a book in his hand.*

2. I never saw a teacher *sitting* while hearing a recitation.

3. Though I saw hundreds of schools, and thousands — I think I may say, within bounds, tens of thousands — of pupils, *I never saw one child undergoing punishment, or arraigned for misconduct. I never saw one child in tears from having been punished, or from fear of being punished.*

During the above period, I witnessed exercises in geography, ancient and modern; in the German language, from the explanation of the simplest words up to belles-lettres disquisitions, with rules for speaking and writing; in arithmetic, algebra, geometry, surveying, and trigonometry; in book-keeping; in civil history, ancient and modern; in natural philosophy; in botany and zoölogy; in mineralogy, where there were hundreds of specimens; in the endless variety of the exercises in thinking; knowledge of Nature, of the world, and of society; in Bible history and in Bible knowledge: and, as I before said, in no one of these cases did I see a teacher with a book in his hand. His book — his books — his library, was in his head. Promptly, without pause, without hesitation, from the rich resources of his own mind, he brought forth whatever the occasion demanded. I remember calling one morning at a country school in Saxony, where every thing about the premises, and the appearance both of teacher and children, indicated very narrow pecuniary circumstances. As I entered, the teacher was just ready to commence a lesson or lecture on French history. He gave not only the events of a particular period in the history of France, bnt mentioned, as he proceeded, all the contemporary sovereigns of neighboring nations. The ordinary time for a lesson, here as elsewhere, was an hour. This was somewhat longer; for, towards the close, the teacher entered

upon a train of thought from which it was difficult to break off, and rose to a strain of eloquence which it was delightful to hear. The scholars were all absorbed in attention. They had paper, pen, and ink before them, and took brief notes of what was said. When the lesson touched upon contemporary events in other nations, — which, as I suppose, had been the subject of previous lessons, — the pupils were questioned concerning them. A small text-book of history was used by the pupils, which they studied at home.

I ought to say, further, that I generally visited schools without guide, or letter of introduction; presenting myself at the door, and asking the favor of admission. Though I had a general order from the minister of Public Instruction, commanding all schools, gymnasia, and universities in the kingdom to be opened for my inspection, yet I seldom exhibited it, or spoke of it, — at least not until I was about departing. I preferred to enter as a private individual and uncommended visitor.

I have said that I saw no teacher sitting in his school: aged or young, all stood. Nor did they stand apart and aloof in sullen dignity. They mingled with their pupils, passing rapidly from one side of the class to the other, animating, encouraging, sympathizing, breathing life into less active natures, assuring the timid, distributing encouragement and endearment to all. The looks of the Prussian teacher often have the expression and vivacity of an actor in a play. He gesticulates like an orator. His body assumes all the attitudes, and his face puts on all the variety of expression, which a public speaker would do if haranguing a large assembly on a topic vital to their interests.

It may seem singular, and perhaps to some almost ludicrous, that a teacher, in expounding the first rudiments of hand-writing, in teaching the difference between a hair-stroke and a ground-stroke, or how an *l* may be turned into a *b*, or a *u* into a *w*, should be able to work himself up into an oratorical fervor; should attitudinize, and gesticulate, and stride from one end of the class to the other, and appear in every way to be

as intensely engaged as an advocate when arguing an important cause to a jury. But, strange as it may seem, it is nevertheless true; and, before five minutes of such a lesson had elapsed, I have seen the children wrought up to an excitement proportionally intense, hanging upon the teacher's lips, catching every word he says, and evincing great elation or depression of spirits as they had or had not succeeded in following his instructions. So I have seen the same rhetorical vehemence on the part of the teacher, and the same interest and animation on the part of the pupils, during a lesson on the original sounds of the letters; that is, the difference between the long and the short sound of a vowel, or the different ways of opening the mouth in sounding the consonants *b* and *p*. This zeal of the teacher enkindles the scholars. He charges them with his own electricity to the point of explosion. Such a teacher has no idle, mischievous, whispering children around him, nor any occasion for the rod. He does not make desolation of all the active and playful impulses of childhood, and call it peace; nor, to secure stillness among his scholars, does he find it necessary to ride them with the nightmare of fear. I rarely saw a teacher put questions with his lips alone. He seems so much interested in his subject (though he might have been teaching the same lesson for the hundredth or five hundredth time), that his whole body is in motion, — eyes, arms, limbs, all contributing to the impression he desires to make; and, at the end of an hour, both he and his pupils come from the work all glowing with excitement.

Suppose a lawyer in one of our courts were to plead an important cause before a jury, but instead of standing and extemporizing, and showing by his gestures, and by the energy and ardor of his whole manner, that he felt an interest in his theme, instead of rising with his subject, and corruscating with flashes of genius and wit, he should plant himself lazily down in a chair, read from some old book which scarcely a member of the panel could fully understand, and, after droning away for an hour, should leave them, without having distinctly impressed

their minds with one fact, or led them to form one logical conclusion; would it be any wonder if he left half of them joking with each other, or asleep? would it be any wonder — provided he were followed on the other side by an advocate of brilliant parts, of elegant diction, and attractive manner, by one who should pour sunshine into the darkest recesses of the case — if he lost not only his own reputation, but the cause of his client also?

These incitements and endearments of the teacher, this personal ubiquity, as it were, among all the pupils in the class, prevailed much more as the pupils were younger. Before the older classes, the teacher's manner became calm and didactic. The habit of attention being once formed, nothing was left for subsequent years or teachers but the easy task of maintaining it. Was there ever such a comment as this on the practice of hiring cheap teachers because the school is young, or incompetent ones because it is backward?

In Prussia and in Saxony, as well as in Scotland, the power of commanding and retaining the attention of a class is held to be a *sine quâ non* in a teacher's qualifications. If he has not talent, skill, vivacity, or resources of anecdote and wit, sufficient to arouse and retain the attention of his pupils during the accustomed period of recitation, he is deemed to have mistaken his calling, and receives a significant hint to change his vocation.

Take a group of little children to a toy-shop, and witness their outbursting eagerness and delight. They need no stimulus of badges or prizes to arrest or sustain their attention; they need no quickening of their faculties by rod or ferule. To the exclusion of food and sleep, they will push their inquiries, until shape, color, quality, use, substance, both external and internal, of the objects, are exhausted; and each child will want the show-man wholly to himself. But in all the boundless variety and beauty of Nature's work; in that profusion and prodigality of charms with which the Creator has adorned and enriched every part of his creation; in the delights of affection;

in the ecstatic joys of benevolence; in the absorbing interest which an unsophisticated conscience instinctively takes in all questions of right and wrong, — in all these, is there not as much to challenge and command the attention of a little child as in the curiosities of a toy-shop? When as much of human art and ingenuity has been expended upon teaching as upon toys, there will be less difference between the cases.

The third circumstance I mentioned above was the beautiful relation of harmony and affection which subsisted between teacher and pupils. I cannot say that the extraordinary fact I have mentioned was not the result of chance or accident. Of the probability of that, others must judge. I can only say, that, during all the time mentioned, I never saw a blow struck, I never heard a sharp rebuke given, I never saw a child in tears, nor arraigned at the teacher's bar for any alleged misconduct. On the contrary, the relation seemed to be one of duty first, and then affection, on the part of the teacher; of affection first, and then duty, on the part of the scholar. The teacher's manner was better than parental; for it had a parent's tenderness and vigilance without the foolish dotings or indulgences to which parental affection is prone. I heard no child ridiculed, sneered at, or scolded, for making a mistake. On the contrary, whenever a mistake was made, or there was a want of promptness in giving a reply, the expression of the teacher was that of grief and disappointment, as though there had been a failure, not merely to answer the question of a master, but to comply with the expectations of a friend. No child was disconcerted, disabled, or bereft of his senses, through fear. Nay, generally, at the ends of the answers, the teacher's practice is to encourage him with the exclamation, "good," "right," "wholly right," &c., or to check him with his slowly and painfully articulated "no;" and this is done with a tone of voice that marks every degree of *plus* and *minus* in the scale of approbation or regret. When a difficult question has been put to a young child which tasks all his energies, the teacher approaches him with a mingled look of concern and encour-

agement; he stands before him, the light and shade of hope and fear alternately crossing his countenance; he lifts his arms and turns his body, as a bowler who has given a wrong direction to his bowl will writhe his person to bring the ball back upon its track; and finally, if the little wrestler with difficulty triumphs, the teacher felicitates him upon his success, perhaps seizes and shakes him by the hand in token of congratulation; and when the difficulty has been really formidable, and the effort triumphant, I have seen the teacher catch up the child in his arms and embrace him, as though he were not able to contain his joy. At another time, I have seen a teacher actually clap his hands with delight at a bright reply; and all this has been done so naturally and so unaffectedly as to excite no other feeling in the residue of the children than a desire, by the same means, to win the same caresses. What person worthy of being called by the name, or of sustaining the sacred relation of a parent, would not give any thing, bear any thing, sacrifice any thing, to have his children, during eight or ten years of the period of their childhood, surrounded by circumstances, and breathed upon by sweet and humanizing influences, like these?

I mean no disparagement of our own teachers by the remark I am about to make. As a general fact, these teachers are as good as public opinion has demanded; as good as the public sentiment has been disposed to appreciate; as good as public liberality has been ready to reward; as good as the preliminary measures taken to qualify them would authorize us to expect. But it was impossible to put down the questionings of my own mind, — whether a visitor could spend six weeks in our own schools without ever hearing an angry word spoken, or seeing a blow struck, or witnessing the flow of tears?

In the Prussian schools, I observed the fair operation and full result of two practices which I have dwelt upon with great repetition and urgency at home. One is, when hearing a class recite, always to ask the question before naming the scholar who is to give the answer. The question being first asked, all

the children are alert; for each one knows that he is liable to be called upon for the reply. On the contrary, if the scholar who is expected to answer is first named, and especially if the scholars are taken in succession, according to local position, — that is, in the order of their seats or stations, — then the attention of all the rest has a reprieve until their turns shall come. In practice, this designation of the answerer before the question is propounded operates as a temporary leave of absence or furlough to all the other members of the class.

The other point referred to is that of adjusting the ease or difficulty of the questions to the capacity of the pupil. A child should never have any excuse or occasion for making a mistake; nay, at first he should be most carefully guarded from the fact, and especially from the consciousness, of making a mistake. The questions should be ever so childishly simple, rather than that the answers should be erroneous. No expense of time can be too great, if it secures the habit and the desire of accuracy. Hence a false answer should be an event of the rarest occurrence, — one to be deprecated, to be looked upon with surprise and regret, and almost as an offence. Few things can have a worse effect upon a child's character than to set down a row of black marks against him at the end of every lesson.

The value of this practice of adjusting questions to the capacities and previous attainments of the pupils cannot be over-estimated. The opposite course *necessitates* mistakes, habituates and hardens the pupils to blundering and uncertainty, disparages the value of correctness in their eyes, and — what is a consequence as much to be lamented as any — gives plausibility to the argument in favor of emulation as a means of bringing children back to the habit of accuracy from which they have been driven. Would the trainer of horses deserve any compensation, or have any custom, if the first draughts which he should impose upon the young animals were beyond their ability to move?

The first of the above-named practices can be adopted by every teacher immediately, and whatever his degree of com-

petency in other respects may be. The last improvement can only be fully effected when the teacher can dispense with all text-books, and can teach and question from a full mind only. The case is hopeless where a conspiracy against the spread of knowledge has been entered into between an author who compiles, and a teacher who uses, a text-book in which the questions to be put are all prepared and printed.

In former reports, I have dwelt at length upon the expediency of employing female teachers to a greater extent in our schools. Some of the arguments in favor of this change have been, the greater intensity of the parental instinct in the female sex, their natural love of the society of children, and the superior gentleness and forbearance of their dispositions, — all of which lead them to mildness rather than severity, to the use of hope rather than of fear as a motive of action, and to the various arts of encouragement, rather than to annoyances and compulsion, in their management of the young. These views have been responded to and approved by almost all the school-committee men in the State; and, within the last few years, the practice of the different districts has been rapidly conforming to this theory. I must now say that those views are calculated only for particular meridians. In those parts of Germany which I have seen, they would not be understood. No necessity for them could be perceived. There, almost all teachers, for the youngest children as well as for the oldest, are men. Two or three times, I saw a female teacher in a private school; but none in a public, unless for teaching knitting, needle-work, &c. Yet, in these male teachers, there was a union of gentleness and firmness that left little to be desired.

Still, into almost every German school into which I entered, I inquired whether corporal punishment were allowed or used, and I was uniformly answered in the affirmative. But it was further said, that although all teachers had liberty to use it, yet cases of its occurrence were very rare, and these cases were confined almost wholly to young scholars. Until the teacher had time to establish the relation of affection between himself

and the new-comer into his school; until he had time to create that attachment which children always feel towards any one who, day after day, supplies them with novel and pleasing ideas, — it was occasionally necessary to restrain and punish them. But, after a short time, a love of the teacher and a love of knowledge become a substitute — how admirable a one! — for punishment. When I asked my common question of Dr. Vogel of Leipsic, he answered, that it was still used in the schools of which he had the superintendence. "But," added he, "thank God, it is used less and less; and, when we teachers become fully competent to our work, it will cease altogether."

To the above I may add, that I found all the teachers, whom I visited, alive to the subject of improvement. They had libraries of the standard works on education, — works of which there are such great numbers in the German language. Every new book of any promise was eagerly sought after; and I uniformly found the educational periodicals of the day upon the tables of the teachers. From the editor of one of these periodicals, I learned that more than thirty of this description are printed in Germany, and that the obscurest teacher in the obscurest village is usually a subscriber to one or more.

A feeling of deep humiliation overcame me as I contrasted this state of things with that in my own country, where, of all the numerous educational periodicals which have been undertaken within the last twenty years, only two, of any length of standing, still survive. All the others have failed through the indifference of teachers and the apathy of the public. One of the remaining two — that conducted by F. Dwight, Esq., of Albany, N.Y. — would probably have failed ere this, had not the legislature of the State generously come to its rescue, by subscribing for twelve thousand copies, — one to be sent to each district school in that great State. The other paper, as it is well known, has never re-imbursed to its editor his actual expenses in conducting it.

The extensive range and high grade of instruction which so many of the German youth are enjoying, and these noble

qualifications on the part of their instructors, are the natural and legitimate result of their seminaries for teachers. Without the latter, the former never could have been, any more than any effect without its cause. Although "the first regular seminary for teachers" (see Dr. Bache's report, page 222) "was established at Stettin in Pomerania in 1735," yet it was not until within the last quarter of a century, and especially since the general pacification of Europe, that the system has made such rapid advances towards perfection. And so powerfully has this system commended itself to all enlightened men, that not only have these seminaries for teachers been constantly increasing in Prussia, in Saxony, and in the States of the west and south-west of Germany, but most of the enlightened governments of Europe have followed the example. Out of Prussia, the plan was first adopted in Holland. The celebrated normal school of Mr. Prinsen was established at Haarlem, in 1816; and it is now acknowledged by all, that common-school education has been reformed and immeasurably advanced throughout the whole of that enlightened country by the influence of this school.

When that great governmental measure for the establishment of common schools throughout France was adopted in 1833, one of its main features was the creation of normal schools. At these institutions, young men are not only educated, but gratuitously maintained; they enjoy certain civil privileges, are exempted from military service, and, if they acquit themselves worthily, they are certain of an appointment as a school-teacher at the end of their course.

It is a fact most interesting in itself, and worthy to be cited as one of the proofs of the advancement (however slow) of the race, that the normal school now in successful operation at Versailles occupies the very site — some of its buildings are the very buildings, and its beautiful grounds the very grounds — which were the dog-kennels of Louis XIV. and his royal successors.*

* A fact kindred to the one mentioned in the text is, that, at Florence, an edifice once used by the Inquisition is now occupied by an infant school. How dif-

Scotland, so long and so justly celebrated among the countries of Europe for the superior education of its people, was not slow to discover the advantages of schools for the preparation of teachers. It has now one such school at Edinburgh, and one at Glasgow, besides the Madras College at St. Andrew's, which exercises the double function of giving a classical education, and of preparing teachers for schools.

Under the enlightened administration of the National Board of Education for Ireland, a normal school has been established at Dublin, and placed upon the most liberal basis.* Excellent buildings with large and beautiful yards and play-grounds are provided for it in the very heart of the city. Here hundreds of the poor children are in constant attendance, to whom instruction is given, in part by professional teachers, and in part by the pupils of the normal school. The normal pupils reside at a place called Glasnevin, a little way out of the city. Here they have a farm, which is conducted by a scientific agriculturist. When not engaged at the school in the city, the pupils are occupied on the farm. At this normal school, none but actual teachers are received. They leave their own schools, and come from all parts of Ireland to receive instruction here. Their whole maintenance — tuition, board, lodging — is gratuitous; and a certain sum is secured to them annually on their return to their schools. More than a thousand teachers have already availed themselves of the benefits of this noble charity.

Though the government of England has declined to follow the example of all the enlightened nations of Europe, yet private individuals and societies are striving to remedy, to some extent, the consequences of this neglect. A normal school established under the auspices of that enlightened educationist, Mr. Kay Shuttleworth, is now in successful operation at Battersea; and the Church party have recently purchased and fitted up, at an expense of a hundred thousand dollars, a normal school at Chelsea, near London.

ferent these uses! A dog-kennel and a normal school! — a pandemonium and an infant school!

* Lord Morpeth gave £1,000 towards establishing this school.

After the revolution of 1830 which separated Belgium from Holland, the former country neglected its schools; and, since that period, it seems to be acknowledged on all hands that the education of the Belgian people has been rapidly retrograding. But, by virtue of a recent law (Sept. 23, 1842), an entire school system is now organizing for that country. Under the new order of things, there are to be two normal schools, — one at Lierre in the Province of Antwerp, the other at Nivelles in the Province of Brabant.

Even at St. Petersburg, in Russia, says Professor Stowe, "a model school for the education of teachers of every grade, and for all parts of the empire," has been established. Thus it appears that almost every member of the great European family of nations, which possesses any claims to be called enlightened or civilized, has looked with favor upon what may be considered one of the greatest of all modern instrumentalities for the improvement of the race; and has either founded this class of institutions by the direct authority and endowment of the government itself, or has allowed and encouraged the same thing to be done by the liberal and philanthropic portion of its people. One empire alone has signalized its name by an opposite course. That empire is Austria. Although the Austrian government maintains what it calls a system of schools, yet they are schools which set metes and bounds, on all sides, to the development of the human faculties; although it prepares a few teachers, yet it is the office of these teachers to lop and prune the common mind, and not to develop it; and when, during the very year previous to my visit, in a part of that empire bordering upon the kingdom of Saxony, — across whose frontier a little of the light and genial warmth of education had been reflected, — a few of the more enlightened subjects of that arbitrary power applied to it for liberty to establish a normal school within their own province, and offered to supply, gratuitously, the money requisite for the purpose, both the application and the offer were rejected with indignity. Austria, impenetrable Austria, over which the black horizon of despotism

shuts down like a cover, excluding, as far as possible, all light, intelligence, and knowledge, — Austria, true to the base and cowardly instincts of ignorance and bigotry, disallows the establishment of a free normal school for the improvement of its people, and spurns the proffered munificence of the noble benefactors who would endow it!

SCHOOL-INSPECTORS.

The extraordinary system of measures by which the Prussian schools have been elevated, and are now sustained, would not be understood without taking into view the office and character of the school-inspectors. The kingdom is divided into circles, or districts; and, for each one of these, there is one or more school commissioners or inspectors. These officers have some duties like those of our town school-committees; but their functions more nearly resemble those of the deputy superintendents appointed for each county in the State of New York, the latter being required by law to visit and examine all the schools in their respective counties, summer and winter, and make report of their condition to the State superintendent.

By visiting schools, attending examinations, and by personal introduction, I saw many of this class of magistrates. They had evidently been selected from among the most talented and educated men in the community. They were such men as would here be appointed as presidents or professors of colleges, judges of the higher courts, or called to other civil stations for which talent, attainment, and character are deemed essential prerequisites. The office is one both of honor and emolument.

It is easy to see how efficient such a class of officers must have been in bringing up teachers to a high standard of qualifications at the beginning; and in creating, at last, a self-inspired, self-improving spirit, among them. If examiners, inspectors, school-committees, — or by whatever other name they may be called, — know little of geography, grammar,

arithmetic, or the art of reading, the candidate who presents himself before them for examination will feel no need of knowing more than they do; and a succession of ignorant and incompetent candidates will be sure to apply for schools in towns which have ignorant examiners. The whole Prussian system impressed me with a deep sense of the vast difference in the amount of general attainment and talent devoted to the cause of popular education in that country as compared with any other country or state I had ever seen. I must refer to other sources of information in regard to the municipal ór parochial supervision of the schools; and can only observe, that over all these intermediate functionaries is the Minister of Public Instruction. This officer is a member of the king's council. He takes rank with the highest officers in the government, sits at the council-board of the nation with the minister of state, of war, of finance, &c.; and his honors and emoluments are equal to theirs. He has no merely clerical duties to perform; and, being relieved from all official drudgery, he can devote his time and his talents to the higher duties of his department. Such also has been the case in France since the late organization of their system of public instruction.

In justice to Prussia also, and as one of the explanations of the remarkable phenomena presented by her schools, the fact should not be omitted, that, before establishing her own school-system, she commissioned agents to visit other countries to examine into theirs, in order that her own path might be illuminated by all the light that could be reflected upon it from other parts of the world.

SCHOOL-ATTENDANCE.

One of the most signal features of the school-system of Prussia and of many of the neighboring States is the universality of the children's attendance. After a child has arrived at the legal age for attending school, — whether he be the child of noble or of peasant, — the only two *absolute* grounds of

exemption from attendance are sickness and death. The German language has a word for which we have no equivalent either in language or in idea. The word is used in reference to children, and signifies *due to the school;* that is, when the legal age for going to school arrives, the right of the school to the child's attendauce attaches, just as, with us, the right of a creditor to the payment of a note or bond attaches on the day of its maturity. If a child, after having been once enrolled as a member of the school, absents himself from it, or if, after arriving at the legal age, he is not sent there by his parents, a notice in due form is sent to apprise them of the delinquency. If the child is not then forthcoming, a summons follows. The parent is cited before the court; and if he has no excuse, and refuses compliance, the child is taken from him, and sent to school, the father to prison.

From a pamphlet published by a director of the schools in Halle, I translate the following forms of notices and summonses, in order to give a more vivid idea of the manner in which this business is conducted: —

(*Notice from the Teacher to the Parent.*)

We miss —— from the class since ——, without having received any intimation of the reasons of absence. We request you, therefore, to indorse the cause of absence on the back of this ticket, and to send your child (or ward) to school again.

HALLE,

If the offence of absence without excuse is continued or is repeated, the register of the school is exhibited to the school-director, who sends the following summons to the parent: —

To ——,

We now present to you the list of school-absences through the police. Your —— is found upon it. If you do not wish to be informed against, present yourself, at the latest, between the hours of and to the undersigned, with your excuses.

HALLE,

If a valid excuse is not now forthcoming, the school-director gives information of the case to the school-inspector, who cites

the delinquent parent before a magistrate by the following warrant, which is put into the hands of a police-officer to be served: —

—— are hereby called upon to appear on at to be tried for the neglected school-attendance of your child.

HALLE, (Signed) ——, *School-Inspector.*

I had frequent conversations with school-teachers and school-officers respecting this compulsory attendance of the children. From these sources, I gathere d the information, that, with one exception, there was very little complaint about it, or opposition to it. Were it not that some of the children are compelled to receive instruction in a religious creed from which their parents dissent, there would rarely be a murmur of complaint in the community. The children are so fond of the school, the benefits of public instruction are now so universally acknowledged, and the whole public sentiment has become so conformed to the practice, that I believe there is quite as little complaint (excepting on account of the invasion of religious freedom before referred to) under the rigorous system of Prussia as under our lax one. One school-officer, of whom I inquired whether this enforced school-attendance were acceptable and popular, replied, that the people did not know any other way, and that all the children were born with an innate idea of going to school.

It should be added, however, that parents are not obliged to send their children to a *public* school; if they prefer it, the children may be sent to a *private* school: but they *must* be sent to some one. All teachers, however, of private as well as of public schools, must submit to an examination, and have a certificate of qualification from the government officer.

A very erroneous idea prevails with us, that this enforcement of school-attendance is the prerogative of despotism alone. I believe it is generally supposed here that such compulsion is not merely incompatible with, but impossible in, a free or elective government. This is a great error. With the exception

of Austria (including Bohemia) and Prussia, almost all the other States of Germany have now constitutional governments. Many of them have an upper and lower house of assembly, like our Senate and House of Representatives. Whoever will attend the Parliament of Saxony, for instance, will witness as great freedom of debate as in any country in the world; and no law can be passed but by a majority of the representatives, chosen by the people themselves. In the first school I visited, in Saxony, I heard a lesson "On Government," in which all the great privileges secured to the Saxon people by their constitution were enumerated; and both teacher and pupils contrasted their present free condition with that of some other countries, as well as with that of their own ancestors, in a spirit of congratulation and triumph. The elective franchise in this and in several of the other States of Germany is more generally enjoyed, that is, the restrictions upon it are less, than in some of the States of our own Union. And yet in Saxony, years after the existence of this constitution, and when no law could be passed without the assent of the people's representatives in Parliament assembled, a general code of school laws was enacted, from the 143d section of which I translate the following. The title is, —

UPON NEGLECT OF SCHOOL-ATTENDANCE. — "1st. In every parish where there is a school-union, there shall be a school-messenger. In large parishes which are divided into many school-districts, every school shall have a particular messenger, besides one for every school-district.

"2d. Excepting on the common vacations, and on those weeks and days when there is no school, the school-messenger must ask the teacher, on every school-day, after the school-hours, what children have been absent without an adequate excuse.

"3d. In places where there is but one school, the school-messenger must ask this question at least twice a week, on Wednesdays and Saturdays, and require an account of the last three days.

"4th. The next morning, not later than an hour before the beginning of the morning school, the school-messenger of every place must go to the parents of the absent and unexcused child, and demand him for the school, or else the reason for his absence. For every such visit, the parent must give the messenger six pfennings.

"5th. If a child does not come after this demand, but remains away unexcused for two days, the school-messenger must take him on the third day, and conduct him to the school. The fee from the parents shall be one groschen.

"6th. A child of a place where there is but one school, who does not come on the Monday or Thursday after the visit of the school-messenger, and remains unexcused, also if he stays away six days without adequate excuse, must be taken by the messenger and carried to the school; and the fee from the parents shall be two groschen.

"7th. If the child stays from the school, with the knowledge of its parents, after being thus carried to it by the messenger, measures for punishment must be taken.

"8th. If the messenger cannot collect his fees, he must apply to the magistrates, whose duty it is to coerce the payment.

"9th. If the parents are actually too poor to pay the same, the magistrates must demand payment quarterly from the school-chest.

"10th. The magistracy must lend their assistance to the messenger, if, without good reason, he is prevented from taking the child to school, or if he is improperly treated while executing the duties of his office."

In many of the German States, the anniversaries of the date of their constitution are celebrated by *fêtes* and shows, by dinners and speeches, as we celebrate our great national festival, the Fourth of July; and yet, in these States, by virtue of laws which the free representatives of a free people have enacted, every child is compelled to attend school!

HIGHER SCHOOLS.

This account of the people's schools would be very imperfect did I omit to mention one or two other classes among them, corresponding in grade with our town-schools, or public high-schools. These are the real and burgher schools, which hold the same relation to the elementary schools that our town-schools hold to those of the districts.

The Royal Real School of Berlin — the first in point of date — was formed as early as 1747 by Counsellor Hecker. The epithet "real" is used in contradistinction from "learned." At the time when this school was established, Latin and Greek were the exclusive objects of study in the learned schools; and

the avowed purpose in founding this was, that "not mere words should be taught to the pupils, but realities, — explanations being made to them from models and plans, and of subjects calculated to be useful in after-life." The establishment of this class of schools was the commencement of a great educational reform. Even now, the Germans could afford to barter any quantity of classical annotations, or of home-made Latin and Greek prose or verse, for enough of mechanical skill to make a good household utensil, a good farming-tool, or a good machine. Doubtless, too, their best students would excogitate more philosophically by day if they knew enough to sleep more physiologically at night; but this knowledge Latin and Greek do not give.

The special design of the Burgher school is to prepare young men to become citizens, — that is, to qualify them for the transaction of such municipal or other public affairs as they may be called upon to perform. The man whose duty it may be to build bridges, to construct drains, to lay out streets or roads, to erect public buildings, to pass ordinances for the establishment or regulation of the police, and for the general administration of city or county affairs, should have some special preparation for duties so various and responsible; and the city which fails to educate those young men who are afterwards to perform such duties in her behalf will find, in the end, that their mistakes, mismanagement, and want of economy, will cost a hundred times more than the original outlay which would have qualified them for such offices. In a country like ours, where all the citizens not only elect to office, but are themselves eligible, if education does not fit the great body of the people for the performance of these duties, it is clear that we must be constantly putting valuable trusts into the hands of incompetent trustees.

The above classes of schools are also schools for the useful arts, manufactures, and commerce. In some of them, architecture, engineering, mining, &c., are taught; and the course of studies is susceptible of being enlarged to any extent, until they become complete polytechnic institutions.

I was so fortunate as to arrive at Cologne pending an examination of its Burgher school. One day had already been spent; but I was present on the morning of the second, before the exercises commenced. A programme of the order of performances, accompanied by remarks and explanations on the course of studies and the methods of instruction, had been prepared for the use of examiners and visitors. It consisted of twenty-four printed folio pages, a fact which shows the degree of attention devoted to the subject. The number and apparent standing and character of the visitors ratified the inference which one would naturally draw from such a fact. From this programme, it appeared that the subjects of examination were religion; the German (their native) language; the French, Latin, English, and Italian languages; history, geography, knowledge of Nature, arithmetic, and geometry; drawing, calligraphy, and singing, — in all, thirteen branches.

I shall speak only of that part of the examination which I heard.

In arithmetic, after a little time had been spent in expounding the mere relations of numbers, the pupils gave an account of the different weights and measures of the neighboring States; of the standard value of gold and silver as determined by the laws of different nations; of the current coins of all the nations of Europe and of the United States of North America. They were then required to change coins of one denomination and country into those of another. After this they were examined in electro-magnetism, having apparatus on which to try experiments. A class of boys from thirteen to seventeen years of age was then examined in the French and English languages. During the exercise in French, *both teacher and pupils spoke in French; and, during the exercise in English, both teacher and pupils spoke in English.* These exercises consisted in translation, parsing, and general remarks. The teacher's remarks on the construction and genius of the English language would have done credit to a professor in one of our colleges. A want of time excluded examinations in Latin and Italian; but all that

I saw and heard was performed so well as to create an assurance of ability to sustain an examination in any other branch set down in the programme. After this came declamation in three languages. In this exercise, I observed there was not a single gesticulation, nor any symptom of an internal impulse towards one. The lads took their station behind a table, which they seized with both hands, and held steadfastly until the close.

After the examination was completed, the head teacher occupied half an hour in delivering an address, a part of which was directed to the young men who were about to leave the school, and a part to parents and visitors on their duties to it.*

In many parts of the Continent, evening schools are kept, which are attended by apprentices and others. In these schools, all branches of useful knowledge are taught. In Paris, I have seen men forty or fifty years of age in attendance, and diligently studying the branches appropriate to their respective occupations. Such schools occupy the place, to some extent, of our debating-clubs and lyceums. The school communicates knowledge; the debating-club and the lyceum suppose the actual possession of knowledge. Where this knowledge does not actually exist, is not the school preferable?

In some of the German States, the law requires apprentices to attend school a certain number of evenings in every week. In one of these States, I was informed that complaint had been made by the apprentices because they were deprived of the disposal of their own time, and were obliged to defray the expense of tuition at school out of their pocket-money. To obviate this complaint, the law was changed. All apprentices were still

* In a private school in Utrecht, composed of both masters and misses, I heard a lesson in English history, conducted principally in the French language. During the lesson, a boy was called to the blackboard, who traced down in a diagram form, in a manner similar to the great historical charts to be found in Lavoisne's Atlas, a regular succession of the English sovereigns, from the time of Edward III. to the present Queen. How valuable and permanent must history be when learned in this way!

In this school, four languages, the German, Dutch, French, and English, were spoken promiscuously by both teachers and pupils; and each one of these languages seemed to be struggling to obtain its share of attention.

obliged to pay a tuition-fee; but the government remitted the payment in favor of those who attended, exacting it only of the absentees.

In most, if not in all, the German cities which I visited, I found Sunday schools in active operation. These are established, not, as with us, for the purpose of giving moral or religious, but secular instruction. Their exercises consist mainly in reading, writing, composition, arithmetic, geography, drawing, and so forth. They are attended principally by apprentices, laborers, and others, whose age for attending the elementary schools has passed, and who are engaged, during the weekdays, in their respective industrial employments.

From what has been said, it will be observed that there is a remarkable difference between the lads, or youth, of Prussia and our own, in regard to the nature and character of the literary exercises to which they betake themselves after leaving the elementary schools. With us they attend the lyceum, the debating-society, the political reading-room or news-room. There, notwithstanding the excellent instruction they have already received in the school, they seek to enlarge and carry forward their elementary knowledge by attending the evening school and the Sunday school. Their course springs from the idea, that further preliminary knowledge is to be acquired; ours from the idea, that sufficient preliminary knowledge has already been obtained, — sufficient to qualify them to enter upon the business of life, sufficient for the decision of all social and political questions. Before we give a decided preference to our own course, would it not be well to inquire whether the supposition on which it proceeds is true?

In Prussia, Saxony, and some other of the German States, schools for further cultivation, as they are called (*Fortbildung-Schulen*), are rapidly increasing.

Having brought to a close what I propose to say respecting the spirit and the methods of instruction prevalent in the German schools, perhaps it may not be wholly useless to others, who may make a similar tour of exploration, if I add, that, after

leaving the north of Prussia and the kingdom of Saxony, I observed a slight falling-off, a declension, in the tone and conduct of the schools. This, however, was slight, until I approached the Rhine. But here, in the Grand Duchy of Nassau, of Hesse Darmstadt, of Baden, and in the cities of Coblentz, Cologne, and Dusseldorf, although the same general system was everywhere in operation, yet its body was not animated and informed by so active and zealous a soul.

The above view of the condition of the Prussian schools, and of the degree of influence they exert upon the national character, would be incomplete without a few general remarks.

The question is sometimes asked, why, with such a wide-extended and energetic machinery for public instruction, the Prussians, as a people, do not rise more rapidly in the scale of civilization; why the mechanical and useful arts remain among them in such a half-barbarous condition; why the people are so sluggish and unenterprising in their character; and, finally, why certain national vices are not yet extirpated.

These questions may be readily answered. *First.* It is a great defect in the *People's* schools of Prussia, that the children leave them at so early an age. At fourteen, when the mind, by blending its own reflections with the instructions of an accomplished teacher, is perhaps in the very best state for making rapid advances, the child is withdrawn from school, and his progress suddenly arrested. The subsequent instruction of the evening school and the Sunday school reaches but a small part of the rural population.

Secondly. There is a great dearth of suitable books for the reading of the older children or younger men. Notwithstanding the multitude of publications sent forth annually from the prolific German brain, but very few of them are adapted to the youthful mind; and that great instrumentality for operating in every place, however secluded or remote, and for elevating every individual, however indigent or obscure, — THE DISTRICT SCHOOL LIBRARY, — has hardly yet been heard of in the kingdom. Hence there is a failure of mental nutriment on which

the common people can thrive. Whenever I mentioned our own plan of school-libraries, it struck all, whether teachers, school-officers, or friends of free and progressive institutions, as one of the grand desiderata for carrying forward the public mind in its career of improvement. I have the happiness to believe that our course on this subject will not only diffuse blessings by its direct agency at home, but will enlarge into a wide circle of beneficence by the effect of its example abroad.

The Prussians have political newspapers ; but these are under a rigorous censorship. There are but few of them, and their size is very small. One of our mammoth sheets would nearly supply a Prussian editor for a year.

Thirdly. But the most potent reason for Prussian backwardness and incompetency is this, — when the children come out from the school, they have little use either for the faculties that have been developed, or for the knowledge that has been acquired. Their resources are not brought into demand ; their powers are not roused and strengthened by exercise. Our common phrases, " the active duties of life ; " " the responsibilities of citizenship ; " " the stage, the career, of action ; " " the obligations to posterity," — would be strange-sounding words in a Prussian ear. There, government steps in to take care of the subject almost as much as the subject takes care of his cattle. The subject has no officers to choose, no inquiry into the character or eligibleness of candidates to make, no vote to give. He has no laws to enact or abolish. He has no questions about peace or war, finance, taxes, tariffs, post-office, or internal improvement, to decide or discuss. He is not asked where a road shall be laid. or how a bridge shall be built, although, in the one case, he has to perform the labor, and, in the other, to supply the materials. His sovereign is born to him. The laws are made for him. In war, his part is not to declare it or to end it, but to fight, and be shot in it, and to pay for it. The tax-gatherer tells him how much he is to pay. The ecclesiastical authority plans a church which he must build ; and his spiritual guide, who has been set over him by

another, prepares a creed and a confession of faith all ready for his signature. He is directed alike how he must obey his king, and worship his God. Now, although there is a sleeping ocean in the bosom of every child that is born into the world, yet if no freshening, life-giving breeze ever sweeps across its surface, why should it not repose in dark stagnation forever?

Many of our expensively-educated citizens will understand *too well* what I mean, in saying, that when they came from the schools, and entered upon the stage of life, they had a *practical* education to begin. Though possessed of more lore than they could recite, yet it was of a kind unavailable in mart or counting-room; and they still had the a, b, c of a business-education to commence. What, then, must be the condition of a people, to the great body of whom not even this late necessity ever comes?

Besides, it was not until the beginning of the present century that the Prussian peasantry were emancipated from a condition of absolute vassalage. Who could expect that the spirit of a nation, which centuries of despotism had benumbed and stupefied, could at once resume its pristine vigor and elasticity?

Fourthly. As it respects the vices of the Prussians, the same remark applies to them as to those of all the continental nations of Europe, — they are the vices of the sovereign, and of the higher classes of society, copied by the lower without the decorations which gilded them in their upper sphere. Mr. Laing (the same author before referred to) says, —

"Of all the virtues, that which the domestic family education of both sexes most obviously influences — that which marks more clearly than any other the moral condition of a society, the home state of moral and religious principles, the efficiency of those principles in it, and the amount of that moral restraint upon passion and impulses which it is the object of education and knowledge to attain — is undoubtedly female chastity.

"Will any traveller, will any Prussian, say that this index-virtue of the moral condition of a people is not lower in Prussia than in almost any part of Europe?"

"This," says Mr. Laing, "is a fact not to be denied, when the fruits of this educational system *may be appreciated in the generation of the adults*." Allowing the accusation to be true, — which, however, so far as it gives to Prussia a criminal pre-eminence over many other Continental nations, may well be questioned, — and can any thing surpass the absurdity of expecting that a deep-seated vice of this description can be extirpated in a single age by the influence of any education, however perfect, or by any other human means of reform whatever? It would be a revolution such as was never yet wrought in so short a period, even by miracles; no, not even under the Jewish theocracy, when men looked to the Omnipotent himself for the execution and the avengement of the laws. Could so fatal a canker in the social body be so easily eradicated from it, the criminality of sovereigns and of the high-born, of princes and of nobles, would be infinitely less than it now is for spreading so virulent a vice among the lower orders by the contagion of their own example, or for allowing its existence by their neglect. The vicious indulgences of the elevated descend through all the grades of society beneath them; and the bitterest drop in the cup of their abominations is that which flows forward, and pollutes the blood of generations yet unborn. Besides, what man of conscientiousness, of an awakened moral sense, can sympathize with denunciations levelled at the poor and ignorant, while those who dwell in high places and give the law to society escape unrebuked? Before the pure spirit of justice, the worst debaucheries and licentiousness that ever reeked in the stews of Athens are less criminal than the amours and obscenities of the gods on Olympus. Throughout the whole history of mankind, the vices of the low have been only *vulgarized* copies and editions of the profligacies of their social superiors, — the coarse penny prints of the illuminated and voluptuous originals of kingly and courtly sensualism.

A proverb has now obtained currency in Prussia, which explains the whole mystery of the relation between their schools and their life. "THE SCHOOL IS GOOD, THE WORLD IS BAD."

The quiescence or torpidity of social life stifles the activity excited in the schoolroom. Whatever pernicious habits and customs exist in the community act as antagonistic forces against the moral training of the teacher. The power of the government presses upon the partially-developed faculties of the youth as with a mountain's weight. Still, in knowledge and in morality, in the intellect and in the conscience, there is an expansive force which no earthly power can overcome. Though rocks and mountains were piled upon it, its imprisoned might will rend them asunder, and heave them from their bases, and achieve for itself a sure deliverance. No one who witnesses that quiet, noiseless development of mind which is now going forward in Prussia, through the agency of its educational institutions, can hesitate to predict that the time is not far distant when the people will assert their right to a participation in their own government. The late king made a vow to his subjects that he would give them a constitution. He survived a quarter of a century to falsify his word, and at last went down to his grave with the promise unredeemed. This was a severer shock to his power than if he had lost half the wealth of his realm. Thousands of his subjects do not hesitate now to declare, that fidelity on his part was the only equivalent for loyalty on theirs; and standing in his mausoleum, amid the costliest splendors of architecure and statuary, — the marble walls around covered with gilded inscriptions in honor of the royal name, — they interpolate a black line upon his golden epitaph, and say, "He promised his people a constitution, but violated his royal faith, and died forsworn."

Some suspicions are entertained that the present sovereign is adverse to that mighty intellectual movement which is now so honorably distinguishing Prussia from most of the nations in Europe. Alike for the fame of the king, and the welfare of humanity, it is to be hoped that these suspicions are groundless. He has the power of gaining as enviable and lasting a renown as any sovereign who ever sat upon an earthly throne. The opportunity is before him, the materials are in his hands.

Through a peaceful revolution by knowledge, he can save a fiery revolution by blood. He can liberalize the institutions of his people, elevate their condition, and continue to enlighten their minds, until they shall become a luminary in the heart of Europe, shedding its benignant beams upon surrounding nations. One of his ancestors has been surnamed " the Great," because he aggrandized his country in war, — because he ravished the population and seized the territory of other nations, and added them to his own ; but this monarch may win a purer and a nobler fame, — uot by the captives or the domain which he shall take, by conquest or spoliation, from the nations around him, but by the example and the enlightenment which he shall be instrumental in giving both to contemporaries aud to posterity.

CORPORAL PUNISHMENT.

I have uniformly made inquiries respecting the use of corporal punishment as a means of order and an incitement to progress in schools.

I need not repeat what was said above (*ante*, pp. 359–60) in regard to corporal punishment in Germauy.

In Holland, corporal punishment is obsolete. Several teachers and school-officers told me there was a law prohibiting it in all cases. Others thought it was only a universal practice founded on a universal public opinion. The absence of the Minister of Public Instruction, when I was at the Hague, prevented my obtaining exact information on this interesting point. But, whatever was the cause, corporal punishment was not used. In cases of incorrigibleness, expulsion from school was the remedy.

One of the school-magistrates in Amsterdam told me, that, last year, about five thousand children were taught in the free schools of that city. Of this number, from forty to fifty were expelled for bad conduct. This would be about one per cent.

At Haarlem, Mr. De Vries told me he had kept the same school for about twenty years, that its average number had

been six hundred scholars, that not an instance of the infliction of corporal punishment had occurred during the whole time, and that two only (boys) had been expelled from it as hopelessly incorrigible. He added, that both those boys had been afterwards imprisoned for crime. On seeing the manner of Mr. De Vries, his modes of instruction, and the combined dignity and affection with which he treated his pupils, I could readily believe the statement.

The schools of Holland were remarkable for good order, — among the very best, certainly, which I have anywhere seen. Nor does this arise from any predominance of phlegm in the constitution, or any tameness of soul; for the Dutch are certainly as high-toned and free-spirited a people as any in Europe. This fact may be read in their organization and natural language, as well as learned from their history.

In Hamburg, I visited an institution of a novel character. It was a punishment-school, or school-prison, — a place of instruction and restraint for those children belonging to the poor-schools of the city who commit any aggravated offence. In Hamburg, many poor people receive assistance from the city. One of the conditions of the succor is, that those who receive it shall send their children to the schools provided for them. If a child in these schools commits any trivial or ordinary offence, he is punished in the school in the usual way. But if the transgression is gross, or if he persists in a course of misconduct, he is sentenced by the competent authorities to a prison, or punishment-school (*Strafschule*). Here he must go at eight in the morning, and remain until eight in the evening. A part of the day is spent in study, a part in work. I saw the children picking wool. There were twenty-one boys in one room, and eleven girls in another. The school was in the third story of a building; and near the schoolrooms were small and wretched bed-rooms, where those whose sentence covered the night, as it sometimes did, were compelled to sleep.

The children were usually sentenced to so many stripes, as well as to so many days' confinement; and the teacher kept a

book, as a jailer keeps a record of his prisoners, in which the case of each child was recorded. At the expiration of the sentence, the children return to the school whence they came. Instances of a second, and even of a third commitment sometimes occur.

While I was stopping at the punishment-school, the hour of dinner arrived. All the boys left their schoolroom for one of the adjacent rooms, and all the girls for another. They arranged themselves in groups of four each, on the opposite sides of a long table. A bowl of bean-porridge was set in the centre of each group, and to each child was given a large, round, coarse wooden spoon. The teacher entered a sort of pulpit, and said grace, after which the children ate their homely meal. There was very little of indecorous behavior, such as winking or laughing in a clandestine manner; but the sobriety appeared to me to come more from fear than from repentance. One of the rules was, that, during the twelve hours of daily confinement, the children should have no communication with each other; but it happened here, as it has in many other cases where all communication is interdicted, that it is carried on clandestinely, or by stealth, — an evil much greater than any which can result from allowed intercourse.

The highest tension of authority which I anywhere witnessed was in the Scotch schools. There, as a general rule, the criminal code seemed to include mistakes in recitation as well as delinquencies in conduct; and, where these were committed, nothing of the "law's delay" intervened between offence and punishment. If a spectator were not vigilant, there might be an erroneous answer by a pupil, and a retributive blow on his head by the teacher's fist, so instantaneous and so nearly simultaneous as to elude observation. Still the bond of attachment between teacher and pupils seemed very strong. It was, however, a bond founded quite as much on awe as on simple affection. The general character of the nation was distinctly visible in the schools. Could the Scotch teacher add something more of gentleness to his prodigious energy and

vivacity, and were the general influences which he imparts to his pupils modified in one or two particulars, he would become a model teacher for the world.

In England, as there is no national system, nor any authoritative or prevalent public opinion towards which individual practice naturally gravitates, a great diversity prevails on this head. In some schools, talent and accomplishment have wholly superseded corporal punishment; in others, it is the all-in-all of the teacher's power, whether for order or for study. I was standing one day, in conversation with an assistant teacher, in a school consisting of many hundred children, when, observing that he held in his hand a lash or cord of Indian rubber, knotted towards the end, I asked him its use. Instead of answering my question in words, he turned round to a little girl sitting near by, perfectly quiet, with her arms, which were bare, folded before her and lying upon her desk, and struck such a blow upon one of them as raised a great red wale, or stripe, almost from elbow to wrist.

In some of the proprietary and endowed schools of England, the practice of solitary confinement still prevails. In large establishments at Birmingham, Liverpool, &c., I saw cells, or solitary chambers, four or five feet square, for the imprisonment of offenders. These were not for mere children, but for young men. I have seen a lad fifteen or sixteen years of age, dressed in a cap and gown, — the scholastic uniform of England, — a prisoner in one of these apartments.

In some of the private establishments at Paris, an extent of *surveillance* over the conduct of students prevails of which we have no idea. This is intended to supersede the necessity of punishment by taking away all opportunity for transgression. Some of the private schools are subsidiary to the colleges, — that is, the master of the private school has the general charge and superintendence of the students, maintains them at his own house, instructs them himself, or by his assistants, at home, but takes them daily to the college, where their lessons are finally heard by professors. I attended, one morning, the

opening of the College Bourbon, in Paris. At eight o'clock, the private teachers came, followed by their pupils marching in procession. All entered a large square, or court, enclosed on all sides, except the gateway, by the college-buildings. Soon after, the roll of a drum was heard, at which all the students arranged themselves in classes. At a second drum-beat, they marched to their recitation-rooms. The teachers then returned home; but, at the end of the college-exercises, they were to be in attendance again, to take back their charge in the same way as they had conducted them thither. To us this would seem singular, because many of the students had already passed the age which we call the age of discretion. By the invitation of one of the teachers, I accompanied him home. The collegians were only the older pupils in his school, and I wished to see the rest of his establishment. It was laid out on a most liberal scale as to play-grounds, schoolrooms, dormitories, kitchen, &c., and was in an excellent condition of order and neatness. The arrangement was such, that he could inspect all the play-grounds while sitting in his study; in this particular resembling those prisons where all the wards can be inspected from a central point. But this was not all. As I passed round to see the several schoolrooms, I observed that a single pane of glass had been set into the wall of each room, so that the principal, or any one deputed by him, could inspect both the class and its teacher without a moment's warning. This was pointed out as one of the distinguishing excellences in the construction of the rooms. It was stated also, that, in order to save the younger from contamination by associating with the older, there was not only an entire separation of them in the schoolrooms, but also in the play-grounds and sleeping apartments; and it was added further, that if two brothers of different ages, and belonging to different classes, should attend the school at the same time, they would not be allowed to see each other. I afterwards saw the same contrivances for inspection, not only in other schools, but in the Royal College of Versailles, a very distinguished institution.

I feel unable to decide whether, in such a state of society and with such children, this piercing *surveillance* is not the wisest thing that can be done; but with us the question certainly arises, whether the cause of school morals would gain more in the end by a closeness of inspection designed to prevent the outflow of all natural action, or by allowing more freedom of will, with a careful training of the conscience beforehand, and a strict accountability for conduct afterwards.

At all times and in all countries, the rule is the same, — the punishment of scholars is the *complement* of the proper treatment of children by parents at home, and the competency of the teacher in school. Where there is less on one side of the equation, there must be more on the other.

EMULATION.

In the Prussian and Saxon schools, emulation is still used as one of the motive-powers to study; but I nowhere saw the passion inflamed to an insupportable temperature. I was uniformly told that its employment was becoming less and less, and that the best authorities throughout the country were now discountenancing rather than encouraging it. Just in proportion as the qualifications of teachers had improved, it had been found less necessary to enlist this passion in their service; and as the great idea of education — that of the formation of Christian character and habits — had been more and more developed, emulation had been found an adverse, and not a favoring influence.

France and Scotland are the two countries in Europe where emulation between pupils, as one of the motive-powers to study, is most vigorously plied. In France, the love of approbation, of conspicuousness, of *éclat*, of whatever ministers to the national passion of vanity, holds pre-eminence. In Scotland, rivalry is more frequently stimulated by the hope of reward.

In one of the *pensions*, or boarding-schools, of Paris, I was struck by the sight of a large number of portraits of young men. These were hung around the walls of the principal's room, which was a large apartment, three of whose sides were nearly covered by them. They were the portraits of those pupils of the school who had afterwards won prizes at a college-examination. The name of the pupil, the year, and the subject-matter on which he had surpassed his competitors, were inscribed respectively beneath the portraits. In the room of the head of the Royal College at Versailles, I also saw the portraits of those students of the college who had won prizes at the university. This display, and the facts connected with it, speak volumes in regard to the French character, and the motive-powers under which not only the scholars, but the nation works. A brief account of a single phasis of this system, — for it is reduced to a system, — if not particularly interesting, may be instructive.

The *pensions*, or boarding-schools, are equivalent to our select or private schools. Their patronage depends upon their reputation; and that reputation is mainly graduated by the number of distinguished scholars they send out. Hence to send pupils to the college who gain prizes for scholarship brings celebrity to the school, and emolument to the master. To obtain talented boys, therefore, becomes a grand object with the masters of the pensions. For this purpose, careful inquiries are made, and sometimes agents are employed to search out lads of promise, and bring them to the school. In some instances, not only tuition, but the whole expense of board, lodging, &c., is gratuitously furnished; and, in extraordinary cases, a pecuniary bounty beyond the whole expenses of the pupil has been given. It may be said that this has a good effect, because it searches out the latent talent of the country, and suffers no genius to be lost through neglect. But here, as everywhere else, the great question is, whether the principle is right; for no craft of man can circumvent the laws of Nature, or make a bad motive supply the place or produce the results

of a good one. The teachers do not supply these facilities, or encourage this talent, from benevolence. It is speculation. It is pecuniary speculation ; and, if they did not anticipate a richer return for their outlay when invested in this manner than when used in a legitimate way, they would not incur such extraordinary trouble and risk. Hence they devote themselves in an especial manner to the training of these prize-fighters, while other pupils suffer a proportional neglect. The very children, therefore, who are attracted to the school in consequence of its celebrity, are defrauded of their share of attention, in order that the reputation of the school, for which they have been made victims, may induce others to join it, to be made victims in their turn. Thus the system prospers by the evil it works. There is the same ambition among the colleges to win the prizes of the university. The day of examination, when these prizes are awarded, is one of great pomp and ceremony. The Minister of Public Instruction and other high official dignitaries usually attend ; the king himself has sometimes been present in person ; and it is a standing rule that the successful competitors are invited to dine at the royal table.

Who that is conversant with the history of France does not see how much of her poverty, her degradation, and her suffering, even in the proudest periods of her annals, is directly attributable to this inordinate love of praise? and especially how much of the humiliation of later times — when the charm of her invincibility was broken, and she was obliged to ransom herself from the grasp of her conquerors by gold wrung from her toiling millions — is directly traceable to the predominance in her character of this love of applause? It was this blind passion for glory which created Bonaparte, and which sustained him not less faithfully in all his vast schemes of wickedness than in his plans for improvement. "Had the Romans not been sheep, Cæsar had not been a wolf."

Among all the nations of Christendom, our own is, perhaps, second only to France in the love of approbation as a prompter and guide to action. Ought we, then, to cultivate this passion,

already of inordinate growth, by the use of emulation in our schools?

On a former page (*ante*, p. 281), when speaking of the modes of instruction in the Scotch schools, I have incidentally described the skill and power with which their teachers wield the lash of emulation. I recur to the subject again, only to observe, that this motive is not confined in Scotland to the lower grades of schools, but bears equal sway in colleges and universities; that it is not employed in imparting secular knowledge only, but is an instrument equally welcome and made equally efficient in giving religious instruction.

Whatever one may think of employing such a motive in matters purely intellectual, I cannot believe that a religious lesson like the following — of which I give an exact account as I heard it — will fail of shocking its hardiest defender: —

Teacher. What sort of death was denounced against our first parents for disobedience?

1*st Pupil.* Temporal death.

T. No (and pointing instantaneously to the second).

2*d P.* To die.

The teacher points to the third, crying, "Come away!" — and then to the fourth. A dozen pupils leap to the floor, a dozen hands are thrust out, all quivering with eagerness.

4*th P.* Spiritual death.

T. Go up, *Dux* (that is, take the head of the class).

And so of the following, from the Westminster Catechism, which, with all the proofs, is committed to memory: —

Teacher. What is the misery of that estate whereinto man fell?

Pupil. All mankind, by their fall, lost communion with God, are under his wrath and curse, and so made liable to all the miseries of this life, to death itself, and to the pains of hell forever (giving the proofs).

T. What sort of a place is hell?

P. A place of devils.

T. How does the Bible describe it?

1*st P.* (Hesitates.)

T. Next. Next. Next.

5*th P.* A lake of fire and brimstone.

T. Take 'em down four.

And thus, on these awful themes, a belief and contemplation of which should turn the eyes into a fountain of tears, and make the heart intermit its beatings, there is the same ambition for intellectual superiority as on a question in the multiplication-table. There is no more apparent solemnity in the former case than in the latter.

Nor is this mode of treating sacred themes confined to the schools. In the universities, money is employed to stimulate theological effort; and a sordid, financial aspect is given to the holiest subjects. For instance, in looking over the published list of prize questions in the Glasgow University for the last two or three years, I find the following offers: —

"The University Silver Medal, for the best Essay on the Analogy of the Mosaic and Christian Dispensations."

Other prizes, of various values, are offered for the best essay on such subjects as the following: —

"For the best Lecture on 1 John iii. 1–6. All students of divinity in this university, during the session 1843–44, may be competitors."

"For the best Essay on the Goodness of God, by students of the third and fourth year."

"For the best Discourse on John xiv. 27."

"For an Essay on the Character of Christ."

"For the best specimen of reading the Holy Scriptures."

"For the best Lecture on the 35th chap. of Isaiah."

"Prize for Essay from students of the second year; subject, 'The Personality of the Holy Ghost.'"

Thus the sordidness of worldly motives is forever mingled with the purity of sacred themes. Men are addressed as though piety dwelt in the purse, and not in the heart; and the holiness of God's nature and the sanctity of the divine commands are flung wantonly into the ring, to be fought for, with dialectic

weapons, by hired wrestlers and prize-fighters. What value would the New Testament retain in our eyes, had the Gospels and the Epistles been prize-essays, penned by money-loving disciples and apostles for so many Jewish shekels or talents! Under the influences which God and Nature are shedding around us, the heart may be trained to a moral intrepidity that will bear martyrdom in the cause of truth, or to an avarice that will sell its Redeemer for thirty pieces of silver. Which class of these motives ought the great literary institutions of a country, in all ways, to foster?

MORAL AND RELIGIOUS INSTRUCTION.

It has been an object of paramount interest with me, throughout my whole tour, to learn in what manner and to what extent moral and religious instruction are given in schools. In addition to the inherent interest which belongs to the subject itself, the great variety of practice existing abroad promises to throw much light upon our course of proceedings at home. The statutes of Massachusetts relative to public instruction, while they prohibit the inculcation upon school-children of any such religious views as "favor the tenets of any particular sect of Christians," provide guaranties for the moral character of teachers, and prescribe their duties in the following comprehensive and noble language: —

"It shall be the duty of the president, professors, and tutors of the University at Cambridge, and of the several colleges, and of all preceptors and teachers of academies, and all other instructors of youth, to exert their best endeavors to impress on the minds of children and youth committed to their care and instruction the principles of piety, justice, and a sacred regard to truth, love to their country, humanity and universal benevolence, sobriety, industry and frugality, chastity, moderation and temperance, and those other virtues which are the ornament of human society, and the basis upon which a republican constitution is founded; and it shall be the duty of such in-

structors to endeavor to lead their pupils, as their ages and capacities will admit, into a clear understanding of the tendency of the above-mentioned virtues to preserve and perfect a republican constitution, and secure the blessings of liberty, as well as to promote their future happiness; and also to point out to them the evil tendency of the opposite vices."

The aim of our law obviously is, to secure as much of religious instruction as is compatible with religious freedom. Let us see how our policy in this respect compares with that of other countries.

In Ireland, a National Board of Education has existed for twelve years, having been constituted in 1831. It is founded on the principle of religious tolerance and conciliation, as between the two great sects into which that country is divided. Some of the most distinguished men, lay and clerical, of both the Protestant and Catholic communions, compose it. In the letter of the Chief Secretary for Ireland, which is the charter and constitution of the Board, its object is expressed in the following words: "To superintend a system of education, from which should be banished even the suspicion of proselytism, and which, admitting children of all religious persuasions, should not interfere with the peculiar tenets of any." To exclude all possible occasion for jealousy, the Board require "that no use shall be made of the schoolrooms for any purpose tending to contention, — such as the holding of political meetings in them, or bringing into them political petitions or documents of any kind for signature; and that they shall not be converted into places of public worship. The commissioners require the schoolrooms to be used exclusively for purposes of education."

Another of the standing regulations is as follows: —

"The commissioners regard the attendance of any of their teachers at meetings held for political purposes, or their taking part in elections for members of parliament, except by voting, as incompatible with the performance of their duties, and as a violation of rule which will render them liable to dismissal."

All religious instruction is expressly prohibited in the schools;

and this prohibition includes "the reading of the Scriptures," "the teaching of catechisms," "public prayer," and "all other religious exercises:" but separate hours are set apart, in which all the children receive religious instruction from the clergymen of their respective denominations; the principle being to give combined literary and moral with separate religious instruction.

In every schoolroom, a copy of the following "General Lesson," prepared by that distinguished and excellent prelate, Dr. Whately, the Protestant Archbishop of Dublin, is to be conspicuously hung up; and all teachers are required to inculcate its principles upon the children under their charge.

"Christians should endeavor, as the Apostle Paul commands them, to 'live peaceably with all men' (Rom. xii. 18), even with those of a different religious persuasion.

"Our Saviour, Christ, commanded his disciples to 'love one another.' He taught them to love even their enemies, to bless those that cursed them, and to pray for those who persecuted them. He himself prayed for his murderers.

"Many men hold erroneous doctrines; but we ought not to hate or persecute them. We ought to seek for the truth, and to hold fast what we are convinced is the truth; but not to treat harshly those who are in error. Jesus Christ did not intend his religion to be forced on men by violent means. He would not allow his disciples to fight for him.

"If any persons treat us unkindly, we must not do the same to them; for Christ and his apostles have taught us not to return evil for evil. If we would obey Christ, we must do to others, not as they do to us, but as we would wish them to do to us.

"Quarrelling with our neighbors and abusing them is not the way to convince them that we are in the right, and they in the wrong. It is more likely to convince them that we have not a Christian spirit.

"We ought to show ourselves followers of Christ, who, 'when he was reviled, reviled not again' (1 Pet. ii. 23), by behaving gently and kindly to every one."

Under the auspices of this Board, more has been done within the last twelve years for the education of the Irish nation than had been effected for a century before under a system whose instruments were coercion, imprisonment, banishment, and

death. On the 21st of March, 1843, when the Board issued its last report, 2,721 schools had been established, in which 319,792 scholars were in a course of education; and this number was rapidly increasing. At this date, the Board had established a Normal School, at which a thousand teachers had been educated; had prepared a complete series of school-books; had digested a code of regulations for the whole system; and notwithstanding the novelty of the subjects, and the number and delicacy of the questions to be settled, as between opposing parties in religion and politics, not a single protest had been entered upon its records, nor had any schism disturbed the harmony of its members.

In Holland, all doctrinal religious instruction is excluded from the schools. The Bible is not read in them. Children are permitted to withdraw at a certain hour, to receive a lesson in religion from their pastors; but this is not required. It is optional to go or remain.

In England, as there is neither law nor system on the subject of education, each teacher — with the exception noticed below — does as he pleases. In the schools sustained by the Church, the views of the Church, both as to religious doctrine and Church government, are taught; and sometimes, though not always, in the schools of the Dissenters, their distinctive opinions are inculcated. There are, however, a few other schools, which are established upon a neutral basis, as between opposing sects. In these, the common principles and requirements of morality, and all the preceptive parts of the gospel, as contradistinguished from its doctrinal, are carefully inculcated. The Harp Alley School, in London, is a good specimen of this class. This school contains children of Churchmen and Dissenters, of Catholics and Jews. The teacher told me, that though himself a Churchman, yet, being placed there to educate children of all denominations, he did so with entire impartiality, and without their knowing what his own views might be.

There is one large class of schools, — technically called

Grammar Schools, because they were established to give instruction in the Greek and Latin languages, whose annual income amounts to about £100,000 (nearly $500,000), — which, by construction of law, are held to be so far under the jurisdiction of the Church, that the masters must be licensed by an archbishop or bishop, and must take the oath and make the subscriptions and declarations which are recited in the license.

The form of the ordinary's license is as follows: "We give and grant to you, A. B., in whose fidelity, learning, good conscience, moral probity, sincerity, and diligence in religion, we do fully confide, our license or faculty to perform the office of master of the Grammar School at ——, in the county, &c., to which you have been duly elected, to instruct, teach, and inform boys in grammar and other useful and honest learning and knowledge in the said school, allowed of and established by the laws and statutes of this realm; you having first sworn in our presence, on the Holy Evangelists, to renounce, oppose, and reject all and all manner of foreign jurisdiction, power, authority, and superiority, and to bear faith and true allegiance to her Majesty Queen Victoria, &c.; and subscribed to the thirty-nine articles of religion of the United Church of England and Ireland, and to the three articles of the thirty-sixth canon of 1603, and to all things contained in them; and having also, before us, subscribed a declaration of your conformity to the Liturgy of the United Church of England and Ireland as is now by law established. In testimony," &c.

In Scotland, although there is no law prescribing the quality of religious instruction to be given, yet there is a public opinion not less authoritative than law, — a public opinion, indeed, whose peremptory demands are more sure to be obeyed without the sanctions of law than a law would be without the exactions of this public opinion.

After the particular attention which I gave to this subject, both in England and Scotland, I can say, without any exception, that in those schools where religious creeds, and forms of faith, and modes of worship, were directly taught, I found the

common doctrines and injunctions of morality, and the meaning of the preceptive parts of the gospel, to be much less taught, and much less understood by the pupils, than in the same grade of schools, and by the same classes of pupils, with us.

Probably, however, I can give a better notion of this subject by relating a few instances from my own observation, just as they occurred. But, for this purpose, I shall quote only from schools of a high, or, at least, of a very respectable character; as it would be uninstructive on such a subject to take specimens from those of a low grade.

In a school of high standing, a few miles from London, after the teacher had gone through with his exercises in the common branches, I requested him to give me a specimen of his manner of teaching the social virtues, such as regard to truth, an observance of the rights of property, &c. Upon this, he turned to the older class of scholars, and said, "What instances of lying are given in the Bible?"

A. The case of Ananias and Sapphira.

Q. Against whom was that crime committed?

A. Against the Holy Ghost.

Q. What doctrine of the Bible does this prove?

A. The doctrine of the Trinity.

Here he stopped, as though the subject of lying were exhausted. He then took up another subject, and proceeded as follows: —

Q. Do you recollect any case in the Scriptures in which stealing is condemned?

A. The case of Achan.

Q. Any case of Sabbath-breaking?

A. The man who gathered sticks on the Sabbath, and was stoned to death.

Here again he stopped. "But," said I, "how do you inculcate an observance of the Sabbath at the present day? Your boys know very well that Sabbath-breakers are not stoned to death, in our time, anywhere; and, if the observance of that day is to

rest upon the fear of being stoned to death, it will not be observed." He replied, that he taught from such examples as were to be found in the Bible, and knew no other way. He said the same about the vice of lying. In this school, I heard a lesson of an hour's length, in which the teacher read passage after passage from the liturgy, called upon the pupils to give an exposition of the meaning of each, and to quote those texts of Scripture which were supposed to prove it. The answers were given with great promptness, and showed a familiar acquaintance with the language of the Bible.

In a school in Edinburgh, in which the intellectual exercises were conducted in a most efficient manner, the teacher put the New Testament into my hands, and requested me to select any passage I might choose, from either of the four Gospels, or from the Epistle to the Hebrews, and then to read the passage selected to a class of about eighty boys and girls, who were, as I should judge, from eleven to thirteen years of age. At the same time, a Testament was given to each of the class. Accordingly, I opened the book at random, and read the first verse upon which my eye fell. Before I had finished the verse, a large number of the class had turned to it in their own Testaments, and announced the book, the chapter, and the number of the verse, which I was reading. Astonished at this, I repeated the experiment, turned backwards and forwards promiscuously, again and again; but in no case were they at fault. In every instance, before, or at least as soon as, I had finished the reading of a verse, a considerable number of the class, often a majority of them, held up their Testaments, and showed or mentioned book, chapter, and verse. It took them no longer to find the verse than it did me to read it. I then tried them by beginning in the middle of a verse, selecting verses whose division was such that each clause presented a substantive idea. This made no difference, — so completely had they committed to memory not only every verse, but the order of all, and the place where each one was to be found.

Amazed at this command of the Bible by children so young,

I said to myself, "How happy if their ideas and sentiments of duty correspond with their verbal knowledge of the great source whence they derive its maxims!" Accordingly, I requested the teacher to examine them on points of common morals, or social, every-day duties and obligations. He did not seem fully to comprehend my meaning, and therefore requested me to explain what I meant by a practical example. I then asked the class what they understood by the word "honesty," or "what it is to be honest." After a little delay, one of the class replied, "To give money to the poor;" and to this definition all assented. I then inquired what they understood by the word "conscience." Several replied, "It is the thinking principle." I asked if all agreed to that, and all but one gave token of assent. This one, — a remarkably intelligent-looking boy, — observing that I was not satisfied with the reply, said, "Conscience tells us what to do;" and, when I rejoined, "Does it not tell us also what not to do?" he assented. I requested the class to give me an instance of what was meant by "lying." All exclaimed, as with one voice, "Ananias and Sapphira;" but beyond this, though I pressed them for some time, they could present no combination of circumstances which would answer the description of lying.

When, however, I stated cases circumstantially, as whether, if a traveller were to call to me in a noisy street, or when I was in a field, at some distance from the way-side, to ask me the direction to a place, and, without speaking, I should point in a direction opposite to the true one; whether, if I were standing by, heard such a question put, and saw such a sign made, without interfering; whether, if I were a witness in a court of law, and should tell the truth literally and exactly, without any equivocation or reservation, and should subsequently perceive, by what the advocate or judge might say, that I had been misunderstood, but should not correct the mistake because it was in favor of the party whom I wished to prevail in the cause, — when I asked them whether these would not be cases of lying, they appeared perfectly able to compre-

hend the point on which the falsity would turn. So in the case of Judas kissing Jesus, they understood that this act was a *lie*, but did not know that it was *perfidy* also, nor understand the injury which such an act must inflict upon the cause of truth generally, by casting suspicion upon one of its liveliest tokens. The children had been admirably trained in most respects; but their minds seemed not to have been turned in this direction.

In another school where the same general conversation was held, and where the case of Ananias and Sapphira seemed to exhaust the pupils' knowledge respecting falsehood, I said to the teacher, "But your children know that liars, nowadays, are not struck down dead as a punishment for lying. What further explanations do you give to show them the deformity and mischievousness of lying, and the beauty and utility of truth?" — "You remind me," said he, "of a case that actually occurred in my school a few days ago. I detected a boy in a falsehood, and publicly punished him for it. The next morning, a schoolmate of his, who had known the whole transaction and its results, came to me and said, 'I have been thinking.' I asked what he had been thinking. He said, 'You once told us that God was the same, yesterday, to-day, and forever. Now, if this is true, why did not God kill this boy for lying, as well as Ananias and Sapphira?' I was not able," said the teacher, "to answer him."

In the Prussian (Christian) schools, only two systems of religion prevail,—the Protestant-Evangelical and the Catholic. The parents have an option between these; but one or the other must be taught to their children. If the parents are all of one religious denomination, the teacher generally gives the religious instruction. Where a diversity of creeds exists, and the teacher is Protestant, he usually gives religious instruction to the Protestant part of the children; and a Catholic priest attends at certain hours, to give instruction, in a separate apartment, to the Catholic children. A similar arrangement prevails in regard to the Protestant children, where the teacher of a mixed school

is Catholic. At fourteen, — the common termination of the school-going age, — the Protestant children usually have sufficient knowledge of the Bible to be confirmed, — that is, to become members of the church, and, of course, communicants at the Eucharist. This confirmation and membership of the church depend on the amount of their Bible knowledge, not on the state of their religious affections. The priest examines and approves; or, if he finds the pupils deficient in Bible knowledge, they are remanded to their former school, or sent to a Bible school. In a Prussian city, I was taken to a school of about twenty boys and girls, from fourteen to sixteen or seventeen years of age, who were doing nothing but reading the Bible. They were vagrants from other places, and were as vicious and perverse a looking company of children as I ever saw. All over their countenances, in characters too legible to be mistaken, were inscribed the records of malignity and evil passions. They had not obtained the amount of Bible knowledge requisite for confirmation, and admission into the church, and were therefore sent here to acquire it. The day for a new examination was near by, at which time the greater part of them would probably be received into the church. Such reception is indispensable, because, without a certificate of confirmation from the priest, it would be nearly or quite impossible for any one to obtain a place as a servant, apprentice, or clerk, or even to get married.

The consequence of all this is, that the whole community are members of the church. The gamester, in a country where gaming is a national vice; the drunkard, the thief, the libertine, the murderer; alike the malefactors who are in prison under the sentence of the law, and the crafty and powerful who by force or fraud have eluded its judgments, — all are members of the church of Christ! — such ascendency has faith over practice in the eye of the law, so much more important is the legal name by which the tree is called than the fruits which it bears!

No inconsiderable number of the teachers in the Prussian

schools, gymnasia, and universities, are inwardly hostile to the doctrines they are required to teach. I asked one of these how he could teach what he disbelieved, and whether it did not involve the essence of falsehood. His reply was, "It is a lie of necessity. The government compels us to do this, or it takes away our bread." While human nature remains as it is, is not such the natural consequence of a compulsory religion? Though every one must condemn as flagrantly wrong what is here done under the plea of necessity, yet is it not clear that the government which creates this supposed necessity is a hundred times more guilty than the victim who yields to the temptation? When the mass of a people are ignorant, they easily become the passive subjects and recipients of a compulsory religion, however false; but, when the people become enlightened, their tendency is to recoil from a compulsory religion, even though it be true.

The enforcement of a speculative faith, or, at least, of an acknowledgment of one, upon minds that discard it, is doubtless one of the principal reasons of the rapid spread of infidelity in that country. This setting a snare to the conscience by tempting any man to practise what he condemns, or to affirm what he disbelieves, is also one of the greatest corrupters of public morals; and by allowing and enforcing two different religions, the government proclaims its own absurdity, for both cannot be right. Two opposites may both be wrong; but, while truth remains *one* and the *same*, it must be obvious to the simplest understanding that both cannot be right. What faith or trust can children put in what is taught to them as positively and certainly true, when they know that views diametrically opposite are taught with equal positiveness and dogmatism, *and by the same authority*, to their play-fellows; when they know, that, if one part of the instruction is loyal to the majesty of truth, the other is treasonable to the same majesty? Would not this be the case if a parent were to teach one faith to a part of his children, and an opposite faith to the rest? and must not the same consequences follow where a gov-

ernment, claiming to be paternal, does the same thing? In the same schoolhouse, under the same roof, I have passed from one room to another, separated only by a partition-wall, where different religions, different and irreconcilable ideas of God and of his government and providence, of our own nature and duties, and of the means of salvation, were taught to the children by authority of law; and where a whole system of rites, books, teachers, officers, had been provided by the government, to enforce upon the children, *as equally worthy of their acceptance*, these hostile views. Everlasting, immutable truth — not merely the image, but the essence of God; not merely unchanging, but, in its natnre, unchangeable and immortal — was made to be one thing on one side of a door, and another thing on the other side; was made, after crossing a threshold, to affirm what it had denied, and to deny what it had affirmed. The first practical notion which any child can obtain from such an exhibition — and the brightest minds will obtain it earliest — is of the falsity of truth itself, or that there is no such thing as truth; and that morals and religion are only convenient instruments, in the hands of rulers, for controlling the populace. Such a conclusion must be an extinction of the central idea of all moral and religious obligation.

I shall never forget the impression made upon my mind by a conversation with a school-officer of great intelligence and high authority, — the inspector of the schools of a large circle of territory, — to whom I explained the neutrality of our school-system as between different religious sects. He expressed the greatest astonishment at the fact, and thought it to be impossible that any government conld stand which did not select some form of religion, and enforce its adoption, through the schools and the pulpit, upon the whole community. On further conversation, I found him to be a thorough Pantheist, and a disbeliever in the divine authority of the book, whose use, and the inculcation of whose doctrines as held by the State, he was enjoining upon all the schools under his charge.

Wherein does the teaching of two hostile religions, by au-

thority of law, differ from teaching contradictory theories in science, only as the former subject should be approached with more caution and reverence than the latter? Suppose some weak but proud mortal, having, by means of birth or any other accident, obtained a control over the destinies of men, should decree that half the children in his kingdom should be taught the Ptolemaic system of astronomy, according to which the sun revolves round the earth, and the other half, the Copernican system, according to which the earth revolves round the sun, — could he retain the respect of any intelligent subject, either for his systems or for himself? Upon portions of the vegetable kingdom, the Creator has inscribed certain visible marks or tokens, by means of which the plants that bear them may at once be recognized as belonging to a poisonous family. To the scientific eye, these marks are equivalent to the words, "Beware of poison," written on the plant itself. Suppose a law were promulgated, that half the children of a realm should be taught that all plants having five stamens and one petal, and whose leaves are rough in texture, and of a livid green in color, should be accounted sanative, and be adopted into the pharmacopœia of the physician; and, in certain prescribed cases, should be administered to all patients by their medical advisers. Aside from the actual and immediate havoc of health and life which would be caused by a public teaching and common practice founded upon such laws, would not the clearest, most powerful, and most independent minds in the community be tempted to treat the whole subject with contempt and derision? Are not the laws of the Creator as certain, as infallible, in one of his kingdoms as in another? The only difference is, we know the laws of one kingdom better than we do those of another. It is a difference, not in the certainty of the Creator's laws, but in the amount of the creature's knowledge. Where these laws are already known, no human authority, no sanction of pains and penalties, can uphold or commend them like their own inherent and indestructible truth. Where they are not yet known, especially when great and good men still entertain

conflicting views respecting them, is it not the wisest part of wisdom to concentrate whatever of talent, of virtue, of religious motive, there may be in the community, to ascertain with more certainty what they really are? And is not a higher education of the intellect and conscience of the rising generation one of the most promising of these means?

To a vast extent, abroad, I found religion to be used for political purposes, — not to enthrone a Deity in the heavens, but a king over a state, — not to secure the spontaneous performance of good works to men, but the blind submission of person and property to the ruler. It will, therefore, be readily understood, that I have returned from this survey of foreign systems with a more exalted appreciation and a more heartfelt attachment for our own. The letter and spirit of our law respect the right of conscience in each individual. Our school-system is designed to promote the development and growth of the understanding, to cultivate upright and exemplary habits and manners, to quicken the vision of conscience in its discriminations between right and wrong, and to inculcate the perfect morality of the gospel; while it reverently forbears to prescribe, by law, the belief which men shall profess respecting their Maker. This belief it leaves to the right of private judgment, and the sense of private responsibility. Least of all does it scandalize truth by setting up different images of its one and indivisible Being and Essence, and then commanding either old or young to bow down and do homage to its discordant representations. The time has probably gone by, in all parts of Christendom, when the dungeon, the rack, and the fagot will be resorted to as instruments for the propagation of supposed truth, or the suppression of supposed heresy; but, though the mode may be different, is not the spirit the same, and the intrinsic wrong as great, when any one man, or class of men, attempts to enforce its own religious views upon the children of another man, or class of men, by penal enactments, or civil disabilities, or social privations of any kind? The form of the oppression may be changed, in accordance with

the milder spirit of the age; but the innate and ineradicable injustice remains the same.

Whatever may be the especial object of the American citizen in going abroad, still, if his mind is imbued with the true spirit of the institutions of his own country, he cannot fail, in travelling through the different nations of Europe, to find material for the most profound and solemn reflection. There is no earthly subject, in its own nature, of higher intrinsic dignity and interest than a contemplation of the different forms into which humanity has been shaped by different institutions. This interest deepens when we compare our own condition with the contemporaneous condition of other great families of mankind. Tracing back, by the light of history and philosophy, these respective conditions to their causes in some period of antiquity more or less remote, we behold the head-springs of those influences which have given such diversity to the character and fortunes of different portions of the race. We are enabled not only to see the grand results which have been wrought out by certain agencies, acting through long periods of time, but we are brought into immediate contact, and we commune, as it were, face to face, with those great principles which bear the future destinies of mankind in their bosom. Whatever now is, whether of weal or of woe, is the effect of causes that have pre-existed; in like manner, what is to be, whether of glory or of debasement, will result from the causes put in operation by ourselves or others. The past is a unit, fixed, irrevocable, about which there is no longer either option or alternative; but the future presents itself to us as an infinite of possibilities. For the great purposes of duty and happiness, to-morrow is in the control of the weakest of men; but yesterday is beyond the dominion of the mightest prince or potentate, — it is no longer changeable by human or divine power. The future, then, is our field of action; the past is only valuable as furnishing lights by which that field can be more successfully entered and cultivated. For this purpose, we study

the history of particular parts of the globe, of particular portions of our race, — of Europe, for instance, — for the last thousand or two thousand years; we learn what manner of men have borne sway; we discern the motives by which they have been actuated; we study the laws they have made, and the institutions they have established, for shaping and moulding *their* unformed future. We go to Europe, or, by other means, we examine and investigate the present social, intellectual, and moral condition of its people; and here we have the product, the grand result, of men, motives, laws, institutions, all gathered and concentrated into one point, which we can now see, just as we see the fabric which comes from a piece of complicated machinery, when the last revolution of the last wheel rolls it into our hands for inspection.

And what is this result? In a world which God has created on such principles of wisdom and benevolence, that nothing is wanting, save a knowledge of his commands and an obedience to them, to make every human being supremely happy, what amount of that knowledge is possessed, what degree of that happiness is enjoyed? It is no adequate representation of the fact, to say that not any thing like one-half of the adult population of Europe can read and write in any intelligible manner, and hence are shut out from a knowledge of all history, sacred and profane, and of all contemporary events; that not one-third are comfortably housed or fed or clothed, according to the very lowest standard of comfort amongst the laboring classes in this country; that not one individual in five hundred has any voice in the enactment of the laws that bind him, or in the choice of the rulers who dispose of his property, liberty, and life; and that, excepting in a few narrow and inconsiderable spots, the inalienable right of freedom in religion, and liberty to worship God according to the dictates of conscience, is not recognized or known; nay, that the claim of any such liberty is denounced and spurned at, and its advocates punished, not only by a denial of the right itself, but by the deprivation of all human rights whatever: all these

facts, deeply as they affect human happiness, greatly as they derogate from human dignity, present no living picture of Europe as it now exists. All this is negation only: it leaves wholly untouched the side of positive, boundless suffering and wrong. In the Europe of the nineteenth century, the incomputable wealth that flows from the bounty of Heaven during the revolving seasons of the year, and is elaborated from the earth by the ceaseless toil of millions of men; that wealth which is wrought out by human labor and ingenuity, in conjunction with the great agencies of Nature, — fire, water, wind, and steam, — and whose aggregates are amply sufficient to give comfort and competence to every human being, and the joys of home and the sacred influences of the domestic circle to every family, — that wealth, by force of unjust laws and institutions, is filched from the producer, and gathered into vast masses, to give power and luxury and aggrandizement to a few. Of *production*, there is no end; of *distribution*, there is no beginning. Nine hundred and ninety-nine children of the same common Father suffer from destitution, that the thousandth may revel in superfluities. A thousand cottages shrink into meanness and want to swell the dimensions of a single palace. The tables of a thousand families of the industrious poor waste away into drought and barrenness, that one board may be laden with surfeits. As yet, the great truth has scarcely dawned upon the mind of theorist or speculator, that the political application of doing as we would be done by is to give every man entire equality before the law, and then to leave his fortunes and his success to depend upon his own exertions.

That there must be governors, or rulers, where there are communities of men, is so self-evident a truth, that it is denied only by the insane. Yet, under this pretext, a few individuals or families have usurped and maintain dominion over almost two hundred millions of men. That a nation must possess the means of defending itself against aggressors, or submit to be vanquished, despoiled, and enslaved, has been

equally obvious. Yet, under pretence of doing this, naval and military armaments are kept up, at incalculable expense; and men are converted into the soulless machinery of war, far more to uphold thrones, and to subjugate all independence of thought and action at home, than to repel assaults from abroad. Religion is the first necessity of the soul; but because every human being, though he were heir to all the glories and profusions of the universe, must still be a wanderer and an outcast until he can find a Supreme Father and God in whom to confide; because of this instinctive outreaching of the soul towards some Almighty Power, — crafty and cruel men have come in, and have set up idols and false gods for its worship; and then, claiming to be the favorites and ministers of Omnipotence, have dispensed the awful retributions of eternity against all questioners of their authority, and brandished every weapon in the armory of Heaven, not merely for the slightest offences against themselves, but for the noblest deeds of duty towards God, and of benevolence towards men. Hence, throughout wide regions of country, man is no longer man. Formed in the image of his Maker, the last vestiges of that image are nearly obliterated. He no longer breathes that breath of independent and conscious life that first animated his frame and made him a living soul. The heavenly spark of intelligence is trodden out from his bosom. In some countries which I have visited, there are whole classes of men and women whose organization is changing, whose whole form, features, countenance, expression, are so debased and brutified by want and fear and ignorance and superstition, that the naturalist would almost doubt where, among living races of animals, to class them. Under governments where superstition and ignorance have borne most sway, the altered aspect of humanity is assimilating to that of the brute; but, where resistless power has been trampling for centuries upon a sterner nature and a stronger will, the likeness of the once human face is approximating to that of a fiend. In certain districts of large cities, — those of London, Manchester, Glas-

gow, for instance, — such are the influences that surround children from the day they are brought into the world, and such the fatal education of circumstances and example to which they are subjected, that we may say they are born in order to be imprisoned, transported, or hung, with as exact and literal truth as we can say that corn is grown to be eaten.

Not in a single generation could either the cruelties of the oppressor, or the sufferings of his victim, have effected these physical and mental transformations. It has taken ages and centuries of wrongs to bend the body into abjectness, to dwarf the stature, to extinguish the light of the eye, and to incorporate into body and soul the air and movements of a slave. And the weight and fulness of the curse is this, — that it will require other ages and centuries to efface these brands of degradation, to re-edify the frame, to rekindle in the eye the quenched beam of intelligence, to restore height and amplitude to the shrunken brow, and to reduce the overgrown propensities of the animal nature within a manageable compass. Not only is a new spirit to be created, but a new physical apparatus through which it can work. This is the worst, — the scorpion sting in the lash of despotism. There is a moral and a physical entailment as well as a civil. Posterity is cursed in the debasement inflicted upon its ancestors. In many parts of Europe, the laws both of the material and of the moral nature have been so long outraged, that neither the third nor the fourth generation will outlive the iniquities done *to* their fathers.

Again: the population of a country may be so divided into the extremes of high and low, and each of these extremes may have diverged so widely from a medium or standard of nature, that there are none, or but a very small intermediate body, or middle class of men, left in the nation. The high, from luxury and its enervations, will have but small families, and will be able to rear but few of the children that are born to them. The intermediate class, whom affluence has not corrupted, nor ignorance blinded to the perception of consequences, will be

too few in number, and too cautious about contracting those matrimonial alliances which they cannot reputably and comfortably sustain, to contribute largely to the continuation of the species. But the low, the abandoned, the heedless, those whom no foresight, or apprehension of consequences, can restrain, — these, obedient to appetite and passion, will be the fathers and the mothers of the next generation. And no truth can be more certain than this: that after the poor, the ignorant, the vicious, have fallen below a certain point of degradation, they become an increasing fund of pauperism and vice, — a pauper-engendering hive, a vital, self-enlarging, reproductive mass of ignorance and crime. And thus, from parent to child, the race may go on degenerating in body and soul, and casting off, one after another, the lineaments and properties of humanity, until the human fades away, and is lost in the brutal or demoniac nature. While the vicious have pecuniary means, they have a choice of vices in which they can indulge; but, though stripped of means to the last farthing, their ability to be vicious, and all the fatal consequences to society of that viciousness, still remain. Nay, it is then that their vices become most virulent and fatal. However houseless or homeless, however diseased or beggarly, a wretch who is governed only by his instincts may be, marriage is still open to him; or, so far as the condition and character of the next generation are concerned, the same consequences may happen without marriage. This, also, the statesman and the moralist should heed, that however adverse to the welfare of human society may be the circumstances under which a fore-doomed class of children are born, yet the doctrine of the sanctity of human life protects their existence. Public hospitals, private charities, step in and rescue them from the hand of death. Hence they swarm into life by myriads, and crowd upwards into the ranks of society. But in society there are no vacant places to receive them, nor unclaimed bread for their sustenance. Though uninstructed in the arts of industry, though wholly untaught in the restraints and the obligations of duty, still the great pri-

mal law of self-preservation works in their blood as vigorously as in the blood of kings. It urges them on to procure the means of gratification; but, having no resources in labor or in frugality, they betake themselves to fraud, violence, incendiarism, and the destruction of human life, as naturally as an honest man engages in an honest employment. Such, literally, is the present condition of large portions of the human race in some countries of Europe. In wide, rural districts, in moral jungles, hidden from public view within the recesses of great cities, those who are next to be born, and to come upon the stage of action, will come, *fifty to one*, from the lowest orders of the people, — lowest in intellect and morals, and in the qualities of prudence, foresight, judgment, temperance, — lowest in health and vigor, and in all the elements of a good mental and physical organization, — strong only in the fierce strength of the animal nature, and in the absence of all reason and conscience to restrain its ferocity. Of such stock and lineage must the next generation be. In the mean time, while these calamities are developing and maturing, a few individuals — some of whom have a deep stake in society, others moved by nobler considerations of benevolence and religion — are striving to discover or devise the means for warding off these impending dangers. Some look for relief in a change of administration, and in the change of policy it will insure. With others, compulsory emigration is a remedy, — a remedy by which a portion of the household is to be expelled from the paternal mansion by the terrors of starvation. There are still others who think that the redundant population should be reduced to the existing means of subsistence; and they hint darkly at pestilence and famine as agents for sweeping away the surplus poor, as famishing sailors upon a wreck hint darkly at the casting of lots. Smaller in numbers than any of the preceding is that class who see and know, that, while the prolific causes of these evils are suffered to exist, all the above schemes, though executed to their fullest extent, can only be palliatives of the pain, and not remedies for the

disease; who see and know how fallacious and nugatory all such measures must be towards the re-creation of national character, towards the laying anew of the social foundations of strength and purity. They see and know that no external appliances can restore soundness to a fabric where the dry-rot of corruption has penetrated to the innermost fibres of its structure. The only remedy, this side of miracles, which presents itself to the clear vision of this class, is in a laborious process of renovation, in a thorough physical, mental, spiritual culture of the rising generation, reaching to its depths, extending to its circumference, sustained by the power and resources of the government, and carried forward irrespective of party and of denomination. But a combination of vested interests has hitherto cut off this resource, and hence they stand, appalled and aghast, like one who finds too late that he is in the path of the descending avalanche. Under circumstances so adverse to the well-being of large portions of the race, the best that even hope dares to whisper is, that, in the course of long periods yet to come, the degraded progeny of a degraded parentage may at length be reclaimed, may be uplifted to the level whence their fearful descent began. But, if this restoration is ever effected, it can only be by such almost superhuman exertions as will overcome the momentum they have acquired in the fall, and by vast expenditures and sacrifices corresponding to the derelictions of former times.

It was from a condition of society like this, or from one where principles and agencies were at work tending to produce a condition of society like this, that our ancestors fled. They came here as to a newly-formed world. In many respects, the colonization of New England was like a new creation of the race. History cannot deny that the founders of that colony had faults. Indeed, the almost incredible fact, that, as soon as they escaped from persecution, they became persecutors themselves; that, while the wounds were still unhealed which the iron fetters of oppression had made in their souls, they began

to forge fetters for the souls of others, — this fact would seem mysterious and inexplicable, did we not see in it so vivid an illustration of the established order of Nature and Providence, signalizing to the world the power of a vicious education over virtuous men ; exemplifying the effect of tyrannical institutions upon human character, by an instance so conspicuous and flagrant that it should be remembered to the end of time, and should forever supersede the necessity of another warning. But, on the other hand, history must concede to the founders of this colony the possession of exalted, far-shining, immortal virtues. Not the least among the blessings which they brought were health and a robustness of constitution that no luxury had ever enervated, or vicious indulgences ever corrupted. In all that company, there was not a drop of blood which had been tainted by vice, nor an act of life that had been stained by crime. Arriving here at a period when winter had converted the land into one broad desert, the inclemency of the season and the extremity of their toils swept away all the less healthful and vigorous, and left not man or woman, save those whose hardy and powerful frames the perils of the ocean, and the wintry rigors of the clime, and the privations of a houseless and provisionless coast, had assailed in vain. In physical energy and hardihood, such were the progenitors of New England. It was said above, that this settlement of our country resembled, in some respects, the creation anew of the race ; but, had Adam and Eve been created under circumstances so adverse to life, we cannot suppose they would have survived the day on which they were animated. Yet these men and women were the first parents, the Adam and Eve, of our republic. Mighty as were their bodies, their spirits were mightier still. Some of the former did yield to privation and peril and disease ; but, in that whole company, not a heart ever relented. Stanch, undaunted, invincible, they held fast to what they believed to be the dictates of conscience and the oracles of God ; and, in the great moral epic which celebrates the story of their trials and their triumphs, the word " apostate " is nowhere written.

This transferrence of the fortunes of our race from the Old to the New World was a gain to humauity of at least a thousand years. I mean, if all the great and good men of Europe, from the 22d of December, 1620, had united their energies to ameliorate the condition of the human family, and had encountered no hostility, either from civil or religious despotism, it would have taken ten centuries to bring the institutions and the population of Europe to a point where the great experiment of improving the condition of the race by means of intellectual, moral, aud religious culture, could be as favorably commenced as it was commeuced on the day when the Pilgrims first set foot upon the Rock of Plymouth. What mighty obstructions and hinderances to human progress did they leave behind them! what dynasties of powerful men, and the more firmly-seated dynasties of false opinions! But, in the world to which they came, there were no classes upheld by law in feudal privilege and prerogative. There were no laws of hereditary descent upholding one class in opulence and power, irrespective of merit or vigor, and degrading other classes to perpetual indigence aud servility, without demerit or imbecility. Here was no cramped territory whose resources were insufficient to furnish a healthful competence to all; nor any crowded population, struggling so earuestly to supply their cravings for daily necessities that all the nobler wants of the soul were silenced by the clamor of the appetites. No predatory barons had conquered the whole land, and monopolized it, and, by a course of legislation as iniquitous as the original robbery itself, had predestined its descent in the line of particular families, through all coming time, so that *not one in hundreds* of all who should be born into the State could own a rood of ground which he might till for subsistence while liviug, or beneath which he could have a right of burial wheu dead.*

Our Pilgrim Fathers also possessed intelligence, — not merely

* The population of England is 16,000,000. The number of land-holders in fee is estimated by the Radicals at 30,000, and by the Tories at 36,000. A mean of 33,000 would give one land-owner to 484 non-land-owners.

common learning and information on common affairs, but most of them were men of accomplished education, conversant with the world's history, profoundly thoughtful, and as well qualified as any equally numerous community that had ever existed to discuss the deepest questions of State or Church, of time or eternity. Hence we are not the descendants of an ignorant horde, or pauper colony, driven out from the parent country in quest of food, and leaving all metropolitan art, intelligence, and refinement behind them. Besides, almost coeval with the settlement of the colony, they founded a college, and established common schools. In the first clearings of the forest, by the side of the first dwellings which they erected for a shelter, they built the schoolhouse; and of the produce of the first crops planted for their precarious subsistence, they apportioned a share for the maintenance of teachers and professors. This they did, that the altar-lights of knowledge and piety which they had here kindled might never go out. This they did, hoping that each generation would feed the flame to illumine the path of its successors, — a flame which should not be suffered to expire, but should shine on forever to enlighten and gladden every soul that should here be called into existence.

I repeat that the transferrence of the fortunes of the race to the New World, under such auspices, was a gain to humanity of at least a thousand years. By that removal, we were at once placed at a distance of three thousand miles from any spot where the Inquisition had ever tortured, or the fagot of persecution had ever blazed. By that removal, the chains of feudalism were shaken off. The false principle of artificial orders and castes in society was annulled. The monopolies of chartered companies and guilds were abolished. Proscriptions by men, who knew but one thing, of all knowledge they did not themselves possess, no longer bound the free soul in its quest of truth. Rapacious hordes of vicious and impoverished classes no longer prowled through society, plundering its wealth and jeoparding the life of its members. There were no besotted

races, occupying the vanishing point of humanity, to be reclaimed. A free, unbounded career for the development of the faculties, and the pursuit of knowledge and happiness, was opened for all. Ample and open as was the territory around them, their spiritual domain was more ample and open still. On the earth, there was no arbitrary power to forbid the establishment of righteous and humane institutions and laws; and, as they looked upward, the air was not filled with demon-shapes of superstition and fear, interdicting their access to heaven. Opportunity was given to discard whatever old errors should remain, and to adopt whatever new truths either the course of Nature or the providence of God might reveal. Whatever of degeneracy was to come upon themselves or upon their descendants in later times, was to come, not from hereditary transmission, not from nature or necessity, but from the culpable dereliction or allowance of themselves or their posterity.

Surely never were the circumstances of a nation's birth so propitious to all that is pure in motive, and great in achievement, and redundant in the means of universal happiness. Never before was a land so consecrated to knowledge and virtue. Never were children and children's children so dedicated to God and to humanity as when in those forest-solitudes — that temple of the wide earth and the o'erarching heavens, girt round with the terrors of ocean and wilderness, afar from the pomp of cathedral and court, in the presence only of the conscious spirits of the creatures who made, and of the Creator who accepted their vows — we, their descendants, were devoted to the cause of human freedom, to duty, to justice, to charity to intelligence, to religion, by those holy men.

It is in no boastful or vain-glorious spirit that I refer to this heroic period of our country's history. It is in no invidious mood that I contrast the leading features of our civil polity and our social condition with those of the transatlantic nations of Christendom. Rather must I confess that the contemplation of these historic events brings more humiliation than pride.

It demands of us whether we have retained our vantage-ground of a thousand years. It forces upon the conscience the solemn question, whether we have been faithful to duty. Stewards of a more precious treasure than was ever before committed to mortal hands, are we prepared to exhibit our lives and our history as the record of our stewardship? On the contrary, do we not rather cling to the trust, and vaunt the confidence wherewith we have been honored, without inquiring whether the value of the deposit is not daily diminishing in our hands? Subtract the superiority which, under our more propitious circumstances, we ought to possess, and how much will remain as the aliment of pride? It is not enough for us to say, that we are exempt from the wretchedness of the masses, and from the corruptions of the courts, of other lands. With our institutions and resources, these should have been incommunicable evils, — evils which it would have been alike unmeritorious to avoid and unpardonable to permit. It is no justification for us to adduce the vast, the unexampled increase of our population. The question is not, how many millions we have, but what are their character, conduct, and attributes? We can claim neither reward nor approval for the exuberance of our natural resources, or the magnificence of our civil power. The true inquiry is, in what manner that power has been used: how have those resources been expended? They were convertible into universal elevation and happiness: have they been so converted? Neither a righteous posterity nor a righteous Heaven will adjudicate upon our innocence or guilt on the same principles or according to the same standards as those by which other nations shall be judged. A necessity for defence convicts us of delinquency; for had our deeds corresponded with our privileges, had duty equalled opportunity, we should have stood as a shining mark and exemplar before the world, visible as an inscription written in stars upon the blue arch of the firmament. The question is not, whether we have ruled others, but whether we have ruled ourselves. The accusations which we must answer before the impartial tribunals of earth and heaven are such as these: Have we, by self-denial, by

abstinence from pernicious luxuries, by beneficent labor, by obedience to the physical and organic laws of our nature, retained that measure of health and longevity to which, but for our own acts of disinherison, we had been rightful heirs? Where temptations are few, vice should be so rare as to become monstrous; where Art and Nature lavish wealth, a pauper should be a prodigy: but have we prevented the growth of vice and pauperism amongst us, by seeking out every abandoned child within our borders, as the good shepherd seeks after the lambs lost from his flock, and by training all to habits of industry, frugality, temperance, and an exemplary life? Have we remembered, that, if every citizen has a right to vote when he becomes a man, then the right of every child to that degree of knowledge which shall qualify him to vote is a thousand times as strong? Have the more fortunate classes amongst us, — the men of greater wealth, of superior knowledge, of more commanding influence, — have they periodically arrested their own onward march of improvement, and sounded the trumpet, and sent back guides and succors *to bring up the rear of society?* Have we insulated ourselves, as by a wall of fire, from the corruptions and follies engendered in European courts, and practised only by those who abhor the name of republic? Have we caused the light of our institutions so to shine before the world that the advocates of liberty in all parts of the earth can boldly point to our frame of government as the model of those which are yet to bless mankind? Can we answer these questions as the myriad sufferers under oppression in other lands would have us answer them? If not, then we have not done to others as we would that others, were circumstances reversed, should do unto us.

In the mines of Siberia, at Olmutz, at Spielberg, — in all the dungeons of the Old World where the strong champions of freedom are now pining in captivity beneath the remorseless power of the tyrant, — the morning sun does not send a glimmering ray into their cells, nor does night draw a thicker veil of darkness between them and the world, but the lone prisoner lifts his iron-laden arms to heaven in prayer, that we, the de-

positaries of freedom and of human hopes, may be faithful to our sacred trust; while, on the other hand, the pensioned advocates of despotism stand, with listening ear, to catch the first sound of lawless violence that is wafted from our shores, to note the first breach of faith or act of perfidy amongst us, and to convert them into arguments against liberty and the rights of man. There is not a shout sent up by an insane mob on this side of the Atlantic, but it is echoed by a thousand presses and by ten thousand tongues along every mountain and valley on the other. There is not a conflagration kindled here by the ruthless hand of violence, but its flame glares over all Europe, from horizon to zenith. On each occurrence of a flagitious scene, whether it be an act of turbulence and devastation or a deed of perfidy or breach of faith, monarchs point them out as fruits of the growth, and omens of the fate, of republics, and claim for themselves and their heirs a further extension of the lease of despotism.

The experience of the ages that are past, the hopes of the ages that are yet to come, unite their voices in an appeal to us: they implore us to think more of the character of our people than of its numbers; to look upon our vast natural resources, not as tempters to ostentation and pride, but as means to be converted, by the refining alchemy of education, into mental and spiritual treasures; they supplicate us to seek for whatever complacency or self-satisfaction we are disposed to indulge, not in the extent of our territory or in the products of our soil, but in the expansion and perpetuation of the means of human happiness; they beseech us to exchange the luxuries of sense for the joys of charity, and thus give to the world the example of a nation whose wisdom increases with its prosperity, and whose virtues are equal to its power. For these ends, they enjoin upon us a more earnest, a more universal, a more religious devotion of our exertions and resources to the culture of the youthful mind and heart of the nation. Their gathered voices assert the eternal truth, that, IN A REPUBLIC, IGNORANCE IS A CRIME; AND THAT PRIVATE IMMORALITY IS NOT LESS AN

OPPROBRIUM TO THE STATE THAN IT IS GUILT IN THE PERPETRATOR.

In conclusion, the Board will allow me to express my gratitude for the opportunity they have afforded me of investigating that class of institutions in other countries to whose prosperity in our own I feel so deep an attachment. I need not ask a body of gentlemen from whom I have uniformly experienced such candor and kindness, to distinguish, in this report, between those sentiments and views which I have advanced as my own, and those of other persons, which I have recorded as subjects of interesting or useful information. I am aware that it may be said, that six months are too short a period to authorize any one to visit countries so numerous and so remote, and to speak of institutions so difficult to be understood; but to this it may be answered, that I was not wholly unprepared for the investigation beforehand; and that the time, though short at best, was prolonged by diligence. The better to accomplish my purpose, many of the great thoroughfares, and most of the attractive objects, which the throng of travellers in pursuit of mere personal gratification commonly selects, were left. Always heedful of my mission, I kept my mind in perpetual contact with the great interests of mankind; and after seeing those institutions in other countries out of which human character arises, — as vegetation rises out of the soil, — I have come back to my native State more ardently attached to her institutions than ever before, and animated with a more fervent, an undying desire to see her noble capabilities of usefulness and of happiness developed and cultivated. To be able to return to my post of labor at the appointed time, I have permitted no pain or peril to retard my progress; and, if the observations which I have made and recorded shall produce those impressions of obligation to our country and our kind upon other minds which they have made upon my own, the remembrance alike of the pain and the peril will be sweet.

REPORT FOR 1845.

GENTLEMEN, —

. . . . THE extraordinary facts exhibited in my last Report, respecting the manner of apportioning school-money among the districts, have turned public attention to that important subject.* Those facts have already induced some towns to make very material modifications in the manner of distributing their money; and they promise to do the same thing in many more. The great doctrine which it is desirable to maintain, and to carry out, in reference to this subject, is, *equality of school-privileges for all the children of the town, whether they belong to a poor district or a rich one, a small district or a large one.*

A general interest has been awakened in some towns upon which a deep sleep had fallen before. During no year, since my original appointment, have my advice and assistance been so frequently requested respecting the best methods of arranging and improving our school-system.

Nor is the movement confined to our own Commonwealth. Several States in the south and west seem to be awaking from their lethargy, and inquiring into the detail of means necessary to be adopted for the general education of their people. Within the space of a single month, during the last autumn, I received inquiries from a dozen distinguished men, belonging to a single State, respecting the organic structure of our system, its general

* The details of this unequal distribution have not been republished, as they are not of present interest.

administration, and its internal arrangements and management. In the mean time, the great State of New York, by means of her county superintendents, her State Normal School, and otherwise, is carrying forward the work of popular education more rapidly than any other State in the Union, or any country in the world. Within the last year, the State of Rhode Island has entirely renovated her school-system. Under the auspices of that distinguished and able friend of common schools, Henry Barnard, Esq., she is preparing to take her place among the foremost of the States. Within the last few weeks also, the State of Vermont has re-organized her school-system, by passing a law which provides for the appointment of town, *county*, and State superintendents, prescribing the course of duty of each class of officers in regard to the examination of teachers, the visitation of schools, and the general administration of the system.

These indubitable evidences of progress are not only a reward for past exertions, but an incentive to future efforts. But let not complacency in successes already obtained tempt to the relaxation of a single fibre in our endeavors for future advancement. What has been gained must be converted into means for further acquisition. The faithful steward, being intrusted with five talents, therewith gets other five talents.

Our common schools are a system of unsurpassable grandeur and efficiency. Their influences reach, with more or less directness and intensity, all the children belonging to the State, — children who are soon to be the State. They act upon these children at the most impressible period of their existence, — imparting qualities of mind and heart which will be magnified by diffusion, and deepened by time, until they will be evolved into national character, — into weal or woe, into renown or ignominy, — and, at last, will stamp their ineffaceable seal upon our history. The natural philosopher looks at the silky envelopment which an insect has woven for itself; he marks its structure; he recognizes the laws of life which are silently at work within it; and he knows that, in a few days or weeks, that covering will burst, and from it will be evolved a thing

of beauty and vivacity, lovely in the eyes of all, or an agent of destruction, fit to be a minister in executing God's vengeance against an offending people. With a profounder insight into the laws of development and growth, and with an eye that embraces an ampler field of time in its vision, the philosopher of humanity looks at the institutions which are moulding the youthful capacities of a nation; he calculates their energy and direction; and he is then able to foresee and to foretell, that, if its course be not changed, the coming generation will be blessed with the rewards of parental forecast, or afflicted with the retributions of parental neglect. Happy are they, who, knowing on what conditions God has made the welfare of nations to depend, observe and perform them with fidelity.

Improvement in schoolhouse architecture — including in the phrase all comfortable and ample accommodations for the schools — is only an improvement in the perishing body in which they dwell. A more perfect organization of the schools themselves, by a wisely-graduated classification of schools and scholars, and by the assignment of such territorial limits as will best combine individual convenience with associated strength, is only an endowment of that perishing body with a superior mechanism of organs and limbs. The more bounteous pecuniary liberality with which our schools, from year to year, are maintained, is only an addition to the nutriment by which the same body is fed, giving enlargement and energy to its capabilities, whether of good or of evil, and empowering it to move onward more swiftly in its course, whether that course is leading to prosperity or to ruin.

The great, the all-important, the only important question still remains: By what spirit are our schools animated? Do they cultivate the higher faculties in the nature of childhood, — its conscience, its benevolence, a reverence for whatever is true and sacred? or are they only developing, upon a grander scale, the lower instincts and selfish tendencies of the race, — the desires which prompt men to seek, and the powers which enable them to secure, sensual ends, — wealth, luxury, preferment, —

irrespective of the well-being of others? Knowing, as we do, that the foundations of national greatness can be laid only in the industry, the integrity, and the spiritual elevation of the people, are we equally sure that our schools are forming the character of the rising generation upon the everlasting principles of duty and humanity? or, on the other hand, are they only stimulating the powers which lead to a base pride of intellect, which prompt to the ostentation instead of the reality of virtue, and which give augury that life is to be spent only in selfish competitions between those who should be brethren? Above all others, must the children of a republic be fitted for society as well as for themselves. As each citizen is to participate in the power of governing others, it is an essential preliminary that he should be imbued with a feeling for the wants, and a sense of the rights, of those whom he is to govern; because the power of governing others, if guided by no higher motive than our own gratification, is the distinctive attribute of oppression; an attribute whose nature and whose wickedness are the same, whether exercised by one who calls himself a republican, or by one born an irresponsible despot. In a government like ours, each individual must think of the welfare of the State, as well as of the welfare of his own family, and, therefore, of the children of others as well as his own. It becomes, then, a momentous question, whether the children in our schools are educated in reference to themselves and their private interests only, or with a regard to the great social duties and prerogatives that await them in after-life. Are they so educated, that, when they grow up, they will make better philanthropists and Christians, or only grander savages? For, however loftily the intellect of man may have been gifted, however skilfully it may have been trained, if it be not guided by a sense of justice, a love of mankind, and a devotion to duty, its possessor is only a more splendid, as he is a more dangerous, barbarian.

We have had admirable essays and lectures on the subject of morality in our schools. In perusing the reports of school-

committees from year to year, nothing has given me so much pleasure as the prominence which they have assigned to the subject of moral education, and the sincerity, the earnestness, and the persistence with which they have vindicated its claims to be regarded as an indispensable part of all common-school instruction. Considered as general speculation, nothing could be better; and yet no one will deny that the want of a corresponding action on this subject still beclouds the prospects of the schools, and ofttimes causes us to tremble for the fate of those who are passing through them. Practically, the duty of cultivating the moral nature of childhood has been neglected, and is still neglected. Profound ethical treatises are written for the guidance of men, after the habits and passions of ninety-nine in every hundred of those men have become too deep-rooted and inveterate to be removed by secondary causes. Volumes are published on the nicest questions of casuistry, — questions which probably will never arise in the experience of more than one in a thousand of the community, — while specific directions and practical aids in regard to the training of children in those every-day domestic and social duties on which their own welfare and the happiness of society depend are comparatively unknown. How shall this great desideratum be supplied? How shall the rising generation be brought under purer moral influences, by way of guaranty and suretyship, that, when they become men, they will surpass their predecessors, both in the soundness of their speculations and in the rectitude of their practice? Were children born with perfect natures, we might expect that they would gradually purify themselves from the vices and corruptions which are now almost enforced upon them by the examples of the world. But the same nature by which the parents sunk into error and sin pre-adapts the children to follow in the course of ancestral degeneracy. Still, are there not moral means for the renovation of mankind which have never yet been applied? Are there not resources whose vastness and richness have not yet been explored? Of all neglected and forgotten duties, in all ages of

the world, the spiritual culture of children has been most neglected and forgotten. In all things else, art and science have triumphed. In all things else, principles have been investigated, and instruments devised and constructed, to apply those principles in practice. The tree has been taken in the germ, and its growth fashioned to the wants or the tastes of man. By the skill of the cultivator, the wild grain and the wild fruit have been taken in their seed, and have had their dwarfishness expanded into luxuriance, and their bitter and sometimes poisonous qualities ameliorated into richness of flavor and nutrition. The wild animal, and even the beast of prey, if domesticated when young, and from the lair, have been tamed and trained to the service of man, — the wild horse and the buffalo changed into the most valuable of domestic animals, and the prowling wolf into the faithful dog. But man has not yet applied his highest wisdom and care to the young of his own species. They have been comparatively neglected until their passions had taken deep root, and their ductile feelings had hardened into the iron inflexibility of habit; and then how often have the mightiest agencies of human power and terror been expended upon them in vain! Governments do not see the future criminal or pauper in the neglected child, and therefore they sit calmly by, until roused from their stupor by the cry of hunger or the spectacle of crime. Then they erect the almshouse, the prison, and the gibbet, to arrest or mitigate the evils which timely caution might have prevented. The courts and the ministers of justice sit by until the petty delinquencies of youth glare out in the enormities of adult crime; and then they doom to the prison or the gallows those enemies to society, who, under wise and well-applied influences, might have been supports and ornaments of the social fabric. For sixteen centuries, the anointed ministers of the gospel of Christ were generally regardless of the condition of youth. And the same remark holds true in regard to the last two centuries, with the exception of three or four only of all the Christian nations; and by far the greater part, even of these, must be excepted from the

exception. The messengers of Him who took little children in his arms and blessed them have suffered juvenile waywardness or perversity to mature into adult incorrigibleness and impenitency; and then they have invoked the aid of Heaven to subdue that ferociousness of the passions which even a worldly foresight would have checked. How often has Heaven turned a deaf ear to their prayers, as if to rebuke the neglect and the blindness which had given occasion for them! Who will deny, that, if one tithe of the talent and culture which have been expended in legislative halls, in defining offences, and in devising and denouncing punishments for them; or of the study and knowledge which have been spent in judicial courts, in trying and in sentencing criminals; or of the eloquence and the piety which have preached repentance and the remission of sins to adult men and women, — had been consecrated to the instruction and training of the young, the civilization of mankind would have been adorned by virtues and charities and Christian graces to which it is now a stranger?

What an appalling fact it is to every contemplative mind, that even wars and famines and pestilences — terrible calamities as they are acknowledged to be — have been welcomed as blessings and mercies, because they swept away, by thousands and tens of thousands, the pests which ignorance and guilt had accumulated! But the efficiency or sufficiency of these comprehensive remedies is daily diminishing. A large class of men seem to have lost that moral sense by which the liberty and life of innocent men are regarded as of more value than the liberty and life of criminals. There is not a government in Christendom which is not growing weaker every day, so far as its strength lies in an appeal to physical force. The criminal code of most nations is daily shorn of some of its terrors. Where, as with us, the concurrence of so many minds is a prerequisite, the conviction of the guilty is often a matter of difficulty; and every guilty man who escapes is a missionary, going through society, and preaching the immunity of guilt wherever he goes. War will never again be waged to dis-

burden the crowded prisons, or to relieve the weary executioner. The arts of civilization have so multiplied the harvests of the earth, that a general famine will not again lend its aid to free the community of its surplus members. Society at large has emerged from that barbarian and semi-barbarian state where pestilence formerly had its birth, and committed its ravages. These great outlets and sluice-ways, which, in former times, relieved nations of the dregs and refuse of their population, being now closed, whatever want or crime we engender, or suffer to exist, we must live with. If improvidence begets hunger, that hunger will break into our garners. If animal instincts are suffered to grow into licentious passions, those passions will find their way to our most secret chambers. We have no armed guard which can save our warehouses, our market-places, and our depositories of silver and gold, from spoliation by the hands of a mob. When the perjured witness or the forsworn juryman invades the temple of justice, the evil becomes too subtle for the police to seize. It is beyond legislative or judicial or executive power to redeem the sanctuaries of religion from hypocrisy and uncharitableness. In a word, the freedom of our institutions gives full play to all the passions of the human heart. The objects which excite and inflame those passions abound; and, as a fact, nearly or quite universal, there is intelligence sufficient to point out some sure way, lawful or unlawful, by which those passions can be gratified. Whatever children, then, we suffer to grow up amongst us, we must live with as men; and our children must be their contemporaries. They are to be our copartners in the relations of life, our equals at the polls, our rulers in legislative halls; the awarders of justice in our courts. However intolerable at home, they cannot be banished to any foreign land; however worthless, they will not be sent to die in camps, or to be slain in battle; however flagitious, but few of them will be sequestered from society by imprisonment, or doomed to expiate their offences with their lives.

In the history of the world, that period which opened with

the war of the American Revolution, and with the adoption of the Constitution of the United States, forms a new era. Those events, it is true, did not change human nature; but they placed that nature in circumstances so different from any it had ever before occupied, that we must expect a new series of developments in human character and conduct. Theoretically, and, to a great extent, practically, the nation passed at once, from being governed by others, to self-government. Hereditary misrule was abolished; but power and opportunity for personal misrule were given in its stead. In the hour of exultation at the achievement of liberty, it was not considered that the evils of license may be more formidable than the evils of oppression, because a man may sink himself to a profounder depth of degradation than it is in the power of any other mortal to sink him, and because the slave of the vilest tyrant is less debased than the thrall of his own passions. Restraints of physical force were cast off; but no adequate measures were taken to supply their place with the restraints of moral force. In the absence of the latter, the former, degrading as they are, are still desirable, — as a strait-jacket for the maniac is better than the liberty by which he would inflict wounds or death upon himself. The question now arises, — and it is a question on whose decision the worth or worthlessness of our free institutions is suspended, — whether some more powerful agency cannot be put in requisition to impart a higher moral tone to the public mind; to enthrone the great ideas of justice, truth, benevolence, and reverence, in the breasts of the people, and give them a more authoritative sway over conduct than they have ever yet possessed. Of course, so great an object can be reached only by gradual approaches. Revolutions which change only the surface of society can be effected in a day; but revolutions working down among the primordial elements of human character, taking away ascendency from faculties which have long had control over the conduct of men, and transferring it to faculties which have long been in subjection, — such revolutions cannot be accomplished by one convulsive

effort, though every fibre in the nation should be strained to the endeavor. Time is an essential element in their consummation; nor can they be effected without an extensive apparatus of means, efficiently worked. Yet such revolutions have taken place, — as when nations emerged from the barbarian into the classic and chivalrous or romantic ages, or when they passed from these into the commercial and philosophic periods. By a brief retrospect of the condition of the more civilized nations of ancient and of modern times, it can be easily shown that such a change has already taken place on the subject of education itself. It is the mission of our age to carry this cause one step farther onward in its progress of development.

Among the ancients, physical education was deemed of paramount importance. A preparation of the masses for war was the grand, the almost exclusive, object of national concern. War being carried on, and battles decided, mainly by muscular strength and agility; by the distance and accuracy with which the javelin could be hurled, or the vigor and dexterity with which the falchion could be wielded, — the desire of physical celerity and force predominated among men. It was not the cultivation of the great heart of the nation, it was not even the development of the intellect of the masses, but it was the invigoration of the frame, the growth and the strengthening of the limbs, that constituted the object of national policy and ambition. Bodily hardihood, the power of physical endurance, the ability to make long marches unfatigued, and to fight hand-to-hand, for the longest period, unterrified, were the qualities which won the spoils and the plaudits of victory, and kindled to enthusiasm the aspirations of the emulous youth. Who can fail to see that the tendency of all this was, not only to weaken the intellectual nature, and to narrow its range of action, but to degrade and demoralize the spiritual affections? The man was sacrificed to the animal; his soul was deemed of less value than his sinews. As the nobler qualities of his nature sunk to the level of brute force, it happened, naturally, that the horse became as valuable as his rider; and the elephant that went

out to battle was of more consequence than the dozen warriors whom he bore in the tower upon his back. During the middle ages, and until the introduction of fire-arms, — which, to a very great extent, neutralized the inequalities of physical strength, — the great barbarian idea, that the body of man is the only part of him worth cultivating, retained unquestioned ascendency in regard to the masses of the people. The soul was not consciously excluded from culture; for it was not sufficiently thought of, as the object of culture, to raise the question. Even down to the present century, the rulers and aristocracy of England have always encouraged athletic sports among the people — wrestling, running, leaping, boxing — as a part of the national policy, because, as it was said, these exercises tended to invigorate the *breed*, and thus to make better soldiers and sailors; the very language which was used betraying the sentiment, that it was the animal, and not the spiritual, part of man which was the object of national concern. Nor even in our own times, nor in our own country, have philosophy and Christianity dispelled this fatal idea, — an idea which is proper to the savage and the heathen only, and which we have inherited from them. In all the nations of Europe, the regulations of military schools in regard to training the body for vigor and robustness, and the capability of endurance, are entirely different from those of the classical, medical, legal, or theological schools; and in the military academy of our own government, at West Point, the cadets are inured to exposure, and their bodies hardened by camp-duty; while in our colleges and higher schools there are no regulations which have the health of the student for their object. On the contrary, so far as the body is concerned, the latter classes of institutions provide for all the natural tendencies to ease and inactivity as carefully as though paleness and languor, muscular enervation and debility, were held to be constituents in national beauty.

The introduction of the Baconian philosophy wrought a great revolution in the education of mankind. Since that epoch, the cultivation of the intellect has received more general attention

than ever before; and, just in proportion as the intellect has been developed, it has seen more clearly and appreciated more fully the advantages of its own development. In Prussia and a few of the smaller States of Continental Europe, the action of the intellect, for reasons too obvious to be mentioned, has taken more of a speculative turn. In Great Britain, it has been turned more towards practical or utilitarian objects; and, in the United States, it has been pre-eminently so turned. The immense natural resources of our country would have stimulated to activity a less enterprising and a less energetic race than the Anglo-Saxon. But such glittering prizes, placed within reach of such fervid natures and such capacious desires, turned every man into a competitor and an aspirant. The exuberance that overspread the almost interminable valleys of the West drew forth hosts of colonists to gather their varied harvests. The tide of emigration rolled on, and it still continues to roll, with a volume and a celerity never before known in any part of the world, or in any period of history. Unlike all other nations, we have had no fixed, but a rapidly-advancing frontier. The geographical information of yesterday has become obsolete to-day. The outposts of civilization have moved forward with such gigantic strides, that their marches are reckoned, not by leagues, but by degrees of longitude; and cities containing thirty or fifty thousand souls have sprung up before the relics of the primeval forests had decayed on the soil they had so lately shaded. In the space of half a century, vast wildernesses have been organized into Territories, and these Territories erected into States, to take their place in the great family of the confederacy, and to be heard by their representatives in the council-halls of the nation. But scarcely had the immigrant and the adventurer surveyed the richness of vegetation which covered the surface of the earth, before they discovered an equal vastness of mineral wealth beneath it, — wealth which had been laid up, of old, in subterranean chambers, no man yet knows how capacious. Thus every man, however poor his parentage, became the heir-apparent

of a rich inheritance. And while millions were thus appropriating fortunes to themselves out of the great treasure-house of the West, other millions on the Atlantic seaboard, with equal enterprise and equal avidity, were amassing the means of refinement and luxury. In one section, where Nature had adapted the soil to the production of new and valuable staples, the planter seized the opportunity, — literally a golden one, — and soon filled the markets of the world with some of the cheapest and the most indispensable necessaries of life. In another section, foreign commerce invited attention; and the hardy and fearless inhabitants went forth to the uttermost parts of the earth in quest of gain. They drew wealth from the bosom of every ocean that spans the globe; they visited every country, and searched out every port on its circumference, where wind and water could carry them, and brought home, for sustenance or for superfluity, the natural and artificial productions of every people and of every zone. Meantime, science and invention applied themselves to the mechanic arts. They found that Nature, in all her recesses, had hidden stores of power, surpassing the accumulated strength of the whole human race, though all its vigor could be concentrated in a single arm. They found that whoever would rightly apply to Nature, by a performance of the true scientific and mechanical conditions, for the privilege of using her agencies, should forthwith be invested with a power such as no Babylonian or Egyptian king, with all his myriads of slaves, could ever command. With the aid of a little hand-machinery, at the beginning, water and steam have been taught to construct machines; and out of their matchless perfection, when guided by a few intelligent minds, have come the endless variety, the prodigality and the cheapness, of modern manufactures. In the Northern States, too, one universal habit of personal industry, not confined to the middle-aged and the vigorous alone, but enlisting the services of all, — the old, the young, the decrepit, the bed-ridden, each according to his strength, — has never ceased to coin labor into gold; and from the confluence of these numberless streams, though individually

small, the great ocean of common comfort and competence has been unfailingly replenished.

Gathered together from these numerous and prolific sources, individual opulence has increased; and the sum total or valuation of the nation's capital has doubled and redoubled with a rapidity to which the history of every other nation that has ever existed must acknowledge itself to be a stranger. This easy accumulation of wealth has inflamed the laudable desire of competence into a culpable ambition for superfluous riches. To convert natural resources into the means of voluptuous enjoyments, to turn mineral wealth into metallic currency, to invent more productive machinery, to open new channels of intercommunication between the States, and to lengthen the prodigious inventory of capital invested in commerce, has spurred the energies and quickened the talent of a people, every one of whom is at liberty to choose his own employment, and to change it, when chosen, for any other that promises to be more lucrative.

Nor is this the only side on which hope has been stimulated and ambition aroused. Others of the most craving instincts of human nature have been called into fervid activity. Political ambition, the love of power, — whether it consists in the base passion of exercising authority over the will of others, or in the more expansive and generous desire of occupying a conspicuous place among our fellows by their consent, — these motives have acted upon a strong natural instinct in the hearts of all. The chief magistrate and the legislators of the nation, the chief magistrate and the legislators of the States, the numerous county, town, parochial, and district officers, are, with but few exceptions, elective; and therefore the possession of all such offices implies the confidence and the regard, of a majority at least, of their respective constituencies. So, too, of a great proportion of the militia offices. In addition to all these, there are voluntary, civil, social, philanthropic, and corporate organizations, each presided over, and its affairs administered, by officers of its own election. Probably there are, at the present hour, in

the United States, as many persons holding offices, bestowed upon them by the votes of others, and therefore indicative of some degree of respect and estimation, as existed through all the centuries of the Roman Republic when its dominion was co-extensive with the known world. Doubtless there are more such elective offices at this time, among the twenty millions of this country, than among the two hundred millions of Europe, and far more than in all the world besides. Many of these offices are sources of emolument as well as of power, and hence they present to competitors the double motive of a desire of gain and a love of approbation. If most of these innumerable fountains of honor are too small to slake the thirst of aspirants, they are sufficient to excite it. They create desires that are often unappeasable, — desires that embroil towns, states, and the nation itself, in the fiercest contentions of party.

Now, it is too obvious to need remark, that the main tendency of institutions and of a state of society like those here depicted is to cultivate the intellect and to inflame the passions, rather than to teach humility and lowliness to the heart. Our civil and social condition holds out splendid rewards for the competitions of talent, rather than motives for the practice of virtue. It sharpens the perceptive faculties in comparing different objects of desire, it exercises the judgment in arranging means for the production of ends, it gives a grasp of thought and a power of combination which nothing else could so effectively impart; but, on the other hand, it tends not merely to the neglect of the moral nature, but to an invasion of its rights, to a disregard of its laws, and, in cases of conflict, to the silencing of its remonstrances and the denial of its sovereignty.

And has not experience proved what reason might have predicted? Within the last half-century, has not speculation, to a fearful extent, taken the place of honest industry? Has not the glare of wealth so dazzled the public eye as often to blind it to the fraudulent means by which the wealth itself had been procured? Have not men been honored for the offices of dig-

nity and patronage they have held, rather than for the ever-during qualities of probity, fidelity, and intelligence, which alone are meritorious considerations for places of honor and power? In the moral price-current of the nation, has not intellect been rising, while virtue has been sinking, in value? Though the nation as a nation, and a very great majority of the States composing it, have performed all their pecuniary obligations, and preserved their reputation unsullied; yet have there not been great communities, acting through legislators whom they themselves had chosen, that have been guilty of such enormous breaches of plighted faith as would cause the expulsion of a robber from his brotherhood of bandits?

And who will say, even of the most favored portions of our country, that their advancement in moral excellence, in probity, in purity, and in the practical exemplification of the virtues of a Christian life, has kept pace with their progress in outward conveniences and embellishments? Can virtue recount as many triumphs in the moral world as intellect has won in the material? Can our advances towards perfection in the cultivation of private and domestic virtues, and in the feeling of brotherhood and kindness towards all the members of our households, bear comparison with the improvements in our dwellings, our furniture, or our equipages? Have our charities for the poor, the debased, the ignorant, been multiplied in proportion to our revenues? Have we subdued low vices, low indulgences, and selfish feelings? and have we fertilized the waste places in the human heart as extensively as we have converted the wilderness into plenteous harvest-fields, or enlisted the running waters in our service? In fine, have the mightier and swifter agencies which we have created or applied in the material world any parallel, in new spiritual instrumentalities, by which truth can be more rapidly diffused, by which the high places of iniquity can be brought low, or its crooked ways made straight?

Must it not be acknowledged, that, morally speaking, we stand in arrears to the age in which we live? and must not

some new measures be adopted, by which, as philanthropists and Christians, we can redeem our forfeited obligations?

While, then, the legislator continues to denounce his penalties against such wicked desires as break out into actual transgression, and while the judge continues to punish the small portion of offences that can be proved in court, the friends of education must do whatever can be done to diminish the terrible necessity of the penal law and the judicial condemnation.

In view of these considerations, I propose to speak, in the residue of this Report, of *School-motives*, and of some means for avoiding and extirpating *School-vices*.

SCHOOL-MOTIVES AND SCHOOL-VICES.

In the order of events, the first thing which demands attention is the choice of school-committee-men. We need school-committee-men who will scrutinize as diligently the moral character of the proposed teacher, and his ability to impart moral instruction, as they do his literary attainments and his ability to impart knowledge. This official prerequisite in every member of our school-committees is not only necessary on account of the general influence which his character will exert upon children, but on account of the particular duties the law requires him to perform. How would consistency be outraged, what a brand would be affixed by the general verdict of the community upon the character of a town which should elect as school-committee-men, to decide upon the literary qualifications of the instructors of their children, those who could neither read nor write! And yet is it not obvious that an immoral man is as little qualified to pronounce upon moral character as an illiterate man is to decide upon the sufficiency of literary qualifications?

The *general* exemption of the teachers of Massachusetts from immoral habits is a fact to which the committees cheerfully and confidently testify; and it is one which my acquaintance

with them enables me to confirm. But freedom from actual vice is not sufficient. In the character of one who is to train up children, a positive determination towards good, evinced by his life as well as by his language, is an essential attribute. No talent can atone for want of principle, no brilliancy of genius compensate for one stain upon the character. The perceptions of a teacher between right and wrong should be as unclouded by interest or passion as the lot of humanity will allow; and his conscience should be trained to an affinity for truth, and an abhorrence of falsehood, as quick and as sure as the elective attractions and repulsions of chemistry. Knowledge is power, talent is power; but they are powers which may be enlisted on the side of evil as well as of good. Nature bestows talent, living among men confers some knowledge, and mere instinct is sufficient to make known to the appetites and passions their related objects; and, therefore, unless a moral sovereign and lawgiver be enthroned in the breast, whose eye can watch and whose arm can defend, these appetites and passions will be to all the sanctuaries of liberty, of reputation, of life, and of chastity, what wolves are to the sheepfold. If talent were sufficient, why are not the greatest men the best men also? If knowledge were sufficient, why does it not always become the handmaid of virtue? or why does much learning ever make men mad? Not nearer to the day of its destruction is a community without knowledge than a community which relies upon knowledge *alone* as sufficient to preserve it. According to the present constitution of the human mind, and of the world in which we are placed, knowledge is a necessity in the pursuit of happiness; but morality is a preliminary necessity, elder-born and eternal. We can conceive of a state of existence where we could be happy without knowledge; but it is not in the power of any human imagination to picture to itself a form of life where we could be happy without virtue.

Generally speaking, I believe there is a commendable desire, on the part of teachers, to impart moral instruction; but there

are obstacles in the way of doing it; and, for various causes, the ability or the opportunity does not equal the exigencies of the case. Some of these causes I proceed to notice.

The manner in which school-examinations have heretofore been conducted has tended to make the moral progress of the children secondary to their literary attainments.

Perhaps there is something in the nature of the case conducing to a result so lamentable; if so, it should be sedulously guarded against by a preventive foresight. The scholars are ambitious to win the approval of the committee; but in what way are they to satisfy the committee that they deserve this approval? Let us glance, for a moment, at the course of proceedings as it usually takes place in some of the best of our schools. The committee visit the school soon after its commencement, as they are required to do by law. Their object is to ascertain the condition of the school, as it stands at the time, in regard to the studies pursued. For this purpose, the classes are called upon to spell, and the percentage of misspelled words is noted; to read, and the facility and intelligence with which they read are attended to; to exhibit their writing-books, and the neatness and legibility of their hand-writing are observed; to answer questions in geography and grammar; to work sums or draw maps upon the black-board: and their proficiency and accuracy in these several studies are noted down, at least in the memory, if not in a book. Occasionally, during the term, a committee-man may call in to watch the progress of the school; but, at its close, a more formal and thorough examination is made necessary, both by the law of the land and by public expectation. The committee appear; the classes again spell; and the diminution in the percentage of errors, as compared with what it was at the opening of the school, is recorded. They read, and define words; and the more living and natural expression of the voice, the greater ease and elegance in the elocutionary part of the exercise, together with their enlarged understanding of the scope and drift of the piece selected, and their ability to explain its historical, biographical,

or scientific allusions, — all these are susceptible, to some extent, of a numerical notation, and can be reported to persons not present at the exercise. The classes are called to the black-board, and, by a swift process, the answers to difficult arithmetical questions are evolved; or, on requiring a map of a particular country to be drawn, a miniature representation of it, with its boundaries, its mountains, its rivers, and its cities, starts into being before their eyes. Indeed, if the class be large, and has been competently trained, then, by assigning a different part of the globe to each member of it, in ten minutes a very respectable atlas of the world will be depicted upon the walls of the schoolroom, to the honor of the pupils and the delight of all spectators. The committee and the parents participate in the general joy, and both teachers and scholars receive the meed of praise. The teacher wins or confirms an enviable reputation; the district solicits his acceptance of the school for another term; other districts hear of his success, and become competitors for his services; and, as a natural consequence of the competition, he obtains both increased honor and emolument.

But suppose, at the time when the school began, low, perverse, and ungentlemanly habits and manners prevailed among the pupils, which the teacher, by the dignity and impressiveness of his own example, and by the energy and kindness of his expostulations, has extirpated, and has substituted decency and propriety and manliness for them. Suppose profaneness polluted the lips of the children, and he has made them see the beauty and the truth of the saying, that a Christian should be afraid to swear, and a gentleman should be ashamed to. Suppose falsehood overt, or falsehood in some of its thousand forms of equivocation, deception, or suppression, had cankered the vitals of the school, and threatened to consume all the honesty and ingenuousness of the young heart, but the teacher has made it a loathing and an abomination, and has inspired his school with some adequate conception of the moral beauty and the moral necessity of truth. Suppose a love of parents,

of brothers and sisters, and a compassion for the poor and the unfortunate, have been warmed into being, and nourished into strength, in bosoms where they did not exist before. Suppose a reciprocation of kind offices among schoolmates has been substituted for alienation or hostility, or that some ancient and long-descended feud has been harmonized by his pacific counsels. Every school of children, as much as every community of men, has a public opinion, which, though an unwritten, is a self-executing law among the pupils, and descends from one school-generation to another: suppose this public opinion of the school has been brought over from the side of insubordination to voluntary acquiescence, and from trickery to open dealing; suppose all or any of these blessed results to have been effected by the teacher: how are they to be brought forward for exhibition at the closing examination of the school? No general answers to general questions, no volubility in the rehearsal of moral precepts, can display them. They cannot be exhibited on the black-board, but they are graven upon the heart. They cannot be recorded in the school-register, but they are written in the Book of Life. All attempts at display, indeed, will refute and corrupt the whole: for there is no more offensive vice than the ostentation of virtue; and the most disgusting of all hypocrisies is a humility ambitious of display. True virtue is lowly and retiring, and finds its highest gratifications in its inward and silent delights; but the moment that a sentiment of pride, on account of its supposed possession, is consciously allowed, or an impulse to boastfulness indulged, then virtue falls from its high and pure estate, and can no longer be numbered with the angels of light.

And yet is not such a change, or any thing approximating to such a change, in the moral charácter and conduct of scholars, as I have here attempted to describe, worth infinitely more than if the teacher, by a miracle of art, could transfer into their minds all the knowledge of all the philosophers who have ever lived?

Now, an unhappy consequence of the prevalent course of

things is, that the teacher who withdraws some part of his time and attention from the intellectual training of his pupils, and devotes it to their moral culture, may be unable to exhibit so great a degree of proficiency in the studies pursued at the end of a short term, or even of a single year, as one who forgets the existence of a moral nature in his charge, and devotes himself exclusively to their intellectual progress. Whatever time the faithful moral teacher spends in cherishing sentiments of honor, truth, generosity, and magnanimity, the unfaithful one will spend in polishing and perfecting the recitations in grammar, geography, or some other study. The former will use no motive, however efficacious, if its ultimate tendencies are injurious; the latter will make all motives equally welcome, provided they conduce to his immediate end. The object of the one teacher is remote, consisting in the welfare of the children in after-life; that of the other is immediate, consisting in the reputation, and the pecuniary value of the reputation, that will redound to himself at the end of his engagement. And hence it clearly follows, that if the committee attend only, or attend mainly, to the proficiency made by the children in their accustomed studies, then a direct and palpable temptation is held out to the teacher to attend only, or to attend mainly, to this inferior part of his duty; because, by so doing, he will win a higher degree of success and a higher reputation for skill, his future services will be in greater demand, and he will not only enjoy his fame as fame, but be able also to coin it into money. Here, then, there seems to be a disastrous alliance of worldly motives; and they unite to weigh down the teacher who aspires to lofty and noble views in the discharge of his duty.

Is not a change in this part of our school-system imperatively demanded? Is not here a point where positive improvement may forthwith begin? Ought it not to become an axiom and a proverb, that no amount of mere knowledge in a school shall ever be accepted as an equivalent for an uninstructed conscience; but, on the other hand, that the formation of good

habits shall be an acceptable apology for inferiority in attainments? Let committees, then, look vigilantly; let them inquire anxiously, day by day, into the effect produced by the teacher upon the conduct, the manners, the disposition of his pupils; and let censure rather than commendation be awarded to the teacher who has carried forward his pupils ever so rapidly in mere knowledge, if he has neglected the culture of the affections, or purchased proficiency in school-studies by means which put the moral nature in jeopardy. How unworthy the sacred office of a teacher, if he incites his pupils to effort, only by displaying before them a brilliant prospect of worldly honors and distinctions, or the power and the pride of wealth, while he neglects to cherish the love of man in their bosoms, or to display before them daily the evidences of the goodness and the wisdom of God! I care not how promptly the classes may respond in the schoolroom, if I hear profaneness or obscenity in the play-ground. I care not how many text-books they have mastered, if they have not mastered the passions of jealousy and strife and uncharitableness. It is not indispensable to the happiness of children that they should know the length of all the great rivers, or the height of all the great mountains, upon the globe; but it is indispensable to their happiness that they should love one another, and do as they would be done unto. A life spent in obscurity and supported by daily toil may be full of blessings; but no worldly honors however high, or wealth however boundless, can atone for one dereliction from duty in acquiring them.

But the great agent in carrying the benign work of reform into our schools must be the teacher himself. No fulness in the qualifications of others can be the supplement of any material deficiency in him.

Essential requisites in a teacher's character are a love of children and a love of his work. He must not be a hireling. It is right that he should have a regard for his compensation; but, his compensation being provided for, it should be forgotten. To exclude the feeling of monotony and irksomeness, he

must look upon his work as ever a new one; for such it really is. The school-teacher is not, as it sometimes seems to be supposed, placed upon a perpetually-revolving wheel, and carried through a daily or yearly round of the same labors and duties. Such a view of his office is essentially a low and false one. What if he does turn over the leaves of the same book from day to day, and hear the same lessons recited from year to year? What if he is required to explain the same principles, and to reiterate the same illustrations, until his path in the accustomed exercises of the school-room is as worn and beaten as the one by which, morning and night, he travels to and from it? Still, in the truest and highest sense, his labor is always a new one; *because the subject upon which he operates is constantly changing.* Every day he is developing new faculties, or carrying forward the old through new stages of their course. Though the books which he uses, and the instructions which he imparts, may be the same, yet his real work consists in his taking up class after class, and conducting them onward through new portions of their progress. The charge committed to his care is weak, ignorant, immature, and constitutionally subject to error. He imparts vigor; he supplies knowledge; he ripens judgment; he establishes principle; and he then sends them on their way to fulfil the great duties of earth, and to be more and more prepared for another life. But, so soon as he has fulfilled his duty to one company of the ever onward-moving procession of young life, another company steps in to occupy the place of the former. Their need of guidance, their capacities of improvement, are as great as those which have gone before them. They, too, are bound on the same perilous journey of life, and for the same goal of an immortal existence. He is to guide their steps aright: he is to see, that, before they pass from under his hands, they have some adequate conception of the great objects at which they are to aim, of the glorious destiny at which they may arrive; and that they are endued with the energy and the perseverance which will make their triumph certain. As soon as this labor is done to one

company, he bids them a hasty farewell, that he may turn with glad welcome to hail another, more lately arrived upon the confines of existence, who ask his guidance as they are crossing the narrow isthmus of time, on their way to eternity. Such is the teacher's duty, — to welcome each new group, to prepare them for the journey of life, and to speed them on their way; and again to welcome, to prepare, and to speed: and, I repeat it, it is, and forever must be, a new work, while new beings emerge into existence, to receive benefit and blessing from him, to be rescued from what is wrong, to be consecrated to what is right. No teacher, therefore, who regards his duties in the light of reason and religion, can look upon them as repulsive or monotonous or irksome. The angel that unlocks the gate of heaven might as well become weary of the service, though, with every opening of the door, a new spirit is ushered into the mansions of bliss.

Let the teacher, then, who cannot draw exhaustless energies from a contemplation of the nature of his calling; let the teacher whose heart is not exhilarated as he looks round upon the groups of children committed to his care; let the teacher who can ever consciously speak of the "tedium of school-keeping," or the "irksome task of instruction," either renovate his spirit, or abandon his occupation. The repining teacher may be useful in some other sphere: he may be fit to work upon the perishable materials of wood or iron or stone; but he is unfit to work upon the imperishable mind.

The teacher should enter the schoolroom as the friend and benefactor of his scholars. He is supposed to possess more knowledge than they, by the utmost diligence and stretch of faculty, can receive from him; but yet no fact is more certain, or law more universal, than that they will make no valuable and abiding acquisition without their own consent and co-operation. The teacher can neither transfuse knowledge by any process of decanting, nor inject it by any force, into the mind of a child; but the law of the relation subsisting between them is, that he must have the child's conscious assent and concur-

rence before he can impart it. He cannot impart, unless the child consents to receive. What, then, is the state of mind most receptive of knowledge, and most co-operative in acquiring it? Surely, it is a state of confidence, of trustfulness, of respect, of affection. Hence it follows that the first great duty of a teacher is to awaken these sentiments in the breasts of his pupils. For this end, he can do more the first half-day he enters the schoolroom than in any week afterwards. But if a teacher presents himself before his pupils with a haughty or a contemptuous air, if he introduces himself by beginning to speak of *his* power and *his* authority, he will soon create the occasion for using them. The pupils themselves are first to be prepared, — to be put into an apt condition for the work that is to follow. If we take a survey of any department of nature or of art, illustrations and analogies will crowd upon the mind in confirmation of the universal truth, that, if we would exert an influence upon any object, we must first bring it into a condition receptive of that influence. Does not the farmer break up the soil, and open it to the sun, before he commits the seed to its bosom in expectation of a harvest? Have not celebrated artists owed their fame as much to the careful preparation of their materials as to the skill with which they afterwards combined them? By the softening agencies of fire or steam, the mechanic overcomes the rigidity or inflexibleness of his materials, before he attempts to mould or bend them to his purpose; yet the chemical changes effected by heat, through the innermost particles of the bar of iron which the smith wishes to fashion anew upon his anvil, are not deeper or more transmuting than the spiritual changes wrought upon the inmost emotions of a child's soul by a demeanor of dignity, and by looks and tones of affection, on the part of the teacher. When the all-bountiful Giver of the seasons wills to overspread our hemisphere with vegetable beauty and luxuriance, he does not scatter abroad his treasures of snow and of hail, nor bind the rivers in the death-like embraces of frost; but he causes the sun to draw near, and the genial rain to descend; he scatters

the infinite drops of dew over the earth, and summons the warming winds from the chambers of the south. Whatever is to be done, whether in the works of Nature or of Art, the material which is to be wrought upon must first be adapted to the work.

All teachers look upon books and apparatus as indispensable to the highest progress of a school; and hence the sending of a child to school with a demand that he should be taught, but without the common instrumentalities for teaching him, they justly regard as a Pharaoh-like requisition. Yet how much more indispensable are a desire and a purpose to learn, in the breast of a child, than a book in his hand! A spelling-book, a geography, and so forth, are very desirable; but a disposition to use them is indispensable. Parents must supply the books; but teachers — with the help of the parents where they can have it, and, as far as possible, without that help where they cannot have it — must supply the disposition. Let this be done, and we may safely affirm that the laws of Nature are not more certain, than that the child will learn; for it is a law of Nature that he will.*

* In the number of "The Bibliotheca Sacra" for February, 1846, pp. 110-11, we find the following observations from the pen of the Rev. Noah Porter, Jr., of Springfield, Mass. They are so valuable in themselves, and tend so strongly to fortify the views we have expressed, that we cannot forbear to copy them.

"You cannot drive a boy to study. Least of all can you drive study into him. The attention must itself awake and pant with eagerness for knowledge. The affections must lay hold of it with a grasp that nothing can unlock; and the man must appropriate it, turning it into the very substance of the mind. You cannot force open the attention as you must the jaw that is locked, nor bind on enthusiasm, nor infuse the results that come, if they come at all, from the personal activity of the scholar. The appliances of masters and text-books and illustrations and rules and supervision, and the most perfect system of gradations, one and all of them, are in vain, unless you can find or make a generous enthusiasm and a wakeful spirit. Still less at college will the scholar carry forward the work, however well begun at school, unless, with his growing capacity to labor and to learn, there grow likewise the desire to labor and to learn. Still less, after he leaves the university, will there be the overmastering desire to be the thorough and finished man, unless there be an iron energy and a burning enthusiasm. To success in acquiring, then, there is needed a strong and active spirit. Indeed, without it, study becomes a mechanical process, books overmaster the mind that should master them, the love of learning is a morbid habit, an unnatural craving, and the highest attainments of scholarship are as useless and as unnatural as a monstrous lion, or a heart that palpitates when it should beat."

If securing the good will of scholars is preliminary to their attainment of *knowledge*, far more important is it to the cultivation of their *moral sentiments* and to the growth of *good habits*. It is an invariable law of Nature in regard to the young mind, that the affections are developed before the judgment. How woful and desolate would be the condition of a child, if it could never love its mother until it had arrived at an age capable of mastering such a process of reasoning as should convince it that she was deserving of its love! Happily, this law of instinctive love prevails until an age when the reasoning powers can be developed, and the conscience enlightened. Then, and not till then, can a child make his affections intelligently obedient to his duties. All the circumstances and conditions, therefore, which attend the first introduction of a teacher to his pupils, should conciliate regard, and predispose to a mutual good understanding.

Is it not too obvious to need exposition, that the principles of duty can be superinduced upon a state of affection and sympathy more easily than upon one of antipathy and distrust? Is it not so self-evident as to make the idea of confirmation absurd, that a teacher who possesses the love and confidence of his pupils will reclaim them from error, or establish them in good principles, more readily than if he were obliged to break through a rampart of hostile feelings, and carry the citadel of the judgment and conscience by assault, and thus to found his ultimate authority upon the right of conquest, instead of having the gates thrown open to him with welcome and gratulation, and being received and hailed as a friend and deliverer? Every pupil who loves his teacher will feel that love soliciting him to obedience, just as certainly as every true disciple finds the love of Christ "constraining" him to good works. Every teacher animated by the spirit which is alone worthy of a teacher will enter into possession of his school, "not by constraint, but willingly; not for filthy lucre, but of a ready mind;" not as being a "lord" over his pupils, but as being an "ensample" to them.

The idea that there are two antagonist powers in the schoolroom, each struggling for mastery over the other, — like the rival houses of York and Lancaster, contending for the English throne, — will be as fatal to the prosperity of a school as is a civil war to the prosperity of a country. But primary and essential is the idea, that there is one sacred, all-pervading law, to which teacher and pupil are alike subject, — the law of duty and affection. All the rules of the schoolroom are but corollaries or consequences from this paramount law. If the authority and power of a teacher are not offensively set forth, they will rarely be questioned. If instead of flattering a despicable pride by a proclamation of his own supremacy, if instead of arrogating sovereignty to his own personal will, all his words and actions proceed upon the supposition that there is one serene and majestic power to which all are alike bound to render allegiance and to pay homage, — a law by which the judge is to be judged, and the ruler ruled, — and, above all, if the teacher shows himself to be a living and shining example of the doctrine he inculcates, the number of pupils will be few indeed who will ever bring the question of authority to a practical issue. When have soldiers ever undergone such privation of the necessaries of life as when their commander was known to stint himself to the same meagre allowance? When have they ever performed such forced marches as when they saw their leader moving in the van of the column? or made so valorous an assault as when they saw his plume waving at the head of the charge? Or, to draw examples from the highest source, does not the apostle say that the *goodness* of God leadeth us to repentance? and the Saviour's emblem was that of a true shepherd, who does not *drive*, but *leads* forth his flock. However it may be with sheep, we know, that, with children as with men, the difference is unimaginably great between *leading* and *driving*.

It was intimated above, that, if the proper influences constantly radiate from the teacher and pervade the schoolroom, the cases of insurgency against him will be rare. Such cases,

however, may occur; and, when they do occur, they suggest their own remedy. If the talent and skill of the teacher are not sufficient to arouse the indolence or restrain the waywardness of the pupil; if his commanding dignity and benevolence cannot change perverseness into docility, or melt down obstinacy into submission; in fine, if the teacher's mind cannot overmaster the pupil's mind in its then present condition, and if the teacher's heart be not of such superior moral power as to overcome, and assimilate to itself, the heart of the pupil, — there is still one resource left: the teacher's physical power *is* superior to the pupil's physical power (for the teacher has a legal right to summon all necessary assistance to his aid); and, with this superiority, he must begin the work of reform. Order must be maintained: this is the primal law. The superiority of the heart; the superiority of the head; the superiority of the arm, — this is the order of the means to secure an observance of the law. As soon as possible, however, the teacher must ascend from the low superiority of muscular force to the higher and spiritual ones; and he must forever cultivate the higher, that they may the sooner supersede the lower.

I think one cannot have been long accustomed to visiting schools, without being able to determine almost at a glance, on entering a schoolroom, what the relation is which exists between the teacher and his scholars. If as soon as the teacher turns his back upon the scholars, in order to approach and to salute his guests, the whole muscular system of the school seems to snap the fetters in which it had been bound, and to break out into mischievous activity, but as soon as the teacher reverts his face all is again subdued and hushed into deathlike stillness; if, as the teacher moves about among his scholars and gives his directions, they exhibit a deference that almost runs into timidity, but, as soon as he has passed by, they make grimaces behind him, or fillip spit-balls at his back; if, as he turns from time to time towards different parts of the room, that portion of the school which is under his eye is constrainedly quiet and submissive, while that portion which he

does not see starts out into a hundred disorders, as wild beasts rush forth when the light of day is withdrawn, — if such be the general aspect of the school, then an intelligent spectator becomes as certain at the end of five minutes as he would be at the end of a week that the teacher holds his place only by the law of force. But, on the other hand, if the scholars seem almost unconscious of the teacher's presence; if they are unobservant in what part of the room he stands, or in which direction he may be looking; if he can step out at the door to speak to a visitor, or into a recitation-room to inspect a class, and remain absent for five or ten minutes without there being any buzz or whirring in the schoolroom, — then one may feel the delightful assurance that such a school is under the sway of a serene and majestic authority, — the authority of the great law of duty and love. I have seen many schools of each class in Massachusetts; and I feel warranted in saying, that, in point of numbers, the latter class is rapidly gaining upon the former.

There is a small class of schools intermediate between the two above described, where the teacher, through a false ambition of having it said that he can govern by moral suasion, or through fear of losing his place, or from some equally unworthy motive, seeks to govern without resort to corporal punishment, but still has not the skill that can interest children in their studies, nor the spiritual ascendency that can control their waywardness. But no low motive can ever perform the office of a high one. The laws of Nature will not be circumvented. High influences without can only come from high principles within. If a teacher would govern by intellectual and moral power, he must possess intellectual and moral power; and no spurious or counterfeit similitudes of them can borrow or steal their efficacy. There is great beauty in the Romish superstition, that the moment consecrated water *is sold* it is desecrated. It loses its quality of holiness by the unhallowed motive that transfers it. The spirit of the sentiment applies to the present case. The teacher who would govern by the law of love must

have faith in the law of love. In the absence of this, he will be compelled to resort to coaxing or wheedling or hiring children to be good, which is like the sin of laying a false offering upon the altar of the Lord.

Immediately on opening a school, an important question arises as to the expediency or inexpediency of promulgating a code of laws for its government. It is the practice of some teachers to announce orally, during the first day or half-day of the school, the rules whose observance they shall require, and whose infraction they shall punish. Others prepare written statutes, sanctioned by specific penalties, which they post up in some conspicuous place in the schoolroom, so as to give a warning to transgressors, and to provide themselves with a ready answer should the plea of ignorance be urged by any offender. Other teachers anticipate the commission of no offence, but wait until one occurs before they expound its demerits or prescribe its consequences.

It seems to me that very serious objections lie against the promulgation of a code of laws, either oral or written, in advance or at the commencement of the school. If this be done, the scholars instantly adopt the well-known principle of legal construction, that what is not included is excluded; and hence that every thing is permitted which is not prohibited. But as he is a bad citizen who has no higher rule of action than the law of the land, so is he a bad scholar who has no other restraint against wrong-doing than the prohibitions of the teacher. No code ever framed by the ingenuity of man, however voluminous or detailed it may have been, ever enumerated a tithe of the acts which an enlightened conscience will condemn; and no language was ever so exact and perspicuous as to be proof against sophistry and tergiversation. The jurisdiction of the conscience is infinitely more comprehensive than that of the statute-book. *Is it right?* and not, *Is it written?* is the question to be propounded in the forum of conscience. Each scholar brings a conscience to school. If it has not been previously enlightened on any given point of duty, then there

is no punishable blame in the breach of that duty; if it has been previously enlightened, then the tribunal is already open before which the culprit should be arraigned.

Besides, as most of our schools consist of scholars differing very much from each other in regard to age and intelligence, the rules applicable to one portion of them may be very unsuitable to another; and yet, if relaxed or suspended in one case, the idea of their permanency and immutability will be destroyed, and with that all their moral efficacy ceases. So there may be cases where peculiar circumstances will take an action out of the spirit of a rule, while they leave it within the letter. Suppose, for instance, in consideration of the many mischiefs which follow in the train of whispering and other modes of communication between scholars, they are peremptorily and altogether forbidden; and suppose that, the next day, a child exhibits symptoms of extreme distress, or of fainting, or is exposed to some danger which requires instant warning, shall the general rule be observed at the expense of any consequences? or, if violated, shall it be punished?

Doubtless, too, it has happened, and not very unfrequently, that the idea of the offence was originally suggested by the prohibition; and thus the law has led to its own infraction, as, with ignorant and superstitious persons, predictions often procure their own fulfilment.*

But there is a great variety of duties to be performed in a schoolroom, as well as of offences to be avoided. Would it not be more appropriate to go into a detail of these duties, and expound their reasons and their rewards, rather than to set forth an array of offences with their penalties? And are there no methods by which the teacher can commend the duties beforehand to the good-will of the scholars; ingratiate them, as

* The story of the Catholic priest and the hostler is not inapposite. When a hostler had finished making confession of his sins, the priest inquired of him if he had ever greased the teeth of his customers' horses to prevent them from eating their oats. The hostler not only replied in the negative, but said he had never heard of such a thing. The next time he went to the confessional, the first offence which he had to acknowledge was, that he had been greasing the teeth of his customers' horses.

it were, into the mind of the school, and thus exclude much that is bad by a pre-occupancy of the ground with what is good? I would commend a course by which not only have some excellent schools sustained their character for excellence, but by which some indifferent schools have been made excellent. It is that of employing the first hour, or perhaps more, of the first day of a term, in a familiar and colloquial exposition of the objects of the school, and the means which it is indispensable to observe for the accomplishment of those objects. Certainly all the older children, in all schools above the rank of the primary, are capable of understanding something, both of the advantages and the pleasures of knowledge; of the connection between present conduct and future respectability; of the different emotions which arise in the mind after the performance of a good and of an evil action, and of the inherent tendencies both of virtuous and of vicious habits to accelerate their course towards happiness or misery. Excepting the comparatively few cases of implicit faith, a child will not be deterred from wrong, unless he sees it to be wrong, any more than he will shrink back from a precipice from whose brink he is about to step, if ignorant of its existence. If the moral precipice were made as visible as the natural can be, might we not hope that fewer victims would be precipitated into the abyss of ruin?

A vast deal of the success of a school depends upon the first impression made by the teacher upon it. And by a well-conducted conversation with the scholars at its commencement, and before any prejudices against its requirements have sprung up, or any temptations to disobedience have been presented, the good-will of many, to say the least, may be propitiated. There are some points, indeed, absolutely essential to the prosperity of a school, respecting which the teacher is in the hands of the scholars, — wholly dependent upon their co-operation, — such as the punctuality and regularity of their attendance, and, not unfrequently, their being provided with text-books and other instruments of learning. And, in regard to other points falling

more directly within the teacher's control, his only hope of reaching the highest success depends upon securing their assistance. A few hours, therefore, at the beginning of a school, and an occasional one afterwards, as the age and capacities of the scholars may require, may be most beneficially spent in a familiar exposition of the great purposes for which the school has been opened, and of the means and observances by which alone its highest prosperity can be secured. A teacher can hardly enter a school of children, collected from various families, and subjected to various home-influences, without finding some, at least, who have an essentially false view of the object for which they have attended. He must throw light forward to show them the true nature of that object. Among the topics introduced by him, in his first friendly discourse to the youthful group collected around him, may be the duty of cultivating the spirit of honor, and of kindness to each other; a desire for each other's improvement as well as for their own; and a determination generously to assist their companions in improving the advantages of the school. Let him deprecate the meanness that would try to put off blame upon another for the sake of shielding one's self; that would even risk the concealment of a fault for which another might be unjustly blamed or suspected; that would triumph in any success which would give pain to the innocent; and let him fill their bosoms with a noble scorn of deception and falsehood. Let him make his company of hearers perceive that knowledge should only be trusted to those who will use it conscientiously; and this he can do by a graphical description of some immoral great man, who has used power and knowledge for selfish and wicked purposes. Let him convince them that he intends to bring into the schoolroom none but the highest motives, and that it is alike *their* duty and interest to bring into the schoolroom none but the highest motives. Let more or less of these topics be introduced again, — particularly on the accession of new members to the school, and before time has been allowed them for practising or inventing any adroit measures of defiance or deception. If new

children, when they come into a school, find its tone a high one, and its habits generous and manly, they will, almost invariably, be assimilated to the prevalent sentiment. Extraordinary cases of perversity may, indeed, occur; but if the new pupils see that the *denizens* of the school make it a matter of honor to govern themselves, instead of being governed by a set of arbitrary rules; if they see such confidence existing between teacher and pupils, that each is ready to trust the other, and that the interests of both sides are the same, instead of clashing like those of enemies, — they will be ashamed to stand out as exceptions, as ugly, misshapen creatures, in a company where all others are beautiful.

One of the highest and most valuable objects to which the influences of a school can be made conducive consists in training our children to self-government. The doctrine of no-government, even if all forms of violence did not meet the first day to celebrate its introduction by a jubilee, would forfeit all the power that originates in concert and union. So tremendous, too, are the evils of anarchy and lawlessness, that a government by mere force, however arbitrary and cruel, has been held preferable to no-government. But self-government, self-control, a voluntary compliance with the laws of reason and duty, have been justly considered as the highest point of excellence attainable by a human being. No one, however, can consciously obey the laws of reason and duty until he understands them: hence the preliminary necessity of their being clearly explained, of their being made to stand out, broad, lofty, and as conspicuous as a mountain against a clear sky. There may be blind obedience without a knowledge of the law, but only of the will of the lawgiver; but the first step towards rational obedience is a knowledge of the rule to be obeyed, and of the reasons on which it is founded.

The above doctrine acquires extraordinary force in view of our political institutions, founded, as they are, upon the great idea of the capacity of man for self-government, — an idea so long denounced by the State as treasonable, and by the Church

as heretical. In order that men may be prepared for self-government, their apprenticeship must commence in childhood. The great moral attribute of self-government cannot be born and matured in a day; and, if school-children are not trained to it, we only prepare ourselves for disappointment if we expect it from grown men. Everybody acknowledges the justness of the declaration, that a foreign people, born and bred and dwarfed under the despotisms of the Old World, cannot be transformed into the full stature of American citizens merely by a voyage across the Atlantic, or by subscribing the oath of naturalization. If they retain the servility in which they have been trained, some self-appointed lord or priest on this side of the water will succeed to the authority of the master whom they have left behind them. If, on the other hand, they identify liberty with an absence from restraint and an immunity from punishment, then they are liable to become intoxicated and delirious with the highly-stimulating properties of the air of freedom; and thus, in either case, they remain unfitted, until they have become morally acclimated to our institutions, to exercise the rights of a freeman. But can it make any substantial difference whether a man is suddenly translated into all the independence and prerogatives of an American citizen, from the bondage of an Irish lord or an English manufacturer, or from the equally rigorous bondage of a parent, guardian, or school-teacher? He who has been a serf until the day before he is twenty-one years of age cannot be an independent citizen the day after; and it makes no difference whether he has been a serf in Austria or in America. As the fitting apprenticeship for despotism consists in being trained to despotism, so the fitting apprenticeship for self-government consists in being trained to self-government; and the law of force and authority is as appropriate a preparation for the subjects of an arbitrary power as liberty and self-imposed law are for developing and maturing those sentiments of self-respect, of honor, and of dignity, which belong to a truly republican citizen. Were we hereafter to govern irresponsibly, then our

being forced to yield implicit obedience to an irresponsible governor would prepare us to play the tyrant in our turn; but if we are to govern by virtue of a law which embraces all, which overlays all, which includes the governor as well as the governed, then lessons of obedience should be inculcated upon childhood in reference to that sacred law. If there are no two things wider asunder than freedom and slavery, then must the course of training which fits children for these two opposite conditions of life be as diverse as the points to which they lead. Now, for the high purpose of training an American child to become an American citizen, — a constituent part of a self-governing people, — is it not obvious that, in all cases, the law by which he is to be bound should be made intelligible to him? and, as soon as his capacity will permit, that the reasons on which it is founded should be made as intelligible as the law itself?

This view of the subject does not trench one hair's-breadth upon the great doctrine of order and subordination. It only contests the claim to arbitrary power on the one side, and its correlative, blind submission, on the other: it discards these as substitutes for moral power and voluntary obedience, and there it stops. The great question is, to whom or to what the obedience or subordination is due. It is primarily due to the law, — to the law written upon the heart, — to the law of God. The teacher is the representative and the interpreter of that law. He is clothed with power to punish its violations; but this comprehends only the smallest part of his duty. As far as possible, he is to prevent violations of it by rectifying that state of mind out of which violations come. Nor is it enough that the law be obeyed. As far as possible, he is to see that it is obeyed from right motives. As a moral act, blind obedience is without value. As a moral act, also, obedience through fear is without value; and not only so, but, as soon as the fear is removed, the restrained impulses will break out, and demand the arrears of indulgence as a long-delayed debt. To prevent misunderstanding, however, I wish to define the

term "fear," as here used. It is here used to signify a dread of bodily pain or injury, or of personal loss. In reference to the Divine Being, the term is used in a widely different sense. That fear of the Lord which "is the beginning of wisdom" includes the emotion of awe and reverence. It is not a servile, but a filial fear. It is a sentiment which an enlightened conscience can never experience towards an unworthy object; and, which, therefore, an unworthy object can never inspire. But the mere dread of personal harm, as the consequence of wrong-doing, is not *curative:* it is not *restorative.* It may warn, it may arrest, it may check, the outward commission of wrong; and its use for these purposes, to any extent which circumstances may require, is legitimate. But, with the prevention of wrong, its functions end. Though it may make an offender cease to do ill, it can never, by its own efficacy, make him love to do well; as poison may arrest a disease, though it cannot restore a patient to health. By suppressing outbreaks, by restraining waywardness, fear may prepare the way for the introduction of higher motives of action; but, if the aid of these higher motives be not then invoked, the ground of justification for using the fear is taken away. A reform in character may be begun by fear; but, if it ends in fear, it will prove to be no reform. When the spendthrift finds he is approaching the last dollar of his patrimony, and gaunt hunger and want begin to stare him in the face, he is admonished to desist; and, under the terror of these impending evils, he arrests his course of riot and dissipation. But this terror does not inspire him with the least love of temperance and industry. A habit of diligence and sobriety must come, if it comes at all, from the working of other motives within him. Without the restraint of higher motives, should another inheritance unexpectedly descend to him, he would return to his "wallowing in the mire." The bond-servants of fear always do as little as they can; because they do nothing for the love of the thing done, but only to avoid some painful consequences if it be not done. Work, whether of the hand or of the mind, which is not performed

from a love of it, is never performed with that zest or alacrity which the love of it inspires. An external act of duty may be done; but it is done, not from a willing, but from a repugnant, not from a dutiful, but from a rebellious heart. The mind will disown what the hand performs; while each movement and each moment will deepen disgust towards it. This is so clear, even to the intellect, that some of the more sagacious slave-drivers at the South are substituting motives of personal profit, of appetite, and the love of tawdriness, for the scourge. They have been led to this, not from compassion, but from cupidity. They find the sum total of profits at the end of the year to be greater under the use of pleasurable motives than under the use of painful ones. Formerly (and, to a great extent, even at present) they used the motive of bodily fear and smart, — the motive by which the tyrant maintains his power, by which the savage enforces obedience to his will, by which the brute secures its prey. But the eyes of some of them have been opened to see the neighboring motives, as they lie arranged along the great scale, from the brutish to the angelic; and they now avail themselves of the love of appetite, the love of approbation, the desire of being bedizened with gaudy colors, and so forth, as more efficient agencies than pain. Doubtless the quantity of their work will be increased, and its quality improved, as their masters ascend higher and higher in the scale of motive-powers. Teachers should be children of light, and they should not permit the children of Mammon to be wiser in their generation than they. It should never be forgotten that the highest duty of a teacher is to produce the greatest quantity and the purest quality of moral action.

Fear, then, is no more to be proscribed from the teacher's list of motives than arsenic and henbane from the *materia medica* of the physician; but the teacher or parent who uses nothing but fear commits a far greater error than the physician who uses nothing but poison. Let all wise and good men unite their efforts so to improve both the moral and the physical

health of the community, as gradually and regularly to diminish, and finally to supersede, the necessity of either.

The maxim embodied in the law of the land, and sustained by the good sense of all communities, that the teacher stands *in loco parentis*, that is, in the parent's place or stead, has been a thousand times repeated. By virtue of this relation, he is authorized to do, for all the purposes within his jurisdiction, what the parent might rightfully do under like circumstances. But he stands in the parent's place, for love as well as for power, for duty as well as for authority. If a father has any right to punish a child whose reason he has never attempted to enlighten, whose conscience he has never sought to develop, it is a right founded upon the previous commission, on his part, of the highest wrong. If preventives and milder remedies have not been used to avert the ultimate necessity of violent applications, then the parent, in regard to every offence which demands the application of violence, is an accessory before the fact, a suborner to the crime, and justly incurs the largest share of its guilt. If the rights of the teacher as to the exercise of power are commensurate with the rights of the parent, so are the teacher's duties also, in regard to the motives from which he acts, commensurate with parental duties.

A question connected with this subject has been often discussed; and the practice is different in different parts of the State. It is, whether refractory and disobedient scholars should be dismissed from the school, or retained in it and subdued. If a teacher stands in the place of the parent, why should he dismiss any scholar from his school (unless temporarily), any more than a parent should expel a child from his household? There is no Botany Bay to which such a child can be banished. Instead of crossing the ocean to another hemisphere, he remains at home. For all purposes of evil, he continues in the midst of the very children from among whom he was cast out; and, when he associates with them out of school, there is no one present to abate or neutralize his pernicious influences. If the expelled pupil be driven from the district where he belongs into

another, in order to prevent his contaminations at home, what better can be expected from the people of the place to which he is sent than a reciprocation of the deed, by their sending one of their outcasts to supply his place, and thus opening a commerce of evil upon free-trade principles? Nothing is gained while the evil purpose remains in the heart. Reformation is the great desideratum; and can any lover of his country hesitate between the alternatives of forcible subjugation and victorious contumacy? In extreme cases, however, the school-committee have an undoubted *legal right* to expel a scholar from school.

But, in those cases where the dangerousness of the symptoms will no longer permit delay, there is an immense difference in the modes of treating a malady. We know that a mere pretender to medical or surgical knowledge will aggravate the puncture of a pin into a mortification, fatal to life; while, by anodyne and restorative, the skilful practitioner will cure the gangrene itself. So, in the case of a distempered will, it may be inflamed and exasperated, by fiery and passionate appliances, into incorrigibleness and misanthropy; or, on the other hand, it may be restored to soundness and docility by reproofs or chastisements administered in wisdom and love.

But after the school has commenced, when classes have been formed, and the routine of exercises begun, it is then that opportunities, without number and without end, will present themselves for inspiring sentiments and cultivating habits of order, of decorum, of honor, of justice, and of truth; or, on the other hand, of engendering a brood of base and dissocial feelings, — unkindness, evasion, hypocrisy, dishonesty, and falsehood. Nay, the teacher may be entirely honest and sincere himself; and yet, from having his mind too intently and exclusively fixed upon the intellectual progress of his pupils, he may be regardless of the moral impulses which secure that progress, and of the emotions which attend it. Every true teacher will consider the train of *feeling*, not less than the train of *thought*, which is evolved by the exercises of the schoolroom.

Here opens a most important and difficult subject. So far as I know, it has never been comprehensively or minutely treated by any writer. It is impossible for me to do it justice. I enter upon it with undissembled diffidence; yet such is its intrinsic importance, and so often, when visiting schools, have I seen exemplifications of wrong where I was sure the teacher intended only what was right, that I can no longer forbear to attempt an elucidation of its merits. May others be led to investigate and expound it, until it assumes a prominence and commands an attention corresponding to its magnitude!

After the provisional classification of a school, the first business ordinarily consists in setting lessons and hearing recitations. In all schools having any claim to respectability, imperfect recitations incur some unpleasant consequences. In some, it is only a forfeiture of the teacher's approval; in some, it is a record of failure; in some, after a fixed number of failures, it is corporal punishment, the infliction of which cancels the old score, and opens the books for a new account. In all decent schools, an imperfect recitation is a thing which the pupils deprecate; but the means of preventing it, or of avoiding the appearance of it, are various.

In the first place, the teacher can insure any number of imperfect recitations by giving too long or too difficult lessons, — lessons beyond the ability of the scholars to learn; and thus a mere mistake in judgment, on the part of the teacher, may lead to discouragement or fraud on the part of the pupils. Lessons should be such that they can be competently mastered by all the scholars in the class, unless in cases of remarkable dulness. Some of the less forward or less bright may require a little extra assistance, which should be freely rendered to them; but, if there be any members of the class who cannot make themselves tolerably well acquainted with the lessons, they should be removed to a lower class. Habitually to break down at a recitation has a most disastrous influence on the character of a child. It depresses the spirits, takes away all the animation and strength derived from hope, and utterly

destroys the *ideal* of intellectual accuracy, which is next in importance to moral accuracy, — on which, indeed, moral accuracy often depends. It is still worse when the whole class fails. Shame never belongs to multitudes. It is a feeling which arises when we contrast our own deficiency or misconduct with the opposite qualities in others; but where all are equally deficient, or equally wrong, there is no opportunity for such a contrast. Common deficiency at the recitation begets a mingled feeling of contempt for the study, and recklessness of reputation, which is fatal to all advancement. It may begin by merely disheartening the pupil; but it will soon become disgust towards the study, and aversion from the teacher. Few things are of more baneful tendency than to have a scholar or a class leave the recitation-stand, after a half-hour of blundering and darkness, with no sense of shame or regret at the dishonor. Few things are of more evil augury than for children to become so inured, by frequency, to having marks of discredit entered against their names, that they grow indifferent and callous to a recorded censure. Such children lose all that delicacy of feeling, that fine sensitiveness to honor, which are strong outposts of virtuous principle. Day after day, to have a dishonorable mark set upon the body, or the hand, or *on the name*, without any feeling of regret, or effort at amendment, is as deplorable for a boy or a girl as it would be for a man or a woman to receive, without shame and without compunction, a tenth or a twentieth sentence to the house of correction or jail. The former, indeed, foretokens the latter.

But suppose the character of the lesson to be rightly adjusted to the capacity of the learner, still a brood of temptations lurk around. In the first place, there is the device of getting one part of the lesson better than the rest, under the expectation of being questioned on that part. How often has this been done! In some of the studies, it is to be forestalled and excluded by the method, before described, of putting each question to the whole class, waiting a sufficient time for each pupil to think out the answer in his own mind, and then calling upon

some one by name to answer it. The naming of the scholar to give the answer should be in no set order, but promiscuous. This method especially applies to grammar, to oral spelling, to oral recitations in geography, and to mental arithmetic. In written arithmetic, a question for solution may be propounded, and one pupil required to state the first step in the process, and then another pupil in another part of the class the second step, and so on, until the explanation is completed. Where there is, as there should be in every schoolroom, a sufficient extent of blackboard to allow the whole class to stand before it at once, a separate question may be given to each member of the class, to be wrought upon it. Occasionally, when the solution is half completed, the pupils may be transposed, and each one required to examine and complete his neighbor's work.

Such are some of the methods — to be constantly varied and interchanged — by which the temptation to deal treacherously with the lesson may be met and defeated. And yet the teacher should make no avowal that he entertains suspicions against any individual, and designs to baffle his plans for deception. He uses these means only for banishing temptation where it exists, and for shutting the door against it where its invasion is threatened. Temptation may be analyzed into two elements, — desire and opportunity. Take away the desire, and the opportunity can work no harm; take away the opportunity, and the desire is baffled. The former course is the better, when it can be taken; but here the latter is recommended as one of the means of accomplishing the former.

It sometimes happens that scholars experiment upon the numbers, or terms, of an arithmetical question. In proportion, for instance, if they have no knowledge of the principle which should guide them, they may try the effect of multiplying two of the numbers together, and dividing the product by the third; but, if that does not yield the right answer, they may transpose the order, and try again; and in the end, having exhausted all the errors, they will obtain the truth. But it is only by a comparison of their result with the answer in the book that they

will know that they have arrived at the truth. They will not know on what principle the true answer was obtained; and, on attempting a solution of the next question, they will be as ignorant as ever, and be again obliged to go through with the same experimental process. In order to prevent this appeal to chance, instead of an appeal to principle, the class may be occasionally required to lay aside their slates, and to work out all the questions contained in a lesson *on paper.* Here they will not be able to obliterate what they have done, as they can do on the slate; and, therefore, the teacher, by a single glance of the eye, can see the track which the mind has made, whether straight or circuitous, in its search after the answer. He will also see the mechanical correctness with which each step may have been performed.

Frequent reviews, by carrying the pupils a second time over the ground they have traversed, will be another means of determining whether they have left any part of it unexplored.

Devices or excuses to escape the lesson altogether, when the pupil is conscious of not having faithfully learned it, are an aggravated form of the evil above mentioned; and it should be guarded against by an examination of the absentee upon the omitted lesson at another time.

I fear that this *slurring* or *shirking* of the lesson is sometimes regarded in no other light than as a clog upon the progress of the pupil, or as an abatement from the success of the coming examination. The substance of the argument often used as a warning against this species of misconduct is, that whoever leaves a lesson of his course unmastered, leaves an enemy in ambush behind him, — an enemy who will, at some day, rise up to molest his peace, and perhaps to defeat his most cherished hopes. But, though this is a legitimate consideration, yet the subject has relations far more important. It is not so much the lesson which is omitted, as the wrongful act which is committed. The knowledge that is lost is an insignificant matter compared with the trickish habit that is gained. The avoidance of the lesson has deprived the intellect of so

much exercise, and, therefore, has prevented whatever of strength that exercise would have given; but the means by which the lesson was avoided have given exercise and strength to motives of deception and fraud. Herein lies the lamentable character of the deed. It is only a misfortune to be ignorant, but it is an unspeakable calamity to be dishonest. However vigilantly the teacher may look after the intelligence of his charge, he should use a thousand times more vigilance in preserving their integrity. Limited attainments are not incompatible with a high degree of happiness; but every immoral act diminishes the capacity for happiness for ever and ever.

Another means of avoiding study — and, I am sorry to say, I have found no little evidence of its existence — is, after procuring some fellow-pupil or other person to perform the work which the teacher has assigned, to present the work, thus performed by another, as the product of one's own labor. The intellectual loss and injury of such a course are great. It leaves the mind unexercised, when it was one of the principal objects of the lesson to exercise it. It also disqualifies the pupil more and more for mastering subsequent lessons. A scholar who did not get his lessons last week through indolence may be unable to get them this week through incapacity, and next week he may give them up in despair. But the most deplorable quality of such conduct is, that it is an *acted* falsehood; and, as subsequent lessons are mastered with so much more difficulty after the omission of preceding ones, the power of the temptation increases in a geometrical ratio at each succeeding step.

The cases above referred to are generally those where assistance is obtained out of school; but the prompting of a fellow-pupil in school, and during the recitation, comes under the same general head, and incurs the like mischievous consequences. To guard against the latter species of misconduct, the teacher should be all eye and all ear. He should be so familiar with the lesson that he can devote his whole attention to the class, instead of occupying the time in preparing himself, by looking

at his book, to hear the successive answers. His eye should be on them on their account, and not on his book on his own account. To guard the pupil against taking fraudulent measures out of school, he should instruct as faithfully in regard to the object of the lesson as in regard to the lesson itself. The attention of the pupil should be forever turned towards the state of his own mind. Have the lesson, the fact, the principle, the scientific relation, been reproduced within himself? Are they recorded on the tables of his intellect? Are they so clearly and enduringly written there, that if the slate and blackboard were broken to fragments, if the book were to be consumed, he would still possess them as his own, ineffaceably inscribed on the mind? Is the lesson so luminously recorded in his memory, that he can see it there in the darkness of midnight, and revive it in the solitude of the desert? Every pupil should be made to see, that to transfer or to copy an answer or a process from a text-book to his own slate or paper, or to take it from another's dictation, is valueless in the way of acquisition, of improvement; that it is, in its nature, the veriest task-work or tread-mill service ever performed. He should be made to see that he might as well learn the art of swimming by getting another boy to swim for him; that he might as well increase his stature and strength by employing another to eat his meals; or that he might as well expect to gain wealth by forfeiting all his daily earnings to the more industrious. Perhaps the most appropriate punishment, in cases where a punishment is deemed advisable, for stealing the solution of a sum from a book, or for transferring it from another's slate, or for borrowing another's composition instead of writing one, would be to make the offender copy off figures in logarithms, or the letters of some algebraic process, about which he knows nothing, or to transcribe passages in the French or Latin language. This would be a parallel to his own "vain knowledge," and would show him how pleasant it is to feed upon the east wind.

But the forfeiture of privileges and of knowledge which the

pupil incurs by such a course as is above described is not the principal evil. It is not a loss of utility merely, but it is a departure from honor and honesty. Why should not the scholar who now cheats his teacher in the recitation-room cheat his master in his work when he becomes an apprentice or a clerk, and his customers in their utensils or their goods when he becomes a mechanic or a merchant? All great robbers began by stealing small things; and the foulest assassins and murderers commenced their career by inflicting petty injuries.

I fear the little departures from rectitude and truth which sometimes pervade a school, or are practised by particular members of it, are not regarded in their true light, — as seminal principles or germs, which, if not eradicated, will grow up to maturity, and bear the fatal fruit of falsehoods, perjuries, and frauds. How narrow the range of a school-child's thoughts, compared with the vast compass and combinations of an adult mind! how slow the mental operations of the former, compared with the celerity with which the latter passes from premises to conclusions, and from means to ends! The child is obliged to commence his calculations with visible and tangible units, and for a long time he moves feebly and totteringly forward, constantly seeking the support of another's hand; yet what vast and complicated schemes the same mind, in its maturity, will project! When we thus witness the capacity of growth and expansion with which the intellect is endowed, why should we doubt that the appetites and propensities have at least an equal power of expansion and activity? Nay, is it not conceded in every system of mental philosophy ever promulgated, that the appetites and desires are endowed with an ardor and a vehemence to which the intellect is a stranger; and that the passions, if unregulated and unchastened, rush to extremes infinitely more wide and more ruinous than the understanding can ever reach? Why then, when we find the mind which was once so feeble, now capable of concerting vast plans for wealth, for ambition, or other forms of personal aggrandizement, — why should we doubt that the little tricks and prevari-

cations of the schoolroom may grow up into fraudulent bankruptcies, or stupendous peculations and embezzlements? States and empires are no more to the man than the toys of the nursery to the infant; why, then, should not corruption in politics, and hypocrisy in religion, grow out of the artifices and pretexts of the playground? If we would enjoy an immunity from the latter, we must suppress the former. How much easier and safer to crush the brittle egg than to kill the coiling serpent!

The act of furnishing arithmetical solutions, or translations in the classics, to a fellow-pupil before recitation, or of prompting him during it, is to be treated as a wrong in the giver as well as in the receiver. Yet always, or nearly so, the subject presents itself in a different light to children, and generally, I believe, even to mature minds. It is commonly regarded as an act of kindness — as a social pleasure, if not a social duty — to give, to one who wants, what we, without any loss, can spare. Shall a pupil who has neglected his lesson until the hour of recitation approaches be subjected to punishment, when we can supply his deficiencies in ten minutes, and save him from harm? Shall a friend and classmate, who has suffered the time of probation to pass by unimproved, — shall he be subjected to mortification, if not to rebuke or chastisement, when we, merely by a whisper in his ear, can save his feelings, his character, and perhaps his skin? Such is the aspect in which the subject presents itself to most minds, especially to the minds of school-children. So, to the natural eye, the earth appears to be flat. But what do we do as soon as the child arrives at a proper age for understanding its true shape? Do we not spend time, use apparatus, and give explanations, again and again, until the natural error of the senses is corrected? And why should not as much time be spent in correcting those moral errors into which all children naturally if not necessarily fall? No reason can be assigned, unless it be the infinitely false one, that moral culture is less important than intellectual. The first impressions of children on this whole subject of prompting answers, and of supplying solutions, can easily be shown to be

illusory and false. The true question goes far deeper than the scholar's appearance at the recitation. The recitation is only a means to an end. In itself, it is valueless. The only question of any importance is, What is the state of the pupil's mind? Does that which he writes down upon his slate, or speaks with his tongue, come from his understanding? or does it only come mechanically from his fingers, or from his lips, by the dictation of another, and not from his own mind? The pupil who submits himself to the ordeal of a recitation, like a witness in court, is under a moral obligation to make true answers, *from his own knowledge*, to whatever questions may be propounded to him; and is that pupil an honest one, who, under such an obligation, gives either the work or the answer of another as his own? If the deficiencies of others are to be recorded, or if there is a competition for places or medals or parts, and one pupil escapes a mark, or gains a credit, by indirect means, is it fair towards his fellows, or doing as he would be done by? If two children collude together, and agree to help each other, by private signs or otherwise, during the recitation, ought we to be surprised if, afterwards, they agree to run up stocks in the market, in order to cheat innocent purchasers? Besides, where is the iniquity to stop? If one pupil may be assisted or prompted once, why may not all go to the same extent? This, however, would reduce the whole to their original equality; for, if all take the liberty to cheat once, they stand in the same relative position as at first. He, therefore, who means to get a dishonest advantage over his fellows must now cheat twice in order to gain his end; and so on indefinitely. If the grocer adulterates his sugar and his flour to the amount of ten per cent of its value, and the purchaser pays him ten per cent of counterfeit coin or bills, neither is a gainer in money, while both are sufferers in morals. So it is with children who cheat each other and their teacher at the recitation. Now, is not the moral spirit with which the lesson is studied and recited of as much consequence as the knowledge it confers? And, if so, ought not the teacher to spend as much time on the former as

on the latter? I exhort teachers and committee-men to ask themselves the question, whether this is done.

The hour of recitation is the hour of reckoning; the place of recitation is the place for weighing and gauging the amount of acquisition made by the pupils. Emphatically, therefore, it is a place for fair-dealing, for truth, for uprightness towards the teacher, and for equity between fellow-pupils. Any deception there is like the use of false balances; and the teacher should no more wink or connive at it, however anxious he may be that his school should appear well, than he should instruct his scholars how they may use false weights or measures in their traffic with men.

I think the nature of a recitation can be so unfolded and explained to all, excepting, perhaps, the lowest class of minds, and that the recitation itself can be so conducted, as to save it from the frauds to which it now gives birth. Invested with the associations of honor and good faith, it may be made to assume something of a sacred character. I have known scholars who would not give an answer with which a prompter had supplied them, any more than they would receive stolen goods, or pass counterfeit money. The inherent absurdity of one pupil's getting a lesson for another may be made so obvious and glaring, even by a moderate degree of ability to a moderate capacity of understanding, as to excite contempt or abhorrence for it. The objects of a child's studying are usefulness, respectability, eminence, happiness. These objects are reached through the acquisition of knowledge, and through an increase of mental activity and energy. But each child's mind must grow for itself as much as each child's body must grow for itself. I may as well be warmed by another man's putting on my garments as be improved by another man's getting my lessons. If a child is idle, or squanders away his time, he, in his own proper person, must suffer for it. No friend can bear the burden of his future ignorance or imbecility. One person may as well bear another's toothache, or transfer another's consumption to his own lungs. Nor does the fraud bring any profit to the defraud-

er. Suppose the children, instead of gathering the richer treasures of knowledge, were only gathering gold-dust, which, day by day, should be brought to the scales, that the amount of their gains might be ascertained. Would any sluggard become richer by concealing a worthless pebble in his heap? Would not the assayer detect the fraud, and expose both it and its author? and would not every one who supplied, or who only assisted in supplying, the spurious substance, be justly regarded as an accomplice in the guilty act? Time is the Great Assayer, and will surely expose the folly and the ignorance of all those who cheat at the recitation, and impose upon the teacher the semblance of knowledge for its reality.

I fear that too much value is ordinarily attached to the recitation. I fear it is often regarded as an object, and not as an instrument; as the goal, and not as the path that leads to it. The daily routine of exercises, and the examinations of the school-committee, may cause all the forces of the school to converge to this point. When such is the case, the pupils, especially the ambitious ones, will devote themselves to the words of their lesson rather than to its meaning; they will aim at readiness and volubility rather than at depth and discrimination; they will confine themselves within the author's train of thought, instead of taking discursive views, tracing analogies, and sending the mind out to the right and left in quest of materials for confirmation or for questioning, from all collateral and related topics. So, too, under such a mistaken view of the object of a recitation, the pupils will be tempted, when it is over, to discharge the subject from their minds, that they may make room for the next exercise. All this is delusive. It grasps at the shadow, but misses the substance. To exhibit to the teacher the state of the pupil's mind is the true object of the recitation, so that whatever is right may be fastened there securely and forever; so that deficiencies may be supplied; and so that whatever is erroneous may be rectified or obliterated before the impression is deepened beyond effacing. If the arrangements and the general spirit of the school are such as

to make the pupils desire a brilliant recitation only, then they are tempted to manage adroitly to conceal their ignorance in order to escape degradation, and to gain a credit upon the teacher's books. But such a course will redound to their own discredit, and will entail enduring degradation upon the moral sense.

Closely akin to the above subject is the use of keys in mathematical studies. To avoid cumbrous enumeration, I shall refer to *arithmetical* keys only, although the remarks on this topic will apply to algebra as well as to arithmetic. In our old arithmetical text-books, the answers were regularly appended to the questions, each to each. The complaint of the pupil who studied the old arithmetics in the old way was, "I cannot get the answer." He did not say he could not understand the principle; but the answer, as given in the book, was the thing he sought for. By observing the denomination in which it was expressed, and the number of places of figures which it contained, he could conjecture the process by which it might be reached. The pupil thus made an illicit use of the answer itself as a means of obtaining it. This was obviously preposterous. The answer was the unknown quantity which was to be obtained from known data on known principles. But, as soon as the answer was included among the known data, the pupil might arrive at it by repeated experiments, although each time he should proceed on unknown principles. The knowledge of the answer beforehand, therefore, became, to some extent, a substitute for such a knowledge of principles as would command the true answer, not only in the given case, but in all analogous cases. Had it been the only object to arrive at the answer contained in the book, then any additions, subtractions, multiplications, and divisions which would secure that end, would be sufficient; and the result would be equally satisfactory, whether the answer contained in the book should be correct or erroneous. Now, it is obvious that there is no more legitimate exercise of the power of calculation in such a procedure than there is of true piety in those contrivances of

the Japanese, where, by turning a crank, they wind off a long scroll of written prayers from one cylinder on to another. The arithmetical faculty is as little employed in the one case as the heart is in the other.

To obviate this difficulty, arithmetics were prepared containing the questions only. But lest the teacher should not be able, for want of time, or for some other reason, to determine the correctness or incorrectness of the answers as they should be found by the pupil, the author prepared a second book, — a book for the answers, as well as a book for the questions. This second book is called a " Key." Both questions and answers are numbered so as to correspond. According to the theory, the key is to be used only by the teacher. It is a labor-saving instrument, designed to supersede the necessity of the teacher's looking over each sum. But it being known to the scholars that there is a key, containing not only the answers, but solutions or partial solutions of the most difficult questions, a grievous temptation is presented to them to get it and use it. So far as this is done, it defeats the very object of separating the answers from the questions, and makes the increased cost of two books over one a gratuitous expense. But what is infinitely more to be deprecated than any cost, or any diminution in intellectual attainments, is the moral delinquency which is involved in the act of using the key clandestinely. If the use of keys be prohibited, they must be obtained surreptitiously, and examined by stealth. The key itself must be kept in some secret place, where the teacher will not be likely to discover it. Hence a system of frauds. The purchasing of a book; the selection of a covert place for its concealment; the stealthy step or look by which it is examined; the transfer of the answers, perhaps upon a piece of paper, to be carried privately about the person; the plans laid to satisfy or circumvent the teacher, should he make any inquiry into the subject; and, finally, the presence of the pupil at the recitation, with the questions all correctly solved, but with a lie visible to himself lying at the bottom of every solution, — all this planned and consummated

deception it is indeed fearful to contemplate. It is a practical training of the young heart to iniquity. Each commendation obtained under such circumstances is a reward for past deception, and a lure to its repetition in future. Why should not the child who does this, and who, perhaps, is not reprehended for doing it, if done when the committee or visitors are present, — why, when the opportunity comes, should he not overreach his neighbor in making a bargain, or put two votes into the ballot-box to secure the election of his favorite candidate, or defraud the post-office and the custom-house? And how much is the virulence of the temptation increased when prizes are offered to the foremost pupils! when, perhaps, badges of honor are bestowed upon the successful competitors, and their names are brought forward with *éclat* in reports, or proclaimed to the world through newspapers, while a proportionate degradation awaits the unsuccessful! — and all this is made to depend upon the marks of credit or discredit received at the end of the recitations.

What the world is seen to regard with honor, ambitious children will, of course, strive to obtain; and, when intellectual attainments take precedence of moral qualities, how cruelly will they be tempted to sacrifice the latter to the former! In foreign universities, where a subscription to creeds is a prerequisite to the honors and emoluments of professorships and presidencies, do we not know that men, for the sake of a conspicuous and lucrative station, will subscribe to theological dogmas, and articles of church government, which their souls abhor? For such bold treason against God and man, they were prepared in childhood, by slight and gradually-increasing deviations from truth and duty, under temptations whose force they could not be expected to resist. Is it not the worst form of sacrilege to invade the unsophisticated consciences of children with temptations to evil, before which it is almost certain they will fall?

For years past, I have made particular inquiries of teachers and others on this subject. I have endeavored to ascertain to

what extent keys are allowed or forbidden in our schools; and also whether they are used, although forbidden. I am satisfied that a startling amount of deception is practised; and that not a few of our children are learning those arts in school, which, we have reason to fear, will be matured in after-life into flagrant immorality and turpitude.

In some cases, it has been discovered that a class owned a single key in common, which was passed round privately among them. In some, the sons of a family go to one school, and the daughters to another; and although, in one of the schools, keys are strictly prohibited, yet in the other they are openly allowed, or, at least, they are not forbidden; so that all the children have equal access to them. I believe it would be far better than that things should continue in their present condition, that all restriction in the use of keys should be removed (in which case it would, of course, be better to return to the old system of inserting the answer with the question in the text-book); but the only effectual remedy, while such helps are prepared and are accessible, is to cultivate the moral feelings of the pupils to such a high tone as will make them disdain and abhor those acts of deception by which one pupil obtains an advantage over another, or by which the pupils succeed in deceiving the teacher. It is fervently to be hoped that teachers will look more carefully into this subject than they have been accustomed to do. Better that we should go back to counting on the ten fingers, *and remain there*, than that the learners of arithmetic should imbibe the spirit by which they will hereafter make fraudulent invoices or false entries in the books of banks, or of the government.

It might prove a preventive to the fraudulent use of keys, and save children from some of the temptations which now spring from the use of them, if teachers would make it a frequent practice to dictate original questions from their own minds. However great the pupil's proficiency may be, a competent teacher could easily frame questions equivalent and analogous to those contained in the book; and the impossi-

bility, in such cases, of getting at the answer by the use of a key, would preclude the thought and prevent the desire of doing so. Is not this in consonance with the spirit of the prayer, — at once so religious and so philosophical, — that we may not be led into temptation? The only objection that can be made to the preparation of questions by teachers is, that they may not have time to examine the solutions, and decide upon their correctness; and must, therefore, submit to the necessity of taking questions where the answers are at hand. But surely, to an accomplished teacher, it can be the work of but a few moments to look over even a long demonstration, and to determine whether the successive steps have been correctly taken. As to what may be regarded as the mechanical part of the solution, — the addition, subtraction, multiplication, and division, — he has no need to trouble himself with that. He knows the nature of the question he has given; he perceives, in the twinkling of an eye, what the necessary steps are to arrive at a correct result; and a single glance from point to point, even in an extended process, is sufficient to show him whether the correct course, or one of several correct courses, has been pursued. As to the rudimental parts, he may, occasionally at least, set some of the younger classes to examine them. They will be able to detect errors, if any exist, in the work of the older pupils; and the older pupils, mortified at being exposed by the younger, will be incited to greater care.

In advanced Prussian schools, where arithmetic was so remarkably well taught and learned (though, if it were well taught, it is almost tautology to say it was well learned), instead of an octavo volume, or a series of duodecimos, imposing burdensome expenses upon the parents, I generally found arithmetical text-books which did not contain more than fifty or sixty pages, — mere skeletons, — and yet amply sufficient for the use of the schools. Probably nineteen-twentieths, if not forty-nine fiftieths, of the questions were supplied extemporaneously by the teacher from his own mind. Under such a system, no temptations to idleness, and no provocations to

fraud, could enter in, to weaken the intellect and to deprave the morals.

Children should also be encouraged to frame questions for themselves, for their own working; and, within certain limits, to frame questions for each other. In some parts of arithmetic, such an exercise would be of great utility, as it would help them to understand more thoroughly the nature, the number, and the relation of the terms necessary to form a practical question. Preparing questions would fasten more securely in the mind the principles for their solution.

I leave this topic with the expression of an intense desire that those who use, as well as those who prepare, mathematical text-books, will take into consideration the moral tendencies as well as the intellectual bearings of the methods they adopt, and of the works they publish. If each day's addition to arithmetical knowledge is to be a subtraction from the authority of conscience, it would be better that such days should never dawn.

I have sometimes found the preservation of good order in schools, and especially the prevention of whispering, attempted by means which seem to me to incur great moral and social hazards. In some schools, a pupil caught in an act of delinquency is made to take a place upon the platform, or other elevated site in the schoolroom, and there to watch for other delinquents. When he detects any one of his schoolmates in a violation of any of the rules of the school, he is expected to announce the name of the offender and the offence. If not contradicted, or although contradicted, yet if confirmed, he is absolved, and returns to his seat; and the new culprit succeeds to the post and the office of sentinel. Here *he* is expected to remain, until, in his turn, he can obtain his discharge by successfully inculpating another. Such a watchman is usually called a monitor; but his real office is that of a spy. If indolent, he may prefer the post to one which obliges him to study. He stands guard under no responsibility. If he sees one of his friends about to commit an offence, he can overlook it, or even

connive at it, by turning away, so as to afford an opportunity for its commission. I have seen such an overseer violating, with those immediately around him, the very rules which he was stationed there to enforce. If, however, he entertains any grudge against a schoolmate, he may there find an opportunity to indulge it.

I think the practice here described has an injurious influence, both upon the school and upon the sentinel himself, whose only qualification to watch others consists in his own offence. It obviously tempts to concealment, which is unfaithfulness; and to partiality, which is injustice. The old proverb, "Set a rogue to catch a rogue," needs, even for the public safety, some additional direction by which the public may be guarded against the collusion of the two rogues when they come to understand each other. At best, the proverb is founded on a low principle; and it inculcates no lesson of wisdom or benevolence in regard to the reformation of either party.

Some teachers adopt the above plan, but include another element of danger in it. If the original culprit does not succeed in detecting a fellow-pupil in some offence, he receives a punishment. If he discovers another, and that other a third, and so on, until the session of the school is closed, the punishment falls upon the last. Now, to escape punishment by subjecting another to punishment, brings into active exercise the most unkind and dissocial propensities of human nature. It makes our welfare or our immunity depend upon another's wrong-doing. It connects our escape from suffering with another's subjection to it. It makes it for our immediate interest that an offence should be committed; and thus tempts us to rejoice at the error or the misconduct of our neighbor, instead of obeying the commandment to love him as ourselves. Is this a Christian relation in which to place children in regard to each other? Suppose it had been so ordained by the Creator, that one man could escape from his wounds or diseases only by touching the person of another, and thus transferring them to him; how few Samaritans would be found who would

suspend the journey or the business of life that they might heal their neighbor! and would not such a law turn the world into Levites, who would pass by on the other side of the way? In the end, such a law would be ruinous even to those for whose benefit it was devised; since it would make it the interest of all to inflict mutual harm. When one drowning man attempts to save himself by grasping another, the consequence almost invariably is, that both go to the bottom. I trust that all teachers, who, either through example or inadvertence, have been led to adopt the course whose evils are here exposed, will adandon, and never resume it.

Whispering is very justly and almost uuiversally considered to be one of the greatest mischiefs that can infest a schoolroom. In small schools, consisting either of very large or of very young scholars, it occasions less inconvenieuce; but in large schools, especially if composed of scholars of all ages, it is a very serious annoyance, and energetic teachers usually strive to suppress it. In a room containing sixty scholars, if each should whisper only one-sixtieth part of the hour, — not an inordinate allowance, if whisperiug be permitted at all, — it would be sufficient to make the buzz perpetual. The mischief of whispering, however, is by no means confined to the noise it makes. If one be allowed to whisper, another must be allowed to listen; and it is too much to expect that the neighbors of the parties will be indifferent hearers or spectators of what is going on around them. Sometimes, too, a plan or a joke started in one corner will be telegraphed round the room almost with the rapidity of a lighted traiu of gunpowder. The course of thought of the whole school will thus be interrupted; and, though the act of whispering may occupy but half a minute, it may occasion the loss of several minutes to each pupil.

But, objectionable as is the practice of whisperiug in schools, some means are used for avoiding it which seem to me to be far more so. In some schools, all whispering is prohibited under sanctions more or less severe; while the teacher, conscious of

his own inability to detect all offenders, and discarding the practice by which the guilty are set to watch for the guilty, establishes another rule, by which the offenders are required to report their own offences. At the close of each day, or half-day, the roll is called, and each pupil is required, when his name is announced, to confess the number of breaches, if any, which he has committed.

One of the objections to this mode of prevention is, that it hazards the commission of a greater offence in order to avert a less one. To prevent whispering, it tempts to falsehood. Now, though whispering is mischievous, yet who, considerately, would suppress a thousand cases of it at the expense of one lie? Consider the force of the temptation. At the appointed time, the teacher calls upon the pupils to declare whether any violation of the rule has been committed by them. He calls upon them to plead guilty or not guilty. To acknowledge that they are guilty is a public avowal of wrong-doing; and, if the feelings are not blunted, must always incur some mortification. A penalty or forfeiture of some kind — such as noting the case in a record-book, or reporting it to the parents, or, at least, the teacher's disapproval — must be attached to the act, or the whole will soon degenerate into a farce. Under these circumstances, the pupil is called upon to avow a breach of duty. He is to do that publicly, which involves some degree of shame; he is to do that voluntarily, which requires some moral courage; and he is to do that promptly, which demands such a vigorous impulsion of conscientiousness as belongs to comparatively few. On the other hand, by silence, or by a moment's delay, — during which he may perhaps be debating within himself what course to take, — the occasion will pass by, and immunity from outward censure be secured. Is not this a snare to conscience? Is not this leading children into temptation, — a grievous temptation? Does it not, in fact, lead two persons — perhaps even more than two — into temptation? for, if one pupil has whispered, he must have whispered *to* another, — generally to a friend sitting at the same desk. For

the friend to betray the offender may wear the aspect of unkindness. Besides, to betray a fellow-pupil, is held, whether justly or not, — according to the moral code of the college and the schoolroom, — to deserve great odium. Perhaps both have offended, and therefore stand in equal need of each other's forbearance.

There is one aspect belonging to the course above described, which it is peculiarly painful to contemplate, — that of a child debating with himself, either before the commission of an offence, or when called upon to confess it, respecting the chances of his escape; and making the commission of the offence in the first instance, or the denial of it in the second, depend upon the balance of probabilities in favor of detection or of exemption. A falser condition of mind cannot be conceived. Probably the fiend who tempts to crime by the hope or promise of concealment outnumbers all his fellow-fiends in the retinue of his victims. A wrong consciously perpetrated by the heart is neither made greater by exposure, nor less by impunity. The question which Conscience puts respecting a guilty act is, not whether it is known or unknown, but whether it has been done; and, before her awful tribunal, the judgment is the same, whether it is concealed by darkness and silence from the eyes and ears of all created beings, or whether all the stars of the firmament have arranged themselves, for the revelation and the condemnation of the deed, into a language of everlasting and unquenchable light.

Now, I can conceive of a school — I think I have seen such schools — where the moral sense of the pupils has been so enlightened and trained, that it would be safe to put a question of the kind above supposed, without jeoparding the integrity of the pupils. But how much more frequently, in the present state of our schools as to morals, would the solicitations to wrong be an overmatch for fidelity to truth, and thus begin a habit of falsehood, or confirm one already begun, which, before the end of life, by the confluence of hundreds of little streams into one deep current of corruption, would prove the ruin of

the tempted! As a guardian of the morals of youth, and especially of their veracity, — that central point of morals, — no teacher should allow his own convenience, or his pride in the appearance of the record of his school, or his fear of incurring the displeasure of any pupil, or the parent of any pupil, for one moment to weigh down the scale against the perpetration, or even the imminent danger of the perpetration, of an untruth. The love of truth is a primal element in moral character. Truth is the cement of society. Without it, all friendships, partnerships, communities themselves, would be dissolved. Without some degree of mutual confidence, no two men, whether virtuous or vicious, could look each other in the face for a minute. Complete distrust at all points would segregate each individual of the race from all the rest; and, like an unbalanced centrifugal force, would impel each to fly away, and to seek some vacant part of the universe for his solitary abode.

There is a natural adaptation between the love of intellectual and the love of moral truth to confirm and strengthen each other. One should never be set in opposition to the other. Circumstances should never be so arranged, that the pursuit of an intellectual good may conflict with that of a moral one. Not antagonists, but co-laborers for the happiness of man, the teacher should unite and marry them into an inseparable union, and thus lay an imperishable foundation for the virtues and duties of life.

In regard to the prevention of whispering in school, the following important questions arise; and I do not see how they can be answered in the negative: If it be practicable to train a school to such a high point of principle and of honorable feeling, that its members will promptly acknowledge the transgression of a rule, may not the same members be so trained as not to be guilty of the transgression itself? Or, if children cannot be deterred from whispering by the reasonableness of the requisition, are they not likely to be guilty of falsehood under the pressure of so violent a temptation? And, finally, does not falsehood surpass whispering as an offence, too much to allow

us to secure our schools from the inconvenience of the latter by incurring a serious hazard of the baseness of the former?

The chances of success in preventing whispering by an exercise of vigilance on the part of the teacher will be increased or diminished by the number and ages of the scholars, and by the good or ill construction of the seats in the schoolroom. The smaller the school, other things being equal, the more easy to banish this invader of its quiet, — not easier in the ratio of the diminished number merely; but, to express it mathematically, the ease is as the square of the diminution. Any school, however, may be considered as only of a moderate or medium size, if the number of the teachers is fitly proportioned to the number of the scholars.

The construction of the schoolroom bears directly upon this subject. The old-fashioned schoolhouses, with seats on three, and sometimes on four sides of the schoolroom, — leaving only a space on one side, unoccupied by seats, sufficient for a door, — could not have been more ingeniously contrived to invite disobedience and trickery had the Genius of Deception been the architect. In such a room, one-half the children, at least, were always without the range of the teacher's eye, and so within the sphere of temptation. Where circumstances had been so skilfully contrived to entice them into transgression, who can wonder that they so often became its victims? Even schoolhouse architecture has a palpable connection with moral culture.

Various remedies have been suggested for the prevention of whispering in school, besides the extreme one of corporal punishment in any of its forms.

Occupation is one of the most effectual. While each scholar has employment on his own account, he has neither time nor inducement to trespass upon his neighbor. This is the case for two reasons. His own occupation precludes the desire of communicating with his fellow; and the occupation of his fellow will repel approaches, should he be tempted to make them.

The privation of some customary privilege — such as being kept within doors at recess — is another expedient. If a single act of communication in school, occupying but half a minute, causes a forfeiture of a five-minutes' privilege of communication at recess, then the balance of advantage is so obviously on the side of self-restraint as to become a powerful motive for abstaining. Such a forfeiture for such an offence seems unobjectionable; but, in all cases where it is inflicted, the offender should have a recess by himself at another time: for the recess is demanded by the laws of health; and the teacher's punishments should never endanger health.

Recognizing the strong natural desire of all children to communicate with each other, and the inherent difficulty of repressing such an inborn and powerful impulse, some teachers adopt the expedient of an intermediate recess; or rather a suspension of the exercises of the schoolroom, for a period of five minutes, at prescribed times, in each half-day's session. During this suspension, the pupils are allowed to rise, to walk about, and to converse, and thus to give vent to their pent-up desires for muscular action and for social communication. This may be allowed twice during each half-day, — once before and once after the customary recess at the middle of the session. Of course, it becomes less necessary as the scholars are older.

But, from my own observation and experience, I am led to believe that all methods for preventing communication between scholars in school, however skilfully devised or energetically executed they may be, will prove inadequate to the intended purpose, unless they include another element, — the assent and co-operation of the scholars themselves. The natural propensity to speak, the inborn social instinct to make known our thoughts and feelings to our fellow-men, is so vigorous, that it requires the most powerful motives of fear, of interest, or of duty, to smother them. In infancy, it is as vain to command a child to stifle the expression of its desires and emotions as to command the gushing waters of a fountain to cease from their

uprising. Later in life, though the inward propulsion of feeling, seeking some form of outward expression, may be regulated, yet it cannot, even then, be wholly suppressed. Probably no two animals of any kind were ever together for two minutes, — unless asleep, or profoundly absorbed in something else, — without some transmissiou, by looks or signs, of sympathy or aversion. With the human species, if the lips are sealed, the fingers will be made the medium of communication; if the hands are confined, the eye will become the subtle messenger of thought. But the voice is the natural sign-maker, and therefore it is through the voice that the will acts most promptly and energetically. In prisons, where the inmates work in companies, but under a rigorous prohibition, sanctioned by terrible penalties, against intercommunication, either by word or gesture, cases have occurred where the tortured spirit within would give vent to its natural instinct by a tremendous shriek or yell, and then submit to a flagellation, with patience, as an expiatiou of the offeuce.

In this, therefore, as in all other cases, whether pertaining to the government or to the proficiency of a school, the teacher's best resources — the only allies he can enlist, who will, in all cases, secure him the victory — are the pupils themselves. No threats, no forfeitures, no fear, no pain, though the teacher should summon these to his aid in formidable hosts, will ever expel whispering from school, unless superadded thereto is the scholars' consent. I have witnessed proofs of the truth of this assertion too numerous to be contested. In schools where authority and superior physical power were mainly relied on, I have witnessed cases of trausgression, even while the teacher was assuriug me of the sufficiency of his own sovereign command to prevent them. But, if the pupils have confidence in their teacher, — if they respect his talents and his attainments, and are constantly drawn towards him by the attractions of a filial affection, — their co-operation can be obtained, and that will prove all-sufficient. Indeed, if only every other scholar — that is, if no more than one-half of the school — should unite

in placing a ban upon the practice, it would be suppressed; for, as a scholar will rarely if ever be whispered to without his own permission, it follows, that, if every other scholar should join the league of abstinence, the other half would be debarred from addressing them, and thus an interdict would be placed even upon willing transgressors.

It is hardly necessary to observe, that, under the generic term whispering, I here include all forms of illicit communication, whether carried on through the medium of the voice, the finger-language, writing on paper or on a slate, marking words or letters in a book so as to make a sentence, or by any other of the ingenious devices which fear and fraud have contrived. Their object is the same, and their mischief is the same. They all train the mind to base and unmanly artifices, for which no amount of knowledge is any equivalent, — artifices which only confer more formidable powers of mischief upon the highly-developed intellect.

Perhaps no other combination of circumstances pertaining to a school furnishes so favorable an opportunity as the one under consideration for the inculcation of self-denial, and for habituating the pupils to its practice. Self-denial is not so much a pre-eminent virtue as it is the parent of all the virtues. To be able to resist the present solicitations of passion or of appetite, in consideration of a future good; to be able to postpone or to forego immediate gratification, in obedience to a principle of duty; to be able, in the solitude of a desert or in the darkness of midnight, when no human eye can see us, when no obstacle or bar, save the eternal law of right, comes between the object of our unlawful desire and our enjoyment of it; to be able, under such circumstances, not only to abstain, but to feel that our resolution would be no stronger though all the universe were gathered around us in a circle, of which we were the luminous centre, — this may be justly regarded as the acme of moral power and grandeur. How vast the distance between this moral altitude and the low region of weakness, of temptation, and of peril, in which the child is born! But just in pro-

portion to this distance are the reward and the glory of the teacher who leads the young spirit onward in its sublime ascension to the heights of virtue.

The very scheme and constitution of human nature demonstrate that we have as deep an interest in any portion of futurity — hour for hour, and day for day — as in the same portion of time now passing; for the simple but decisive and perfectly intelligible reason, that future time *is to be* present time. Indeed, our personal interest preponderates in favor of that portion of time which lies beyond us, rather than in favor of that now present; because the current of our life widens and deepens as it advances; and because new capacities and sources of happiness and of misery are perpetually pouring in their confluent streams to increase the volume of our future existence, and thus making that existence more desirable for enjoyment, or more terrible for suffering. We know, too, that the present not only has its concomitants of weal or woe, but that it will modify and color all that is to come after it. To the eye of reason and conscience, therefore, the stages of being through which we are hereafter to pass have as close a relation to ourselves, to our identity, as those through which we are now passing. It is the eye of sense only which magnifies the near, but sees the distant in the diminished proportions of perspective; as has been strikingly illustrated in the saying, that a straw placed near the eye seems as large as an oak of a hundred years in the distance. But the difficulty is, that, with a spiritual nature perpetually existent, we have appetites and desires that demand immediate gratification; and, to give plausibility to their demands, it is also true that those appetites and desires must, to a certain extent, be gratified, or our temporal existence would cease. The teacher, then, should put the future visibly into the scale, that it may counterbalance the present. For this purpose, the connection between the present and the future must be explained, — the tendency of habits, whether good or evil, to increase in velocity and momentum; the tendency of all indulged desires and thoughts to redouble their strength,

and their control over the will; the danger, therefore, of uttering a profane word, of venturing upon the terrible experiment of a falsehood, of dissimulation, of envy, of unkindness, of disobedience. The competent teacher adopts this method in regard to all the studies pursued in his school. He shows the relation between what is present and visible, and what is distant and unseen. Physical geography can never be learned, unless the child is first led to form adequate conceptions of *space*, where he can assign locality to objects, and give arrangement to all the facts he learns. History can never be learned, unless the learner has adequate conceptions of past *time*, — of successive centuries, along whose years and decades he can distribute and arrange the events which history brings under his notice. So the duty and the utility of self-denial can never be adequately enforced or appreciated, unless the future be opened, and the relations of passing events to the fortunes of after-life be exhibited. Why, then, should so great a proportion of the school-hours be spent upon studies, and so small a proportion upon motives? Why should the reputation and the patronage of schools depend more upon what the scholars *know* than upon how they *act?* Why should the public inquire more frequently respecting the school or the college where a *great* man has been educated than respecting the influences under which a *good* man has been trained? In the vast majority of our schools throughout the length and breadth of the land, are not the laws of orthoepy more carefully taught than the laws of justice and equity between man and man? Is the duty of forgiveness as much insisted on as the rules of grammar? Are the elementary ideas of right and wrong as laboriously explained as the elements of arithmetic? or are the mighty results of good or evil principles, as they are evolved in society, in the affairs of government, and in the intercourse of nations with each other, as perseveringly expounded as are the higher combinations of arithmetical numbers? Are not errors in text-books, or even in the language of visitors, sometimes brought forward with care and exposed with vanity, while obscene

carvings, or emblems of pollution, around the premises, or on the walls of the schoolroom itself, are suffered to remain unmolested? These frightful inconsistencies must be terminated. Their continuance is suicide. Self-preservation as well as religion demands a change. Neglect moral and Christian culture in the schoolroom, and if the exchange is shaken by stupendous frauds, if perjuries invade the tribunals of justice, if hypocrisy and intolerance are installed in the sanctuaries of religion, if political profligacy reigns in the council-halls of the nation, and sends its streams of corruption through all the channels of government, we shall reap only as we have sown.

There are some schools in Massachusetts, and the number is increasing, where, without invading the conscientious rights or scruples of a single denomination, social and Christian principles have been so wisely acted on by the teacher, have been so clearly and convincingly brought down and brought home to the minds of the pupils, that not only whispering, but other sources of disorder and misconduct, has been almost entirely banished from the schoolroom. Cases have occurred where, voluntarily, without solicitation, the older and more influential scholars have signed a pledge, obligating themselves to abstain from particular school-offences, and to use their influence to induce others to practise the like abstinence. How high the point of self-respect and of principle which the pupils have reached, when such a measure emanates spontaneously from them! How greatly is the power of acquisition promoted when the power of self-control is enthroned in the breast! And how far-reaching and decisive in its influences upon after-life is a successful resolution in childhood to seek counsel of duty, and to abide by its decisions! Blessed is the fortune of those children who are led by wise and benignant hands to some moral eminence, where they can survey the path that will conduct them to happiness, and are inspired with the motives which will prompt them to pursue it! *

* As a specimen of the utter oblivion into which a love of intellectual acuteness and skill may throw the moral relations of a subject, I quote the following question from a modern arithmetic: —

The vice of truantship is to be regarded under the same moral aspects. The truant, it is true, loses privileges which can never be recovered; because no revolution of the wheel of time ever brings back an hour that has been wasted. By foregoing his opportuuity of acquiring knowledge, the truant forfeits at least a portion of his chances for future usefulness and success in life; and he also forfeits those enduriug satisfactions which are the rewards of intellectual culture. Loitering by the wayside but for a single day, or deviating into illicit paths but for a single hour, he allows those who were behind him to pass by, and to seize upon the advantages or the honors, which, by the use of diligence, he might rightfully have made his own. He enrolls himself with the most wasteful of all prodigals, — those who are prodigal of time. But the positive good which is lost is trifling compared with the positive evil which is incurred. Every act of truantship is a twofold falsehood. It is a falsehood committed against the parent who sends, and agaiust the teacher who expects. Worse than either of these, it is a violation of the culprit's own sense of duty. To waste the seed-time, and to consume the seed from which a rich harvest might be reaped, does but condemn the fields of after-life to barrenness; but the pretence, the equivocation, the deceit, and occasioually the downright lie, and, what is worst of all, the perpetual holding of the mind in an active lying state, — that is, in a state ready to lie, — these strew thickly those tares of vice over the fields of youth whose harvest will be ruin. It is

"A sea-captain on a voyage had a crew of thirty men, half of whom were blacks. Being becalmed on the passage for a long time, their provisions began to fail; and the captain became satisfied, that, unless the number of men was greatly diminished, all would perish of hunger before they reached any friendly port. He therefore proposed to the sailors that they should stand in a row on deck, and that every ninth man should be thrown overboard until one-half of the crew were thus destroyed. To this they all agreed. How should they stand *to save the whites*?"

Doubtless this question was prepared by the author, and has been laboriously studied by thousands of pupils, without any distinct contemplation of the fiendish injustice and fraud which it involves, but only with admiration for the ingenuity which originated, and for the talent that can solve it; and yet the idea which the question has lodged in the mind may become the parent of a fraud as base if not as appalling as its prototype.

not, then, the squandering of school-privileges which gives to this offence its most malignant type ; it is not the loss of money expeuded for books and for tuition ; it is not the indignity offered to the teacher : but it is the positive wrong, self-inflicted upon the pupil's own moral nature ; it is that struggle between his own illicit desires and his sense of duty, in which the former are victorious ; it is the stratagem, and the putting of the mind into a frame to invent stratagems, in order to secure impunity or to avoid suspicion, — it is this inward training of the soul to the contemplation and the devices of iniquity, which gives to the evil its magnitude and frightfulness. But is it so regarded by those parents who never visit the school from the beginning to the end of the term, in order to examine the teacher's register, or to learn, by personal inquiry, whether their childreu have been delinquent? Is it so regarded by any teacher who records absences, half-day after half-day, without ever visiting the parents to know whether the absence is necessary or fraudulent? Is it so regarded either by parents or teachers, who, when the offence is detected, inflict chastisement upon the offender as the penalty of his misconduct, but take no other measures to reach the secret workings of his mind, and there to rectify the springs of action themselves?

In rural districts, where the population is sparse, cases of truantship are of rare occurrence. In cities and large towns, and especially in manufacturing villages, the offence is not unfrequent. Various devices are resorted to for its successful commission. In most schools, no written excuse for absence or tardiness is required, and therefore a truant has only to fabricate some excuse for being late or absent ; and the teacher too often dismisses the subject without further inquiry. When written excuses are required, parents often give one without date, which the pupil will keep as long as he dares, — perhaps for several days, — and then present it. Sometimes a child is necessarily detained at home for half an hour after the commencement of the school ; and, having obtained an excuse from his parent without any specificatiou as to time, he plays

truant for the greater part of the session, and then goes in and presents it. Or the parent sends written word that he wishes his child to return home before the school is done, without specifying how long before; and an hour or two of playtime is gained by obtaining dismission too early. Instances have occurred where a child has had the wickedness to forge an excuse, and present it as genuine. But if the *child* will forge his father's name to an excuse, in order to get an hour of play, ought we to be surprised if the same child, when grown to manhood, should commit the crime of forgery to obtain the means of criminal indulgence? Is it a vain apprehension that a child, thus false to his own interests and to the claims of duty, will be false to all the interests and duties which may afterwards be committed to his keeping? If we think we foresee, in the remarkable answers of a school-boy, — remarkable only because so little is expected at so early an age, — proofs of the power and the splendor that shall aggrandize and adorn the future man, why may not we foresee, in these juvenile offences which are so lightly passed over, proofs of those enormous misdeeds which afterwards shall bring distress upon a family, a community, or a country? With pleasure it is admitted, that there are cases of reformation, — cases where the evil that was betokened by a youth of error is averted by repentance, and followed by a life of uprightness. On the other hand, also, it must be conceded that there are instances where all the hopes that were cherished by a childhood of innocence have been blasted by a manhood of profligacy. But, on both sides, these cases are exceptions to the general rule; and they are no further to be recognized as grounds of action, than as they admonish us never to sink into the inaction of over-confidence in regard to the good, nor into the hopelessness of despair in regard to the bad. A venerable clergyman belonging to the State, always watchful of the condition of youth, and regarding the conduct of the child as foretokening the character of the man, has informed me that he taught school for many years in the town where he was afterwards settled as a minister; that

it was his practice, while in school, to keep a detailed record of the diligence, proficiency, and moral deportment of his pupils, which record he has preserved; and now, on recurring to this school-diary, he finds, with but few exceptions, that it would answer very well as an index, or table of contents, for the acted volume of their subsequent lives. There is one vice, indeed, or rather a prolific parent of all vices, which disturbs this great law of probabilities, and often falsifies the indications given by an exemplary youth of an honorable old age. It is the vice of intemperance. This vice is a horrid alchemy, which transmutes every thing good into evil; and not merely changing affinities, but, corrupting the very elements on which it works, renders it impossible ever afterwards to restore them to their pristine strength and purity. It is the theological opposite of regeneration; for it depraves depravity itself.

In the new register-book which has been prepared by the Board, and which will be in the schools the ensuing summer term, provision is made for the entry of each pupil's name. If the teacher performs his duty in keeping the register, as it is to be presumed he will, then every parent, on visiting the school, can learn by mere inspection whether his child is charged on the book with more cases of tardiness or absence than have been authorized; and, by a vigilant use of this check, the vice of truantship may be generally extirpated.

The question, By what motives shall children be incited to study? opens a vast and most interesting field of inquiry. That the human mind was pre-adapted by its benevolent Creator for the acquisition of knowledge and the exercise of reason, is not merely an inference drawn from the wisdom and goodness of God, but it is ocularly demonstrated by the constitution of our nature. It is not merely what we should expect, but what we actually see. Before the human lungs are brought into the world, how admirably are they prepared for the air that is to surround and to fill them! Not only are the lungs tubular and vesicular, in the highest degree, for the reception of the air, but the air has a property which the blood must imbibe, or it

would perish in five minutes; and, further, the blood has a property which it must cast out through the lungs into the air, or again it would perish in five minutes from another cause. What need has the unborn child of that exquisite mechanism, the eye; of the iris, invested with power to enlarge or diminish itself by a spontaneous movement; of its crystalline lens, and of its different humors, to cause the rays of light to converge; of the finely-wrought net-work of the retina, spread at the true focal distance over its interior surface; of the wonderful nerve that lies behind it, holding mysterious communication with the secret chambers of the brain; and of the solid masonry of bones, which is built up as a wall of protection around it? This marvellous contrivance is prepared in reference to the sun, — an object almost a hundred millions of miles distant from it; it is prepared in reference to sidereal systems, lying at incomputable distances from our system; and He who, in the beginning, created the greater and lesser lights of the firmament, and who now selects and arranges the subtlest particles of matter for the formation of the human eye, established of old the relations between them, and pre-adapted their powers and their properties to each other. How curiously has the Creator fashioned the mechanism of the ear! He has planted it so deeply and securely within the protecting walls of the cranium, that it needs no bars or portals to defend it from external encroachments; he has made it to stand forever open, — by night as well as by day, and whether sleeping or waking, — so that there is scarcely a natural agent of harm that can approach us, without warning us of its coming. With what a delicate equilibrium is its tympanum balanced! — vibrating at the buzz of an insect's wing, or at the tread of an insect's foot, yet able to bear uninjured the ocean's roar, or the thunder's crash; and it is made to delight in all the variety of sweet sounds that lie between these far-distant extremes. And so of all the other senses. Is it not intuitively obvious that they were designed to bring us into communication and relationship with the infinitely-varied objects of the world around us; with

the food and drinks which nourish and sustain us; with the solid substances that shelter, and the textile ones that clothe us; with the various races of animals over which "dominion" has been given us; with the dry land which abideth in its place, and with the waters which make their perpetual circuit from the mountains and hills into the rivers, from the rivers into the sea, from the sea into the clouds, and from the clouds to the mountains and hills and rivers again?

Nor is utility the only purpose of those beautiful relations which exist between ourselves and the external world. The goodness of God is as pervading as his power, and hence he has everywhere intermingled pleasure with advantage. Golden threads are thickly interspersed in every web which Nature has woven. How conspicuous is this truth in regard to the property of color! Most of the other properties of matter seem to have a primary reference to utility. The inflexibility of stone, and the elasticity of steel; the combustibility of wood, and the relative incombustibility of the metals; the hardness of flint, and the softness of wool and silk, — seem primarily designed for use rather than for pleasure; and so of innumerable other objects. But what profit can the cold utilitarian extort from all the variegation and changeful beauties of color? The rainbow, the orient sun, the evening clouds, the plumage of birds, the flower-strewn fields, the hues of the blossoming spring, and of the foliage of autumn, joyful in its death, — these add no gold to his coffers, nor acres to his lands, nor fruit to his garners. Yet this beautiful property of matter is spread upon the surface of all things, as if to attract our attention to them, and to win our regards for them, not only before, but after, the age of reflection; and no other property is at once so universal and so varied as this. In almost every instance, the gracious Author of this property of matter, and of our capacity to perceive it, has made it pleasurable; and probably no child ever consciously looked, even for the thousandth time, upon the moon, or a sun-illumined cloud, or stream, or lake, without an emotion of joy.

Such is the relation which our *senses* bear to the external universe.

And, in the second place, the faculties by which we reason stand in the same relation to the perceptive powers, and to the images or notions of things which they collect, as the perceptive powers themselves do to the objects of the external world. Through the senses we collect notions, more or less accurately and extensively, of the boundless variety of things that constitutes the world around us, — of all that is great or small, high or low, solid or fluid, cold or hot, moving or motionless, odorous or inodorous, savory or vapid, hard or soft, loud or low, and so forth; but all this knowledge of properties would be of no more service to us than to the beasts of the field or the fowls of the air, did not the illuminating reason preside over them, discerning the relations between them, disentangling consequences by referring each effect to its cause, and, out of new arrangements and combinations, educing new uses to increase the physical comforts and the spiritual elevation of mankind. It is only by the safer light of reason, indeed, that we rectify the mistakes into which the senses would inevitably and constantly lead us. To the senses, the earth and sun are flat: reason declares them to be spheres. If we ask the senses, they affirm that the earth is thousands of times larger than the sun; if we consult the reason, we are assured that the sun would contain within its circumference more than thirteen hundred thousand globes, each as large as the earth. The senses declare that the earth is stationary, and that the sun revolves around it every day; but reason gives stability to the sun, and a diurnal revolution to the earth. So, from the beginning of life, reason rectifies the errors of the senses; and, without its aid, we should be in a world of illusions, each one leading us astray. Reason also teaches us to discover those things which are too remote and too minute for the senses ever to reach, — the magnificent bodies and distances of astronomy, and the imperceptibly minute atoms and motions of chemistry. Who, then, let me again ask, can doubt that the great Author of our reason

designed that it should be used, and that it should be developed and cultivated in order to be used? As the senses were created to receive images or perceptions of things belonging to the external world; so the reason was created to work upon those images or perceptions when received, to correct and modify and assort them, to discover the *insensible* qualities they possess, and to penetrate to the laws they obey. Hence it is obvious, from our very constitution, that the Deity meant that the science of optics should be *understood*, as much as that the sensation of light should be *felt;* that the atmosphere should be analyzed into its different ingredients, and the properties of each ingredient determined, as much as that the atmosphere itself should be breathed; and that the laws of life and health should be discovered, as much as that we should desire to live.

And in all these exercises of the reason upon the crude materials of knowledge, not less than in the acquisition of the knowledge itself, there is pleasure. Nature has not constituted this portion of the mind upon the principles of utility alone, but upon the principles of utility and pleasure combined. How intensely have all the great intellectual luminaries of the world loved the sciences in which they labored! and who has ever *understandingly* surveyed any part of the creation of God, without being thrilled with delight?

Is not the course of Nature, then, — which is a lesson given by the Creator himself, — full of instruction and wisdom in regard to the school-motives which should be brought to bear upon children? First, in order to win attention, the objects of knowledge should be made attractive, as Nature, by bestowing upon her objects the pleasing qualities of form and color, of motion and sound, makes them attractive. As the powers of perception precede the powers of reasoning, in the order of development, the sensible qualities of things should first be presented to the learner. Afterwards, and when the reasoning powers are developed, the profounder relations that exist between things, and the laws by which they are governed,

should be unfolded to the reason in the same manner in which the sensible properties had been exhibited to the senses. In this clear light of Nature, too, we see where language should come in. Words are but the signs of things, not only useless, but burdensome and pernicious, without a knowledge of the things themselves. For all mankind, the course of Nature is, *things*, and then their *names*. For a year, and not unfrequently for two years, after a child's birth, the Deity forbids to it, withholds from it, the use of language. At that period of life, so cumbrous and uncertain an instrument as language would confuse and bewilder the mind, and divert it from the perception of qualities to signs. Yet, during that time, how much does a child learn respecting the properties and distances and relative positions of the objects about him! What more stupendous folly, then, can be conceived, than to teach children to read, without seeing that they understand what they read; to teach them the pauses and emphases and cadences which are designed to aid the intellect, and the modulation and tones which are expressive of the passions, while they themselves receive but little more conscious intelligence or emotion from the lesson than do the benches on which they sit! Still worse is it if coarse and harsh appliances are used as substitutes for those true and genuine sources of interest which are thus withheld.

But, notwithstanding this original adaptation of the faculties for acquiring and using knowledge, it must be conceded that there are cases in actual life where the natural tendency of the mind to become acquainted with the things around it has been marred, and sometimes almost obliterated. As the stomach, with its instinctive longings for healthful food, may be so abused as to loathe the most appropriate nourishment; so the mind, with its inborn love of knowledge, — which seems to be not merely an attraction for knowledge, but a repulsion from ignorance, — may be so abused as to look with disgust at what it should have longed for. And this is not unfrequently done, by parental ignorance or perversity, before the child passes into

the hands of the professional teacher. In such a case, the teacher may appear to do a vast deal more by stimulating the verbal memory of the child, and by giving him the show instead of the substance of knowledge, than if he should strive to re-animate the apparently dead powers of acquisition and of thought. Yet the latter should be done, at whatever seeming delay; and the faithful teacher will do it, irrespective of the consequences to his own reputation. It is only the unfaithful teacher who will adopt the course which will make the child appear best at the end of the term, irrespective of his permanent welfare.

It was the opinion of Pestalozzi, — that wisest of schoolmasters, — that the children's want of interest in their studies, in his day, was almost universally referable to a want of skill in those who had charge of them. "There are scarcely any circumstances," he says, "in which a want of application in children does not proceed from a want of interest; and there are perhaps none under which a want of interest does not originate in the mode of treatment adopted by the teacher. I would go so far as to lay it down as a rule, that whenever children are inattentive, and apparently take no interest in a lesson, the teacher should always first look to himself for a reason." Undoubtedly, in expressing this opinion, Pestalozzi must have referred to permanent teachers only, and not to such as keep the same school only for a few weeks, or for a single term; and in many cases, certainly, the parents as well as the teacher should be included in the stricture. Yet, if any person had a right to say this, it was Pestalozzi; for, however stubborn or stupid children had ever been found to be under other masters, they became docile and improving under him. But every teacher cannot become what Pestalozzi was, with his extraordinary natural endowments, and with his life of experience, any more than every man can become what Lord Bacon or Sir Isaac Newton or Dr. Franklin was. What, then, shall be done by such teachers as we have, and are glad to employ? Shall they not, as far as possible, imitate him, and, by pursu-

ing similar means, approximate to similar results? Shall they not, as he did, determine what they will *not do*, as well as what they will do? "The motive of fear," says he, "should not be made a stimulus to exertion. It will destroy interest, and will speedily create disgust. The *interest* in study is the first thing which a teacher should endeavor to excite and keep alive." And again, speaking of that class of children who are subjected to a mere "mechanical training," and who, therefore, need some collateral stimulus to spur them on to study, he says, "The common motive by which such a system acts on those whose indolence it has conquered is *fear*. The very highest to which it can aspire, in those whose sensibility is excited, is *ambition*.

"It is obvious," he continues, "that such a system can calculate only on the lower selfishness of man. To that least amiable or estimable part of the human character, it is, and always has been, indebted for its best success. Upon the better feelings of man it turns a deaf ear.

"How is it, then, that motives leading to a course of action which is looked upon as mean and despicable, or at best as doubtful, when it occurs in life, — how is it that motives of that description are thought honorable in education? Why should that bias be given to the mind in a school, which, to gain the respect or the affection of others, an individual must first of all strive to unlearn? — a bias to which every candid mind is a stranger.

"I do not wish to speak harshly of ambition, or to reject it altogether as a motive. There is, to be sure, a noble ambition, — dignified by its object, and distinguished by a deep and transcendent interest in that object. But if we consider the sort of ambition commonly proposed to the school-boy; if we analyze 'what stuff 'tis made of, whereof it is born,' — we shall find that it has nothing to do with the interest taken in the object of study; that such an interest frequently does not exist; and that, owing to its being blended with that vilest and meanest of motives, — with *fear*, — it is by no means raised by the

wish to give pleasure to those who propose it; for a teacher who proceeds on a system in which fear and ambition are the principal agents must give up his claim to the esteem or affection of his pupils.

"Motives, like fear or inordinate ambition, may stimulate to exertion, intellectual or physical; but they cannot warm the heart. There is not in them that life which makes the heart of youth heave with delight of knowledge, with the honest consciousness of talent, with the honorable wish for distinction, with the kindly glow of genuine feeling. Such motives are inadequate in their source, and inefficient in their application; for they are nothing to the heart, and 'out of the heart are the issues of life.'"

In remarking upon school-motives, the use of emulation as an incentive to study cannot be overlooked; and yet I mean to abstain, on this occasion, from touching upon the debatable ground which it covers. To discuss the subject fully would require, not a paragraph merely, but a treatise. In regard to the general question, — the expediency of a system of means to excite emulation between scholars, — there are distinguished advocates on both sides; but it will be my endeavor, at the present time, only to elucidate some points, respecting which there is, so far as I know, an entire unanimity of abstract opinion, though with no inconsiderable diversity in practice.

May we not expect the assent of all intelligent men to the doctrine, that it is the teacher's duty to effect the greatest *general* proficiency of his pupils? It is not the remarkable progress of a few scholars, while others remain in a stationary condition, or are even retrograding, that is desirable or allowable. The spirit of all our institutions coincides herein with the spirit of humanity and religion; all enforcing the duty of succoring the destitute, of instructing the ignorant, of elevating the lowly. As it would be a violation of the soundest principles of political economy to make the rich richer, and the poor poorer; so it would transgress the plainest dictates of republican duty and Christian ethics to give knowledge to the learned at the ex-

pense of suffering the ignorant to remain in their ignorance. To present this idea with arithmetical precision, let us suppose, that, in a class of twenty children in one school, the improvement of ten of them shall be equal to 5 each, or 50 in all; and that of the other ten shall be nothing: so that 50 shall represent the improvement of the whole class. In another school, suppose a class of the same number, but an improvement of 2½ for each of the whole. As in the former case, *fifty* will be the product; and who will not acknowledge that the greatest good has been accomplished in the latter instance? Who will deny that the teacher in the latter case has accomplished a far nobler object than in the former?

When schools are very large, and it is the custom of the committee to examine only the first class, or, perhaps, only a part of the first class, the temptation to carry forward those who are to be examined, even at the expense of neglecting the residue, is peculiarly strong; and it needs all the guards of an active conscience in the teacher, and a vigilant superintendence in the committee, to prevent it.

As a spur to emulation, it is not an unfrequent practice to make a record, at the end of each recitation, of the number of mistakes which each scholar may have made. In the great majority of instances, so far as I have witnessed, this record is made without any reference to the quality of the mistake committed. Yet can any thing be more unjust than to recognize no difference between a mistake *in fact* and a mistake *in principle?* In arithmetic, for instance, one scholar, with his mind intently fixed upon the principle according to which his problem is to be wrought, makes a mistake in subtracting or dividing, and fails, therefore, of arriving at the true answer. Another, regardless of principle, performs the mechanical part of his work correctly, but proceeds upon such an erroneous hypothesis as will insure error in every question which comes under the same head or rule. In geography, one makes a mistake of a few hundreds in the census of a great city; another does not perceive that there is any connection between the great slopes

of a continent and the course of its rivers. In history, one has forgotten the date of an unimportant event; another makes Gen. Washington a Frenchman. Yet in these cases, or such as these, the mistakes are reckoned *numerically;* no difference being made between a mistake which a wise man might have committed and one which stigmatizes its author as a dunce. To estimate the demerit of mistakes by number, instead of quality, is as rude a way as it would be, in the transactions of the bank or the market-place, to receive and pay all the various coins of our common currency by tale, instead of weight and fineness.

Again: will it not be conceded by all that the degree of emulation is excessive which induces scholars to study for *recitation* rather than for *knowledge?* The difference between the two modes is great, and it diffuses its consequences over all the future life. To learn for the purpose of repeating or reciting what is learned at the end of an hour, or of a few hours, supposes a state of mind entirely different from that which is necessary in order to learn the same thing with a view of treasuring it up in the mind to be remembered forever. The mind approaches, surveys, and grasps the subject, in these two cases, by modes wholly unlike. If a thing is to be remembered only for an hour, there are many auxiliary helps, which are useless, and even pernicious, if the object be to insure its retention for life. The order in which the lesson stands upon the pages of the text-book; the sequence of paragraphs or sections; the accident of a principle's being stated at the top or the bottom of a page, on its right hand or on its left; the fact that a place in the lesson has been rendered conspicuous to the eye by a proper name or a date, — all these and many other accidental associations may be temporary helps, though they are permanent obstructions. They are like the tricks and devices of the professors of mnemonics, who, in ten lessons, will teach their classes the greatest quantity of things, which, however, are like records made upon the beach whence the tide has receded, to be washed away by its refluent wave. The pupil

who studies for recitation merely, is tempted, all the while, to use the *artificial* memory : the pupil who studies for knowledge will use the *philosophic* memory only. Knowledge acquired by the artificial method remains only while the arbitrary associations on which it is founded remain; but knowledge acquired by a perception of philosophic relations, being inwrought into the very structure and constitution of the mind, will be perpetuated until the happening of such a catastrophe as shall shatter to pieces the mind itself; and, even then, it will be seen shining among the fragments. Who ever heard of a great philosopher or jurist or mathematician, — a Franklin, a Marshall, or a Bowditch, — whose vast sequences of thought were linked together only by the brittle chain of an artificial memory? Among the graduates of those institutions of learning where emulation is one of the main incentives to study, is it the general rule that the scholars who obtain the highest honors of the class achieve a corresponding rank in society? On the other hand, is it not a fact that the exceptions to the contrary rule hardly amount to a respectable number?

Not only is the state of the mind different while studying and while reciting, if the only or the main object be to make a brilliant recitation, but there is a still greater difference after the recitation than before it. If superior rank at recitation be the object, then, as soon as that superiority is obtained, the spring of desire and of effort for that occasion relaxes. The pupil knows that the record, "perfect," set against his name, will stand, whatever fading-out of the lesson there may be from his mind. He dismisses, therefore, all thought of the last lesson, and concentrates his energies upon the next; and this becomes his history from day to day. Instead of spending an extra hour or half-hour in collateral reading, for the purpose of fortifying and expanding the views contained in the text-book, he spends it for increasing the volubility, or polishing the style, of the recitation. But, to the pupil who studies for the sake of understanding and retaining the subject-matter of the lesson, the recitation is only one of the early stages in the progress of

his investigations. As he goes abroad, and views the works of nature and of art, he revives and applies the principles he has learned, until they become so familiar, that they rise spontaneously in the mind on every related occasion. If he reads any thing in a book or a newspaper, or hears any thing in conversation, involving the same principles, or explicable by them, the principles become consciously present to his reflection, until frequent repetition, seconded by the ready welcome they always receive, domiciliates them in the mind, and enfranchises them as members of the household of thought.

The spirit of the above remarks applies to all cases of studying for *review* as well as to studying for *recitation.*

Now, that I may avoid, on this occasion, all points of controversy in regard to the use of emulation in schools, I desire only to commend the following rule of practice to teachers: If they perceive that the use of emulation as a motive-power tends to increase the bulk and showiness of acquisition rather than to improve its quality; if it leads pupils to cultivate a memory for words rather than an understanding of things; and if it be found that the knowledge acquired through its instrumentality is short-lived, because it has been acquired for the temporary purpose of the recitation or examination rather than for usefulness in after-life, — if teachers find all or any of these mischiefs resulting from the use of such a motive, they should restrict it within such limits as will effectually avoid them.

But the most serious objection which can be urged against this agency is of a moral character. I suppose no one will deny that emulation *may* be plied to such a degree of intensity as to incur moral hazards and delinquencies. Addressing each teacher on his own ground, whatever that may be, I would, with deference, submit to him the following considerations: If the object of a pupil be to learn; if he compares himself with himself, which may be called self-emulation, and asks whether he knows more to-day than he did yesterday, or has acquired more during the current term or year than he

did during the corresponding part of the last term or year; if he has some elevated object before him, which he desires to reach, and rejoices in his progress towards it, — all this seems not only lawful, but laudable. But if the pupil rejoices, not because he has acquired so much knowledge, but because, in acquiring so much, he has excelled another, and therefore would have grieved, even though he had made still greater acquisitions than he has, if another had surpassed him; if he indulges a feeling of exultation, not because he has shone, but because he has *out*-shone a rival; if he yields to the temptation of disparaging a competitor whom he would not have disparaged but for the competition, and is not as prompt to defend or justify him as though the rivalship did not exist between them; if he enjoys his own triumph with a keener zest because of the mortification of a fellow-aspirant, — in all and in each of these cases, I suppose it will be admitted by every one, that the law of Christian, and even of heathen, morality is violated. Bishop Butler defines emulation to be "the desire and hope of equality with or superiority over others with whom we compare ourselves;" and he then adds, "To desire the attainment of this equality or superiority by the particular means of others being brought down to our own level, or below it, is, I think, the distinct notion of envy." Abstaining, then, from all discussion of the general question, I would still say, that wherever teachers perceive the above-described consequences, or any of them, to be produced by emulation, they should be admonished that it has gone too far.

It is obvious that the question respecting the propriety or the impropriety, the justifiableness or the unjustifiableness, of using emulation as an incentive to intellectual progress, will be decided in different ways by different persons, according to the relative rank which they respectively assign to mental as distinguished from moral qualities. Whether talent be admired above virtue, or virtue above talent, the weaker affection will be sacrificed to the stronger, just as certainly as a parent, whose bark is in danger of sinking, will throw his treasures overboard

to save his first-born, if the first-born be nearer to his heart than his treasures. So, if a teacher desires that his pupil should be a great man rather than a good one; or that he should acquire wealth rather than esteem; or that he should master the Latin and Greek languages rather than rule his own spirit; or attain to high official preferment rather than love the Lord his God with all his heart, and his neighbor as himself, — then he will goad him on by the deep-driven spur of emulation, or any other motive, until he outstrips his fellows, at whatever peril to his moral nature. But if, on the other hand, the teacher esteems the greatness of humility above the greatness of ambition; if he prefers mediocrity, or even obscurity, with uprightness and independence of soul, to princely fortune or regal power without them; if, in fine, he would see his pupil dispensing blessings along the lowliest walks of life rather than blazing athwart the sky with a useless splendor, — then he will forego the brilliant recitation, the talented essay, the annual prize, the college honor, rather than win them by any incentive which jeopards honor, veracity, or benevolence. But while there is such a *practical* diversity of opinion in regard to what constitutes the highest destination of our nature, even in a worldly point of view, we cannot expect a general concurrence of opinion as to the influences under which the youthful character should be formed. Those who are intent upon ends which are so different can hardly agree as to means. A discussion, however, of these unsettled questions, in a spirit of kindness and candor, may lead to a convergence, if not to a coincidence, of opinion.

Having spoken of the temptations that encompass our children in regard both to the manner and the motive of their studies and recitations, I wish to add a few remarks in regard to the final examinations of the schools.

From the moment when the school is opened, it ought to be understood that each day is equally a day of preparation for the closing visit of the committee. It ought to be understood that every absence and every tardiness, every instance of idle-

ness and of inattention, is so much of time or of effort withdrawn from that preparation. At all times, by every means, in every form, the expectation is to be extinguished, the idea is to be annihilated, that especial preparation, as the school draws towards its close, on a few pages or a few lessons, can atone for or conceal any want of studiousness or of regularity as the term advances. Every pupil should be made clearly to see, and deeply to feel, that his fortune is in his own hands; that the responsibility of his future appearance rests upon himself; that no arts or devices are to be made use of, either to conceal his ignorance or to display his knowledge; that his mind will be submitted for inspection, not on its bright side only, but on all sides; and that it will be useless for him to expect to shine on that occasion, with only a radiant beam of light thrown across it here and there, while wide intervals of darkness lie between. Above all, will the teacher who wishes to keep the moral character of his scholars pure and stainless beware of encouraging or of tolerating any imposition upon the committee. He will not turn the last few days of the school into seasons of rehearsal for the examination. He will not indicate lessons or pages or questions that are to be specially conned for the occasion. To be guilty of any such artifice, with a view to make the school appear better than it is, is to corrupt the minds of his pupils. To the conscientious teacher, the formation of such a conspiracy, whether tacit or express, between himself and his pupils, will be the abominable thing which his soul hateth. It is true, that strong temptations may beset a teacher, and solicit him to deviate from the course of rectitude by an unfair preparation of his school. All laudable and honorable motives unite with the dictates of self-interest to make him desire the approval of the committee, and of his employers generally; and, what is more, such fraudulent preparations have not been uncommon in former times, so that precedent can be pleaded for them. It is well known, that, a few years ago, some teachers used *to cast the parts*, among their scholars, as much as they were ever cast in a play. The

scholars committed the portions assigned them to memory. The committee and parents attended, and listened, with apparent delight, to recitations which proceeded with such volubility, that answers were often given before the questions were put. And, when the day was over, all parties — teacher, committee, parents, and children — congratulated each other upon the success and brilliancy of the farce. Were such a course so common as to be understood to mean nothing, much of its mischief would be taken away. But, at the present day, it is not so. Universally, an examination is now understood to be an *assaying* of the value of the school. All, therefore, who are now guilty of any counterfeiting of the image and superscription of knowledge, like other counterfeiters, conceal it if they can. Hence, any one who ventures upon such a course now is a teacher of evil, and not of good. Standing before his charge in the sacred character of a moral guide, he guides to immorality. Considering the immaturity of the children, and the deference with which they naturally look up to him, he is not so much the accomplice in a fraud, as the originator and instigator of it. By presenting the alluring side of wrong to unsophisticated minds, he creates, rather than connives at, its commission; and, by one such practical example, he neutralizes a volume of formal moralizing. Few things in a teacher's conduct furnish a more fair or a more certain test of the question, whether he has a lively and sensitive conscience, or has no standard of duty higher than mere conventional rules and observances.

It is in the power of the school-committee to uphold and to perpetuate this loss to the minds and this demoralization of the hearts of pupils, or at once and utterly to annul it. If, when visiting the school for the first time, they announce that they shall themselves conduct the closing examination; that, however much or however little ground the classes may undertake to cultivate, they will be liable to be taken to any part of that ground, to show in what condition they have left it; and that they will be examined on the subject rather than

on the book, — if this be done, the pupils will study throughout the whole term with a very different object in their minds from what they would otherwise do. They will perceive at once, that if they devote special attention to a few lessons, or to a few sections, to the neglect of the rest, the neglected portions may be the very ones on which they will be questioned; and that the probability of their being taken up on a less prepared part will be in the ratio of the extent of that part. Such a course, too, will furnish a teacher with one of the most palpable arguments in favor of the steady, persevering application of his pupils.

At the examination, every thing, as far as possible, should be rescued from the dominion of chance. No pupil should feel that he can escape by what is called *good luck*, or suffer by *bad*. Hence examinations by written or printed questions are better than by oral; for, in such case, the question can be put to all; and a comparison of the different answers will be an impartial test of relative attainments. In arithmetic, the identical questions contained in the text-book should not be put, but equivalent ones. As grammar pertains to language, there is a special propriety in requiring answers to be given in writing, in order to determine whether a pupil who can parse glibly, and cite all the rules, can write any better English than one who has never opened a grammatical text-book. When proficiency in hand-writing is made one of the tests or titles for deserving rank or rewards, it is alleged that some children begin their copy-books by writing a few pages in a style inferior to their ability, for the dishonest purpose of appearing to have made more rapid improvement during the term than they really have done. To prevent this, some committees have adopted the expedient of providing themselves with one or more specimen-books for each school, in which all the writers are required to write at the end of the term. This specimen is then compared with the specimens of the preceding year; and the real progress of the writer is determined by the comparison. In this case, no inferior specimen can be prepared as a foil to set off its fellow.

In deprecating the devices and stratagems of the pupils against their teacher, we should be no less earnest in deprecating all devices and stratagems of the teacher against the pupils. There should be no arts to entrap on his side, any more than arts to evade on theirs. He should practise the utmost vigilance; but vigilance is as opposite to circumvention as a friendly visit to ask for an explanation is to eaves-dropping. Let the teacher, then, never descend to sly watchings or insidious questionings; but let his countenance, his manner, and his language bespeak frankness in himself, and confidence in his pupils. The atmosphere between him and them should be sunny and genial, unclouded by suspicion, and unchilled by distrust. Were it always sunlight, there would be no thievish owls nor felon foxes. As like begets like, confidence or unworthy suspicion in the teacher will beget confidence or unworthy suspicion in the school.

It is sometimes tauntingly asked by the opponents of our common-school system, why this boasted institution does not yield more abundant harvests of virtue; why the young men and the young women who come from our public schools are not nobler specimens of whatever is pure in feeling, and exemplary in conduct. I feel no disposition to retort upon such sinister inquirers by asking the question, what they themselves have ever done to elevate these schools to a condition from which purer influences might be expected to flow. But another inquiry will answer their inquiry, and dispel the ominous doubtings which it suggests. Let this startling question then be first answered, What is the relative amount of time and attention devoted to the moral culture of our children in school as compared with that which is devoted to the intellect? Follow the routine exercises of our schools for a single term; or, rather, take a broad survey of the whole course of instruction, from the day when the little child first crosses the threshold of the schoolhouse, to the day when, on the verge of manhood or womanhood, the young man and the young woman bid it farewell to enter upon some of the varied duties of life.

What innumerable lessons have been set! how many recitations have been performed! what a graduated series of books has been read, for the purpose of leading the young mind upward, step by step, along the ascent of knowledge! what questionings, and repetitions of questionings, to the hundredth time! and what reviews, and reviewing of things reviewed! But, on the other hand, how comparatively sterile of instruction has all this course of years been in the duties of children to each other; in the mutual duties of brothers and sisters; in filial duties; in the duties of the talented towards those less highly endowed by Nature; of those who are well-clad towards those who are clad in the homely garb of poverty; of the well-formed towards the deformed, or the sufferers under any physical privation; and, indeed, in that vast range of civil and social duties which awaits each one of them in after-life; and of the duty of love to their heavenly Father, and of obedience to his laws! What has been said against the passions of pride and cupidity, and envy and revenge? What expositions have been made of the inherent detestableness of profaneness and obscenity and falsehood? or of the retinue of calamities that come in the train of intemperance and gaming? Has arithmetic been so taught as to show the folly of buying lottery-tickets as a means of obtaining wealth? In teaching grammar, has a reference to the grammatical blunders and solecisms of the ignorant been accompanied by such humane and benevolent inculcations as will inspire all the learners with a desire to seek out ignorance, and to enlighten it? or have the errors of unavoidable ignorance been so ridiculed and contemned, that all the class will be led to vie with each other in jeering at the unfortunately and innocently ignorant wherever they may meet them? In teaching history, have the criminality of nine-tenths of all the wars ever waged, and the unspeakable sufferings they have inflicted upon mankind, been portrayed? or, on the other hand, have victorious armies and blood-stained conquerors been held up as objects of admiration? Who can rejoice at the proficiency of the children in their studies, if,

when the school is dismissed, the older ones gather themselves hastily into some corner to draw a lottery, though it should involve only the value of a knife or a pencil-case? or if the younger ones are seen to leap the fences, and to explore woods and fields, that they may rob birds' nests? or if those of any age trespass upon the neighboring orchards to purloin fruit? Are our children taught in school the duty of restoring lost articles which they may have found? or the infamousness of cheating the post-office by sending concealed letters, or substitutes for letters? or the iniquity of adulterating commodities for sale, or of defrauding in weight or measure? or the cruelty and sinfulness of detraction and slander? Where these things are neglected, the children may be well trained in reading and writing and arithmetic; but they are not trained in the way they should go. Such children may make powerful or crafty or worldly-prosperous men; but they will not become men of unspotted and stainless lives; they are not preparing themselves to do as they would be done by; they are not learning to do justly, to love mercy, and to walk humbly with God.*

There is another fact which deepens and aggravates, to an alarming extent, the evil here spoken of. I refer to the mode often used in imparting even the pittance of moral instruction that is given.

Since the time of Pestalozzi, there has been scarcely any difference of opinion among the leading educators of Europe or America as to the true and philosophical method of instruction. With one consent, their decision is in favor of the *exhibitory*, *explanatory*, and *inductive* method. This method is the opposite of the *dogmatic*. The latter method consists in

* During the last year, while I was passing by a school, the children came out to take their forenoon recess. They were boys, in appearance, between eight and ten or eleven years of age. As they rushed into the street, one of the largest boys turned, and cried out, "Now let's play robber!" Whereupon he drew a pine dagger from under his coat, seized one of his fellows, and exclaimed, "Your money, or your life!" This scene, thus enacted in sport, was doubtless drawn from some of the novels of the day, whose guilty authors receive the patronage, if not the homage, of society; while the comparatively innocent felon, who only steals a horse or burns a house, is sentenced to the penitentiary. Was that school doing its duty, or building up character after a Christian model?

laying down abstract rules, formulas, or theorems, in a positive, authoritative manner, and requiring the forms of words in which the abstractions are expressed to be committed to memory. Of course, the principle embodied in these forms of words is to be received by the learner whether he understands it or not, and without any inquiry on his part whether it be true or false. But, on the Pestalozzian method, nothing which lies beyond the reach of intuition is asserted without being explained. If a complex idea is affirmed, it is analyzed into its elements: if an abstruse one is introduced, it is illustrated, if practicable, by some sensible object; if not susceptible of illustration by any sensible object, some anecdote or narrative is related, or some combination of circumstances supposed, which will make it intelligible. When the subject-matter will admit, there is an actual exhibition of the thing spoken of. If the thing spoken of cannot be exhibited, there is explanation, founded on the exhibition of some analogous thing. Should the lesson refer to any common or simple substance, a specimen is exhibited, — as in the case of minerals, metals, fruits, manufactures, and so forth. To a child who has never seen a mountain, a hill is made a unit of measure for explaining the mountain's height and extent. So of a brook, to one who has never seen a river; and of a pond, to one who has never seen a lake or an ocean. If a centaur or sphinx or mermaid be referred to, the teacher draws the likeness of one upon the blackboard, or exhibits an engraving. In case of a complex object, as a machine, a ship, a fort, or an Indian pagoda, some miniature model, or, at least, some pictorial representation, is produced, and made the basis, or framework, of the conceptions that are to be founded upon it, or collocated around it. When the thing to be taught is not an object of the senses, but of the mind only, and especially when the thing lies remote from elements, or first principles, this method requires that the learner's mind should be conducted through all the intermediate stages of progress, until it arrives at the point where the complex or abstract idea can be understood; and then, and not

till then, that it should be brought forward. In fine, this method requires that individuals should be introduced before species, species before genera, and so forth. But the dogmatic method begins with the most comprehensive generalizations, and runs the risk of the pupil's obtaining any knowledge of particulars afterwards. In the one case, the learner is expected to receive blindly what is dictated to him; while the other method exhibits, explains, illustrates, exemplifies, and educes, and then submits the whole to the learner's intelligence, to be received or discarded.

After this statement of the points of distinction between the Pestalozzian and the dogmatic method, it would be only an illustration of the former were an example of each to be given. Suppose, then, a foreign gentleman should send his son to Boston, under the care of a tutor, in order that he might become acquainted with the city and its vicinity, and learn something of its public works, its institutions, and its distinguished men. According to the dogmatic method, when the strangers should have arrived and taken their lodgings, the tutor would obtain a guide-book for his pupil. In a series of lessons, he would see that the peninsular shape, the territorial extent, the statistics of population, commerce, education, and so forth, were well studied and recited. The boundaries of the city — Charles River on the north, the ocean on the east, and the interior on the south and west — would be learned. The pupil would be taught to name the principal streets, bridges, and railroads, probably in an alphabetical order, until they could be volubly repeated. A directory would be put into his hands, with a mark against the names of the men whose distinction entitled them to a place in his memory. He would be told, that, in the city or its vicinity, there are an Asylum for the Insane, an Institution for the Blind, a Navy Yard, Bunker-hill Monument, Dorchester Heights, Lexington and Concord battle-grounds, and so forth. These facts, and such as these, would be deposited in the memory, reviewed and rehearsed, until they could all be called up at will; and then the parties would re-embark,

congratulating themselves that the object of their mission had been successfully accomplished. This is the dogmatic method.

On the other hand, suppose the tutor to instruct his pupil on the exhibitory, explanatory, and inductive plan. For the first lesson, he takes him to the dome of the State House, — the highest point in the metropolis, and one which commands the splendid panorama of the city and its suburbs. There, before a single object is pointed out, before a single glance at the broad and varied scene is allowed, the points of the compass are determined. If the sun be visible, this is done by an observation, consisting of but two elements,— the position of the sun, and the hour of the day. First a general survey is allowed, in order to impress the mind with a general conception of outline and extent. This is in analogy to that summary description of the nature, the advantages, and the pleasures of a study, which a teacher should always give to his class when a new branch is introduced. Then a single class of objects is selected for attention, — suppose it to be the public buildings; and, as the one from whose observatory they are looking is the central point from which the bearings and distances of all the rest are to be estimated, it is first considered. Then the other great public edifices or structures are taken in their order, — the Quincy Market, the public buildings at South Boston, the Blind Institution, the Colleges, the Hospitals, Bunker-hill Monument, the Navy Yard, the lighthouses and forts in the harbor. When the most interesting of this class of objects are completed, — after such reflections and explanations, and, perhaps, pencillings, as may be deemed necessary, — the eye is withdrawn from the whole; the parties retire; and the pupil is required to reproduce from his recollection, in the form of a map, all the objects he has examined, with their apparent distances, positions, and so forth. In succeeding lessons, given from the same elevated point, other objects and neighboring towns are pointed out. Here the telescope is used. The bridges, and the six lines of railroads radiating from the city,

towards the south, west, and north, are designated. After every lesson, a map of objects or localities is prepared, both for the purpose of determining the accuracy of the impression carried away, and of deepening it in the mind. After such minuteness of detail as circumstances will allow, the same objects are visited and inspected; and their history, administration, amount of success or causes of failure, and so forth, learned. The streets are learned by passing through them; the schools, by visiting and questioning them; the state of commerce and merchandise, from the wharves, the custom-house, and the depositories; the manufactories, by the amount and the quality of their fabrics; the distinguished men, by introduction, conversation, and personal intimacy; and historical events, not merely by reading the narrative, but by visiting the scenes where they occurred. Such is an inadequate representation of what may be called the Pestalozzian method of instruction. Which of the two methods is most conducive to an understanding of the subject, it is not difficult to decide.

Now, it is but a few years since the dogmatic method was the one almost universally practised in our schools in regard to intellectual instruction. Arithmetic was taught without oral exercises or the blackboard; geography, without globes, maps, or map-drawing; grammar, by the endless repetitions of government and agreement, mood and tense, gender, number, and case, — the children asseverating ten thousand times the remarkable facts that *he* is masculine, *she* feminine, and *it* neuter; that *one* is in the singular number, *two*, *three*, *four*, and all the rest, in the plural, and so forth. But such a change has taken place in this respect, that, at the present time, there is not one of our first class of schools where the principles of arithmetic are not explained; where words are not defined, and the meaning of the author paraphrased; poetry turned into prose; maps drawn; orthographical and grammatical exercises *written;* and, generally, the thing itself sought for and understood, instead of a mere babbling from memory of the words in which it is expressed. But, in regard to moral subjects, I fear the dogmatic

method still remains, — precepts, rules, abstruse principles, mere formulas of speech, — without specification, without expansion, without illustration, without the living, glowing, inspiring spirit. Suppose, in arithmetical proportion, the teacher should tell the pupil that, "as the first term is to the second, so is the third to the answer," and should there stop. Would the pupil ever know how to work a sum in the rule of three? But the moral lesson, "Do as you would be done unto," is precisely analogous to the arithmetical one, if it stops with the general injunction. The latter needs exemplification, by instances, as much as the former, and would profit as much by it. Yet, under this head in the arithmetic, a hundred examples will be given; under the moral axiom, not one. I cannot see why it is not as absurd to give a moral rule to a child, without examples under it, as it is to give an arithmetical rule, without examples under that; and, if questions pertaining to business are selected in the one case, why should not questions pertaining to duty be selected in the other? Suppose the teacher of a normal school should prescribe, as a rule to the future teachers, "Train up a child in the way he should go," and should there leave them, without giving them any specific instructions as to what that way is, and by what means children can be *trained* — that is, *accustomed* — to walk in it. How easy it would be to make accomplished teachers, if such a precept, comprehensive and perfect as the principle of it is, were all that is necessary! But such a rule requires years of exemplification and practice: it requires years of reading, reflection, and consultation with masters of the art. Under the rule, to do as we would be done unto, a thousand instances, taken from the play-ground, the schoolroom, the domestic fireside, the pleasure-party, the shop, the counting-room, should be given. Under the rule, to love our neighbors as ourselves, the illustrations may be as numerous as all the interests and wants of life. How varied are those rights of property which come within the protection of the command, "Thou shalt not steal;" and those rights of character and of reputation that are embraced

within the spirit of the prohibition, "Thou shalt not bear false witness against thy neighbor"! Are these things of less consequence than the frivolous discussions whether *a* and *an* and *the* are articles or adjectives? Are these momentous subjects, with all their finite and infinite bearings, to be postponed in order that we may have time to teach children not to spell *labor* and *honor* with the letter *u*, or *public* and *music* with the letter *k*; or when to reduplicate the final consonants of primitive words, and when not? How can a child be led to love the Lord his God with all his heart, unless, in the first place, he has a heart which has been trained to love what is good; and, in the second place, unless some of those glorious attributes of his Maker which are fitted to excite his love are unfolded to his perceptions? How can a child love God while he knows nothing of him but the name, and has perhaps heard that name spoken more frequently in profaneness or blasphemy than in reverence? Is it of more consequence for a child to know the specks of islands in the Indian or Pacific Oceans than it is to know the reason why he is taught to say that God is good, and that his tender mercies are over all his works? Is it more important that a child should be taught the anomalies of our arbitrary language than that he should be instructed in the beneficence of his heavenly Father, who has created the sun for his warmth and light, and the earth for his dwelling-place; who robes Nature in beautiful colors for the gratification of his eye, and surrounds him with an atmosphere which is an undecaying medium of communication with his friends, and, like a vast instrument of music, is forever ready to be played upon for the delight of his ear; whose skill and power are made known in the formation of his body, and whose bounty in the abundance that sustains it; whose munificence in the bestowment of his faculties, with their adaptations to happiness; and who has given him, in the words and life of the Saviour, a perfect rule and a perfect example? If there be nothing in orthography or etymology or syntax of superior value to an upright life, or better becoming an immortal being

than devout feelings towards his Maker, why should the former be allowed to dispossess the latter, and usurp their place?

The natural conscience needs training in order to discern the distinctions between right and wrong, in the same manner that the intellect needs training in regard to addition and subtraction, or substantive and verb, or latitude and longitude, or republics and monarchies. No man, then, has any right to oppose our system of common schools because the children who come from them are not as honest as they are intelligent, and as benevolent as they are sagacious, until our teachers are as competent and as faithful in teaching their pupils humanity and morality, and in training them to the practice of the social virtues, as they are in teaching them the common branches of study, and in training them for the business of life. When the voice of public opinion shall imperatively demand as high a degree of culture for the moral as for the intellectual nature, and teachers shall bestow it, all opposition to our schools will be destroyed; for the opponents themselves will be *reformed* into advocates.

The unexpected length to which this Report has already extended admonishes me to bring it to a close; although, in so doing, I am obliged to omit other and kindred topics, to which I would gladly advert. Instead of generalizing on the subject of morals, or vainly attempting to embellish their inherent beauty and loveliness, I have preferred to set forth in the preceding pages, with some minuteness and detail, the principal dangers to which our children are exposed as they are passing through our schools; and I have endeavored to help the conscientious teacher in the discharge of his duties to those children by setting up a few way-marks and beacons along their perilous path. This, however, is a subject heretofore uninvestigated, so far as I know, by any writer on education. Like other pioneers, I must, doubtless, have made a very imperfect survey of the extensive field I have entered, — all the more imperfect because it is so extensive. But I devoutly hope that what has now been said may prove sufficient to incite others

to make more complete explorations, until every precipice and pitfall that besets the pathway of the rising generation in their common pursuit of knowledge may be not only discovered, but surmounted with warning signals too conspicuous to be unnoticed.

Directly and indirectly, the influences of the Board of Education have been the means of increasing, to a great extent, the amount of religious instruction given in our schools. Moral training, or the application of religious principles to the duties of life, should be its inseparable accompaniment. No community can long subsist, unless it has religious principle as the foundation of moral action, nor unless it has moral action as the superstructure of religious principle. Not at present, any more than in the days of the Jewish theocracy, does the strength of a nation consist in the number of its horsemen, or its chariots, or its mighty men of valor, but in those who fear the Lord, and work righteousness.

Travellers inform us, that, in some of the vast deserts of the Eastern continent, the course of the wayfarers across the trackless waste is marked by the bleaching bones of mighty caravans that had perished on their way in traversing the desolate expanse. Spread out upon the arid sands, or heaped in mounds, these relics of the dead give warning of the dangers by which they had been overwhelmed. The pilgrim troop or merchant company, as they pass along, and behold these eloquent memorials of others' fate, are admonished to press on with vigor, that they may reach the place of safety. Even thus, along the track of time, for thousands of years, do historic memorials — like vast monumental piles upon the right hand and upon the left — make known to us the causes of the decline and fall of ancient and of modern republics. They fell through the ignorance and debasement of the people that composed them. But for these, Greece, having revivified her spirit by the genius of Christianity, and turned her Pantheon into a temple of the living and true God, might, to this day, have spread far more than her ancient happiness and splendor over

those beautiful regions where now the Mahommedan bears sway; and, but for these, Rome might have adopted the principles of that purer faith which was preached to her by the Apostle to the Gentiles, and saved the world from the thousand years of unspeakable horrors which the dark ages inflicted upon it. Happy will our young Republic be, if, forewarned by the perdition of others, she avoids their fate by avoiding the causes that incurred it.

REPORT FOR 1846.

Gentlemen, —

To write a history of popular education in Massachusetts would be a work of great interest, and of little difficulty. Such a history, however, seems not to have been contemplated, and, therefore, would not be warranted, by those resolves of the legislature under which the following pages are prepared. The resolves provide only for " the republication of so much of his (the late Secretary's) Tenth Annual Report, as, with the requisite additions and alterations, will exhibit a just and correct view of the common-school system of Massachusetts, and the provisions of law relating to it.* An adequate idea of this " system," however, can hardly be obtained without a brief reference to its origin, and to those great fundamental principles which its authors and supporters seem rather to have tacitly assumed than to have fully expounded.

The Pilgrim Fathers who colonized Massachusetts Bay made a bolder innovation upon all pre-existing policy and usages than the world had ever known since the commencement of the Christian era. They adopted special and costly means to train up the whole body of the people to industry, to intelligence, to virtue, and to independent thought. The first entry in the public record-book of the town of Boston bears date, " 1634, 7th month, day 1." The records of the public meetings for the residue of that year pertain to those obvious necessities that

* The provisions of law are omitted in this volume.

claimed the immediate attention of an infant settlement. But in the transactions of a public meeting, held on the 13th day of April, 1635, the following entry is found: "Likewise it was then generally agreed upon, that our brother Philemon Purmont [or Purment] shall be intreated to become scholemaster for the teaching and nourtering of children with us." Mr. Purmont was not expected to render his services gratuitously. Doubtless he received fees from parents; but the same records show, that a tract of thirty acres of land, at Muddy River, was assigned to him; and this grant, two years afterwards, was publicly confirmed. About the same time, an assignment was made of a "garden plott to Mr. Daniel Maude, schoolemaster, upon the condition of building thereon, if neede be." From this time forward, these golden threads are thickly inwoven in the texture of all the public records of Boston.

It is not unworthy of remark, that a word of beautiful significance, which is found in the first record on the subject of schools ever made on this continent, has now fallen wholly out of use. Mr. Purmont was entreated to become a "scholemaster," not merely for the "teaching," but for the "NOURTERING" of children. If, as is supposed, this word, now obsolete in this connection, implied the disposition and the power on the part of the teacher, as far as such an object can be accomplished by human instrumentality, to warm into birth, to foster into strength, and to advance into precedence and predominance, all kindly sympathies towards men, all elevated thoughts respecting the duties and the destiny of life, and a supreme reverence for the character and attributes of the Creator, then how many teachers have since been employed who have not NOURISHED the children committed to their care!

In 1642, the General Court of the colony, by a public act, enjoined upon the municipal authorities the duty of seeing that *every child* within their respective jurisdictions should be educated. Nor was the education which they contemplated either narrow or superficial. By the terms of the act, the selectmen of every town were required to "have a vigilant eye over their

brethren and neighbors, — to see first that none of them shall suffer so much barbarism in any of their families, as not to endeavor to teach, by themselves or others, their children and apprentices, so much learning as may enable them perfectly to read the English tongue, and [obtain a] knowledge of the capital laws; upon penalty of twenty shillings for each neglect therein."

Such was the idea of "barbarism" entertained by the colonists of Massachusetts Bay more than two centuries ago. Tried by this standard, even at the present day, the regions of civilization become exceedingly narrow; and many a man who now blindly glories in the name and in the prerogatives of a republican citizen would, according to the better ideas of the Pilgrim Fathers, be known only as the "barbarian" father of "barbarian" children.

The same act further required that religious instruction should be given to all children; and also "that all parents and masters do breed and bring up their children and apprentices in some honest, lawful calling, labor, or employment, either in husbandry or some other trade profitable for themselves and the Commonwealth, if they will not or can not train them up in learning to fit them for higher employments."

Thus were recognized and embodied in a public statute the highest principles of political economy and of social well-being, the universal education of children, and the prevention of drones or non-producers among men.

By the same statute, the selectmen and magistrates were empowered to take children and servants from the custody of those parents and masters, who, "after admonition," "were still negligent of their duty in the particulars above mentioned," and to bind them out to such masters as they should deem worthy to supply the place of the unnatural parent, — boys until the age of twenty-one, and girls until that of eighteen.

The law of 1642 enjoined universal education; but it did not make education *free*, nor did it impose any penalty upon municipal corporations for neglecting to maintain a school. The

spirit of the law, however, worked energetically in the hearts of the people; for in Gov. Winthrop's Journal ("History of New England," vol. ii. p. 215, Savage's edition), under date of 1645, we find the following: "Divers free schools were erected, as at Roxbury (for maintenance whereof every inhabitant bound some house or land for a yearly allowance forever) and at Boston, where they made an order to allow fifty pounds to the master, and an house and thirty pounds to an usher, who should also teach to read and write and cipher, and Indians' children were to be taught freely, and the charge to be by yearly contribution, either by voluntary allowance, or by rate of such as refused, &c.; and this order was confirmed by the General Court. Other towns did the like, providing maintenance by several means."

It is probable, however, that some towns, owing to the sparseness of their population and the scantiness of their resources, found all the moneys in their treasury too little to pay the salary of a master; and surrounded by dangers, as they were, from the ferocity of the aborigines and the inclemency of the climate, believed that not an eye could be spared from watching nor a hand from labor, even for so sacred a purpose as that of instruction; and therefore failed to sustain a school for the teaching and "nourtering" of their children. But, in all these privations and disabilities, the government of the colony saw no adequate excuse for neglecting the one thing needful. They saw and felt, that "if learning were to be buried in the graves of their forefathers, in Church and Commonwealth," then they had escaped from the house of bondage, and swam an ocean, and braved the terrors of the wilderness, in vain. In the year 1647, therefore, a law was passed making the support of schools compulsory, and education both universal and *free.*

By this law, every town containing fifty householders was required to appoint a teacher "to teach all such children as shall resort to him to write and read;" and every town containing one hundred families or householders was required to "set up a grammar school," whose master should be "able

to instruct youth so far as they may be fitted for the university."

The penalty for non-compliance with the above requirements was five pounds per annum. In 1671, the penalty was increased to ten pounds per annum; in 1683, to twenty pounds; and in 1718, to thirty pounds for every town containing one hundred and fifty families; to forty pounds for every town containing two hundred families; and so on, *pro rata*, for towns containing two hundred and fifty or three hundred families. The penalty was increased from time to time, to correspond with the increasing wealth of the towns. All forfeitures were appropriated to the maintenance of public schools.*

It is common to say that the act of 1647 *laid the foundation* of our present system of free schools; but the truth is, it not only laid the foundation of the present system, but, in some particulars, it laid a far broader foundation than has since been

* It is well known, that, in the dearth of the precions metals which prevailed among the early settlers of Massachusetts, the colonial and provincial governments made various kinds of grain, — wheat, rye, barley, Indian corn, &c., — with several other commodities, a legal tender in payment of debts, and received them for taxes. In our early legislation and history, these were called "country pay." From time to time, the law determined the value of the bnshel, or unit, of each kind of product. On an examination of twenty such determlnations of value, made from 1642 to 1694 inclusive, I find that Indian corn was rated at from one shilling and two pence a bushel to three shillings and six pence; and that the average for this whole period was, within a very slight fraction, two shillings and ten pence a bushel.

Allowing six persons to a family, a town of three hundred families would contain a popnlatlon of eighteen hundred.

To pay a fine of sixty pounds, therefore, to which such a town would be liable by one of the laws above referred to, if paid in Indian corn, at the average of the prices which prevailed from 1642 to 1694, would require four hundred and twenty-three bushels.

The rates of labor, as ordained by the colonial government, show, in a still more striking manner, how heavily the towns were mulcted for neglecting to support schools.

Under date of Sept. 30, 1630, " It is ordered, that laborers shall not take aboue 12d a day for their work and not aboue 6d and meate and drink under paine of 10s; noe master carpenter, mason, joyner or bricklayer, shall take aboue 16d a day for their worke, if they have meate and drink, — and the second sort not aboue 12d a day under payne of 10s both to giuer and receauer."

At these rates, it would take a laborer (having board) four hundred and eighty days to pay a fine of one pound. The penalty imposed upon towns, by the law of 1647, for not maintaining a free school, was five oounds, — equivalent, at the above

built upon, and reared a far higher superstructure than has since been sustained. Modern times have witnessed great improvements in the methods of instruction, and in the motives of discipline; but, in some respects, the ancient foundation has been narrowed, and the ancient superstructure lowered. The term "grammar school," in the old laws, always meant a school where the ancient languages were taught, and where youth could be "fitted for the university." Every town containing one hundred families or householders was required to keep such a school. Were such a law in force at the present time, there are not more than twelve towns in the Commonwealth which would be exempt from its requisitions. But the term "grammar school" has wholly lost its original meaning; and the number of towns and cities which are now required by law to maintain a school where the Greek and Latin languages are taught, and where youth can be fitted for college, does not exceed thirty. The contrast between our ancestors and ourselves in this respect is most humiliating. Their meanness in wealth was more than compensated by their grandeur of soul.

The institution of a free-school system on so broad a basis, and of such ample proportions, appears still more remarkable when we consider the period in the world's history at which it was originated, and the fewness and poverty of the people by whom it was maintained. In 1647, the entire population of the colony of Massachusetts Bay is supposed to have amounted

rate, to the work of a common laborer (with board, but without clothing) for twenty-four hundred days, or all the working days in almost eight years.

Under date of Sept. 3, 1634, it was ordered that "noe person that keepes an ordinary shall take above 6d a meale for a person, and not above 1d for an ale quarte for beare out of meale time vnder the penalty of 10s for eury offence, either of dyet or beare."

In 1654, May 3, the following order was made: "As the countrje is in debt, no stock in the treasury, no meanes at present to raise any, so that workmen cannot be procured to finish the Castle, which yett is necessary forthwith to be done," the several military companies must do it; one division of them by having each of their soldiers labor three days on this fortification, and another by being individually assessed 4s. 6d. Hence it would seem that 4s. 6d. were held to be an equivalent for three days' work on the Castle, and going to and returning from the work.—See *An Historical Account of Massachusetts Currency, by* JOSEPH B. FELT.

only to twenty-one thousand souls. The scattered and feeble settlements were almost buried in the depths of the forest. The external resources of the people were small, their dwellings humble, and their raiment and subsistence scanty and homely. They had no enriching commerce; and the wonderful forces of Nature had not then, as now, become gratuitous producers of every human comfort and luxury. The whole valuation of all the colonial estates, both public and private, would hardly have been equal to the inventory of many a private citizen of the present day. The fierce eye of the savage was nightly seen glaring from the edge of the surrounding wilderness; and no defence or succor, save in their own brave natures, was at hand. Yet it was then, amid all these privations and dangers, that the Pilgrim Fathers conceived the magnificent idea, not only of a universal, but of a free education, for the whole people. To find the time and the means to reduce this grand conception to practice, they stinted themselves, amid all their poverty, to a still scantier pittance; amid all their toils, they imposed upon themselves still more burdensome labors; and, amid all their perils, they braved still greater dangers. Two divine ideas filled their great hearts, — their duty to God and to posterity. For the one, they built the church; for the other, they opened the school. Religion and knowledge, — two attributes of the same glorious and eternal truth, and that truth the only one on which immortal or mortal happiness can be securely founded!

It is impossible for us adequately to conceive the boldness of the measure which aimed at universal education through the establishment of free schools. As a fact, it had no precedent in the world's history; and, as a theory, it could have been refuted and silenced by a more formidable array of argument and experience than was ever marshalled against any other institution of human origin. But time has ratified its soundness. Two centuries of successful operation now proclaim it to be as wise as it was courageous, and as beneficent as it was disinterested. Every community in the civilized world awards it the

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meed of praise; and states at home, and nations abroad, in the order of their intelligence, are copying the bright example. What we call the enlightened nations of Christendom are approaching, by slow degrees, to the moral elevation which our ancestors reached at a single bound; and the tardy convictions of the one have been assimilating, through a period of two centuries, to the intuitions of the other.

The establishment of free schools was one of those grand mental and moral experiments whose effects could not be developed and made manifest in a single generation. But now, according to the manner in which human life is computed, we are the sixth generation from its founders; and have we not reason to be grateful both to God and man for its unnumbered blessings? The sincerity of our gratitude must be tested by our efforts to perpetuate and to improve what they established. The gratitude of the lips only is an unholy offering.

In surveying our vast country, the rich savannas of the South, and the almost interminable prairies of the West, — that great valley, where, if all the nations of Europe were set down together, they could find ample subsistence, — the ejaculation involuntarily bursts forth, "WHY WERE THEY NOT COLONIZED BY MEN LIKE THE PILGRIM FATHERS?" And as we reflect how different would have been the fortunes of this nation, had those States — already so numerous, and still extending, circle beyond circle — been founded by men of high, heroic, Puritan mould; how different in the eye of a righteous Heaven, how different in the estimation of the wise and good of all contemporary nations, how different in the fortunes of that vast procession of the generations which are yet to rise up over all those wide expanses, and to follow each other to the end of time, — as we reflect upon these things, it seems almost pious to repine at the ways of Providence; resignation becomes laborious, and we are forced to choke down our murmurings at the will of Heaven. Is it the solution of this deep mystery, that our ancestors did as much in their time as it is ever given to one generation of men to accomplish, and have left to us and

to our descendants the completion of the glorious work they began?

The alleged ground upon which the founders of our free-school system proceeded, when adopting it, did not embrace the whole argument by which it may be defended and sustained. Their insight was better than their reason. They assumed a ground, indeed, satisfactory and convincing to Protestants; but, at that time, only a small portion of Christendom was Protestant, and even now only a minority of it is so. The very ground on which our free schools were founded, therefore, if it were the only one, would have been a reason, with more than half of Christendom, for their immediate abolition.

In later times, and since the achievement of American independence, the universal and ever-repeated argument in favor of free schools has been, that the general intelligence which they are capable of diffusing, and which can be imparted by no other human instrumentality, is indispensable to the continuance of a republican government. This argument, it is obvious, assumes, as a *postulatum*, the superiority of a republican over all other forms of government; and, as a people, we religiously believe in the soundness both of the assumption and of the argument founded upon it. But if this be all, then a sincere monarchist, or a defender of arbitrary power, or a believer in the divine right of kings, would oppose free schools for the identical reasons we offer in their behalf. A perfect demonstration of our doctrine — that free schools are the only basis of republican institutions — would be the perfection of proof, to his mind, that they should be immediately exterminated.

Admitting, nay, claiming for ourselves, the substantial justness and soundness of the general grounds on which our system was originally established, and has since been maintained, yet it is most obvious, that, unless some broader and more comprehensive principle can be found, the system of free schools will be repudiated by whole nations as impolitic and dangerous;

and, even among ourselves, all who deny our premises will, of course, set at nought the conclusions to which they lead.

Again: the expediency of free schools is sometimes advocated on grounds of political economy. An educated people is always a more industrious and productive people. Knowledge and abundance sustain to each other the relation of cause and effect. Intelligence is a primary ingredient in the wealth of nations. Where this does not stand at the head of the inventory, the items in a nation's valuation will be few, and the sum at the foot of the column insignificant.

The moralist, too, takes up the argument of the economist. He demonstrates that vice and crime are not only prodigals and spendthrifts of their own, but defrauders and plunderers of the means of others; that they would seize upon all the gains of honest industry, and exhaust the bounties of Heaven itself, without satiating their rapacity for new means of indulgence; and that often, in the history of the world, whole generations might have been trained to industry and virtue by the wealth which one enemy to his race has destroyed.

And yet, notwithstanding these views have been presented a thousand times with irrefutable logic, and with a divine eloquence of truth which it would seem that nothing but combined stolidity and depravity could resist, there is not at the present time, with the exception of the States of New England and a few small communities elsewhere, a country or a state in Christendom which maintains a system of free schools for the education of its children. Even in the State of New York, with all its noble endowments, the schools are not free.*

I believe that this amazing dereliction from duty, especially in our own country, originates more in the false notions which men entertain *respecting the nature of their right to property* than in any thing else. In the district-school-meeting, in the town-meeting, in legislative halls, everywhere, the advocates for a

* By an act of the New-York legislature, passed at its last session, the question whether free schools shall be established throughout the State is to be submitted to the decision of the people, to be determined by ballot, at their primary meetings, during the current year.

more generous education could carry their respective audiences with them in behalf of increased privileges for our children, were it not instinctively foreseen that increased privileges must be followed by increased taxation. Against this obstacle, argument falls dead. The rich man who has no children declares that the exaction of a contribution from him to educate the children of his neighbor is an invasion of his rights of property. The man who has reared and educated a family of children denounces it as a double tax when he is called upon to assist in educating the children of others also; or, if he has reared his own children without educating them, he thinks it peculiarly oppressive to be obliged to do for others what he refrained from doing even for himself. Another, having children, but disdaining to educate them with the common mass, withdraws them from the public school, puts them under what he calls "selecter influences," and then thinks it a grievance to be obliged to support a school which he contemns. Or if these different parties so far yield to the force of traditionary sentiment and usage, and to the public opinion around them, as to consent to do something for the cause, they soon reach the limit of expense at which their admitted obligation or their alleged charity terminates.

It seems not irrelevant, therefore, in this connection, and for the purpose of strengthening the foundation on which our free-school system reposes, to inquire into the nature of a man's right to the property he possesses; and to satisfy ourselves respecting the question, whether any man has such an indefeasible title to his estates, or such an absolute ownership of them, as renders it unjust in the government to assess upon him his share of the expenses of educating the children of the community up to such a point as the nature of the institutions under which he lives, and the well-being of society, require.

I believe in the existence of a great, immortal, immutable principle of natural law, or natural ethics, — a principle antecedent to all human institutions, and incapable of being abrogated by any ordinance of man, — a principle of divine origin,

clearly legible in the ways of Providence as those ways are manifested in the order of Nature and in the history of the race, which proves the *absolute right* to an education of every human being that comes into the world; and which, of course, proves the correlative duty of every government to see that the means of that education are provided for all.

In regard to the application of this principle of natural law, — that is, in regard to the extent of the education to be provided for all at the public expense, — some differences of opinion may fairly exist under different political organizations; but, under our republican government, it seems clear that the minimum of this education can never be less than such as is sufficient to qualify each citizen for the civil and social duties he will be called to discharge, — such an education as teaches the individual the great laws of bodily health, as qualifies for the fulfilment of parental duties, as is indispensable for the civil functions of a witness or a juror, as is necessary for the voter in municipal and in national affairs, and, finally, as is requisite for the faithful and conscientious discharge of all those duties which devolve upon the inheritor of a portion of the sovereignty of this great Republic.

The will of God, as conspicuously manifested in the order of Nature, and in the relations which he has established among men, founds the *right* of every child that is born into the world, to such a degree of education as will enable him, and, as far as possible, will predispose him, to perform all domestic, social, civil, and moral duties, upon the same clear ground of natural law and equity as it founds a child's *right*, upon his first coming into the world, to distend his lungs with a portion of the common air, or to open his eyes to the common light, or to receive that shelter, protection, and nourishment, which are necessary to the continuance of his bodily existence. And so far is it from being a wrong or a hardship to demand of the possessors of property their respective shares for the prosecution of this divinely-ordained work, that they themselves are guilty of the most far-reaching injustice when they seek to

resist or to evade the contribution. The complainers are the wrong-doers. The cry, "Stop thief!" comes from the thief himself.

To any one who looks beyond the mere surface of things, it is obvious that the primary and natural elements or ingredients of all property consist in the riches of the soil, in the treasures of the sea, in the light and warmth of the sun, in the fertilizing clouds and streams and dews, in the winds, and in the chemical and vegetative agencies of Nature. In the majority of cases, all that we call *property*, all that makes up the valuation or inventory of a nation's capital, was prepared at the creation, and was laid up of old in the capacious storehouses of Nature. For every unit that a man earns by his own toil or skill, he receives hundreds and thousands, without cost and without recompense, from the all-bountiful Giver. A proud mortal, standing in the midst of his luxuriant wheat-fields or cotton-plantations, may arrogantly call them his own; yet what barren wastes would they be, did not Heaven send down upon them its dews and its rains, its warmth and its light, and sustain, for their growth and ripening, the grateful vicissitude of the seasons! It is said that from eighty to ninety per cent of the very substance of some of the great staples of agriculture are not taken from the earth, but are absorbed from the air; so that these productions may more properly be called fruits of the atmosphere than of the soil. Who prepares this elemental wealth? Who scatters it, like a sower, through all the regions of the atmosphere, and sends the richly-freighted winds, as His messengers, to bear to each leaf in the forest, and to each blade in the cultivated field, the nourishment which their infinitely-varied needs demand? Aided by machinery, a single manufacturer performs the labor of hundreds of men. Yet what could he accomplish without the weight of the waters which God causes ceaselessly to flow, or without those gigantic forces which he has given to steam? And how would the commerce of the world be carried on, were it not for those great laws of Nature — of electricity, of condensation, and of rarefaction —

that give birth to the winds, which, in conformity to the will of Heaven, and not in obedience to any power of man, forever traverse the earth, and offer themselves as an unchartered medium for interchanging the products of all the zones? These few references show how vast a proportion of all the wealth which men presumptuously call their own, because they claim to have earned it, is poured into their lap, unasked and unthanked for, by the Being so infinitely gracious in his physical as well as in his moral bestowments.

But for whose subsistence and benefit were these exhaustless treasuries of wealth created? Surely not for any one man, nor for any one generation, but for the subsistence and benefit of the whole race from the beginning to the end of time. They were not created for Adam alone, nor for Noah alone, nor for the first discoverers or colonists who may have found or have peopled any part of the earth's ample domain. No. They were created for the race collectively, but to be possessed and enjoyed in succession, as the generations, one after another, should come into existence, — equal rights, with a successive enjoyment of them. If we consider the earth and the fulness thereof as one great habitation or domain, then each generation, subject to certain modifications for the encouragement of industry and frugality, — which modifications it is not necessary here to specify, — has only a life-lease in them. There are certain reasonable regulations, indeed, in regard to the outgoing and the incoming tenants, — regulations which allow to the outgoing generations a brief control over their property after they are called upon to leave it, and which also allow the incoming generations to anticipate a little their full right of possession. But, subject to these regulations, Nature ordains a perpetual entail and transfer, from one generation to another, of all property in the great, substantive, enduring elements of wealth, — in the soil; in metals and minerals; in precious stones, and in more precious coal and iron and granite; in the waters and winds and sun, — and no one man, nor any one generation of men, has any such title to or ownership in these ingredients

and substantials of all wealth, that his right is invaded when a portiou of them is taken for the benefit of posterity.

This great principle of natural law may be illustrated by a reference to some of the unstable elements, in regard to which each individual's right of *property* is strongly qualified in relation to his contemporaries, even while he has the acknowledged right of *possession*. Take the streams of water, or the wiud, for an example. A stream, as it descends from its sources to its mouth, is successively the property of all those through whose land it passes. My neighbor who lives above me owned it yesterday, while it was passing through his lands; I own it to-day, while it is descending through mine; and the contiguous proprietor below will own it to-morrow, while it is flowing through his, as it passes onward to the next. But the rights of these successive owners are not absolute and unqualified. They are limited by the rights of those who are entitled to the subsequent possession and use. While a stream is passing through my lands, I may not corrupt it, so that it shall be offensive or valueless to the adjoining proprietor below. I may not stop it in its downward course, nor divert it into any other direction, so that it shall leave his channel dry. I may lawfully use it for various purposes, — for agriculture, as in irrigating lands, or watering cattle; for manufactures, as in turning wheels, &c., — but, in all my uses of it, I must pay regard to the rights of my neighbors lower down. So no two proprietors, nor auy half-dozen proprietors, by conspiring together, can deprive an owner, who lives below them all, of the ultimate right which he has to the use of the stream in its descending course. We see here, therefore, that a man has certain qualified rights — rights of which he cannot lawfully be divested without his own consent — in a stream of water, before it reaches the limits of his own estate; at which latter point, he may somewhat more emphatically call it his own. And, in this sense, a man who lives at the outlet of a river, on the margin of the ocean, has certain incipient rights in those fountain-sources that well up from the earth at the distance of thousands of miles.

So it is with the ever-moving winds. No man has a *permanent* interest in the breezes that blow by him, and bring healing and refreshment on their wings. Each man has a temporary interest in them. From whatever quarter of the compass they may come, I have a right to use them as they are passing by me; yet that use must always be regulated by the rights of those other participants and co-owners whom they are moving forward to bless. It is not lawful, therefore, for me to corrupt them, — to load them with noxious gases or vapors by which they will prove valueless or detrimental to him, whoever he may be, towards whom they are moving.

In one respect, indeed, the winds illustrate our relative rights and duties even better than the streams. In the latter case, the rights are not only successive, but always in the same order of priority; those of the owner above necessarily preceding those of the owner below: and this order is unchangeable, except by changing the ownership of the land itself to which the rights are appurtenant. In the case of the winds, however, which blow from every quarter of the heavens, I may have the prior right to-day; but, with a change in their direction, my neighbor may have it to-morrow. If, therefore, to-day, when the wind is going from me to him, I should usurp the right to use it to his detriment, to-morrow, when it is coming from him to me, he may inflict retributive usurpation upon me.

The light of the sun, too, is subject to the same benign and equitable regulations. As the waves of this ethereal element pass by me, I have a right to bask in their genial warmth, or to employ their quickening powers; but I have no right, even on my own land, to build up a wall, mountain-high, that shall eclipse the sun to my neighbor's eyes.

Now, all these great principles of natural law which define and limit the rights of neighbors and contemporaries are incorporated into and constitute a part of the civil law of every civilized people; and they are obvious and simple illustrations of the great proprietary laws by which individuals and generations hold their rights in the solid substance of the globe, in

the elements that move over its surface, and in the chemical and vital powers with which it is so marvellously endued. As successive owners on a river's bank have equal rights to the waters that flow through their respective domains, subject only to the modification that the proprietors nearer the stream's source must have precedence in the enjoyment of their rights over those lower down, so the rights of all the generations of mankind to the earth itself, to the streams that fertilize it, to the winds that purify it, to the vital principles that animate it, and to the reviving light, are common rights, though subject to similar modifications in regard to the preceding and succeeding generations of men. They did not belong to our ancestors in perpetuity; they do not belong to us in perpetuity; and the right of the next generation in them will be limited and defeasible like ours. As we hold these rights subject to the claims of the next generation, so will they hold them subject to the claims of their immediate successors, and so on to the end of time; and the savage tribes that roam about the head-springs of the Mississippi have as good a right to ordain what use shall be made of its copious waters when in their grand descent across a continent they shall reach the shores of arts and civilization, as any of our predecessors had, or as we ourselves have, to say what shall be done, *in perpetuity*, with the soil, the waters, the winds, the light, and the invisible agencies of Nature, which must be allowed, on all hands, to constitute the primary and indispensable elements of wealth.

Is not the inference irresistible, then, that no man, by whatever means he may have come into possession of his property, has any natural right, any more than he has a moral one, to hold it, or to dispose of it, irrespective of the needs and claims of those, who, in the august processions of the generations, are to be his successors on the stage of existence? Holding his rights subject to their rights, he is bound not to impair the value of their inheritance either by commission or by omission.

Generation after generation proceeds from the creative energy of God. Each one stops for a brief period upon the

earth, resting, as it were, only for a night, — like migratory birds upon their passage, — and then leaving it forever to others whose existence is as transitory as its own; and the migratory flocks of water-fowl which sweep across our latitudes in their passage to another clime have as good a right to make a perpetual appropriation, to their own use, of the lands over which they fly, as any one generation has to arrogate perpetual dominion and sovereignty, for its own purposes, over that portion of the earth which it is its fortune to occupy during the brief period of its temporal existence.

Another consideration, bearing upon this arrogant doctrine of absolute ownership or sovereignty, has hardly less force than the one just expounded. We have seen how insignificant a portion of any man's possessions he can claim, in any proper and just sense, *to have earned;* and that, in regard to all the residue, he is only taking his turn in the use of a bounty bestowed, in common, by the Giver of all, upon his ancestors, upon himself, and upon his posterity, — a line of indefinite length, in which he is but a point. But this is not the only deduction to be made from his assumed rights. The *present* wealth of the world has an additional element in it. Much of all that is capable of being earned by man has been earned by our predecessors, and has come down to us in a solid and enduring form. We have not erected all the houses in which we live, nor constructed all the roads on which we travel, nor built all the ships in which we carry on our commerce with the world. We have not reclaimed from the wilderness all the fields whose harvests we now reap; and if we had no precious metals or stones or pearls but such as we ourselves had dug from the mines, or brought up from the bottom of the ocean, our coffers and our caskets would be empty indeed. But, even if this were not so, whence came all the arts and sciences, the discoveries and the inventions, without which, and without a common right to which, the valuation of the property of a whole nation would scarcely equal the inventory of a single man, — without which, indeed, we should now be in a

state of barbarism? Whence came a knowledge of agriculture, without which we should have so little to reap? or a knowledge of astronomy, without which we could not traverse the oceans? or a knowledge of chemistry and mechanical philosophy, without which the arts and trades could not exist? Most of all this was found out by those who have gone before us; and some of it has come down to us from a remote antiquity. Surely all these boons and blessings belong as much to posterity as to ourselves. They have not descended to us to be arrested and consumed here, or to be sequestrated from the ages to come. Cato and Archimedes, and Kepler and Newton, and Franklin and Arkwright and Fulton, and all the bright host of benefactors to science and art, did not make or bequeath their discoveries or inventions to benefit any one generation, but to increase the common enjoyments of mankind to the end of time. So of all the great lawgivers and moralists who have improved the civil institutions of the state, who have made it dangerous to be wicked, or, far better than this, have made it hateful to be so. Resources developed and property acquired after all these ages of preparation, after all these facilities and securities, accrue, not to the benefit of the possessor only, but to that of the next and of all succeeding generations.

Surely these considerations limit still more extensively that absolutism of ownership which is so often claimed by the possessors of wealth.

But sometimes the rich farmer, the opulent manufacturer, or the capitalist, when sorely pressed with his natural and moral obligation to contribute a portion of his means for the education of the young, replies, — either in form or in spirit, — "My lands, my machinery, my gold, and my silver, are mine: may I not do what I will with my own?" There is one supposable case, and only one, where this argument would have plausibility. If it were made by an isolated, solitary being, — a being having no relations to a community around him, having no ancestors to whom he had been indebted for ninety-nine parts in every hundred of all he possesses, and expecting to

leave no posterity after him, — it might not be easy to answer it. If there were but one family in this Western hemisphere, and only one in the Eastern hemisphere, and these two families bore no civil and social relations to each other, and were to be the first and last of the whole race, it might be difficult, except on very high and almost transcendental grounds, for either one of them to show good cause why the other should contribute to help educate children not his own. And perhaps the force of the appeal for such an object would be still further diminished if the nearest neighbor of a single family upon our planet were as far from the earth as Uranus or Sirius. In self-defence or in selfishness, one might say to the other, "What are your fortunes to me? You can neither benefit nor molest me. Let each of us keep to his own side of the planetary spaces." But is this the relation which any man amongst us sustains to his fellows? In the midst of a populous community to which he is bound by innumerable ties, having had his own fortune and condition almost predetermined and fore-ordained by his predecessors, and being about to exert upon his successors as commanding an influence as has been exerted upon himself, the objector can no longer shrink into his individuality, and disclaim connection and relationship with the world at large. He cannot deny that there are thousands around him on whom he acts, and who are continually re-acting upon him. The earth is much too small, or the race is far too numerous, to allow us to be hermits; and therefore we cannot adopt either the philosophy or the morals of hermits. All have derived benefits from their ancestors, and all are bound, as by an oath, to transmit those benefits, even in an improved condition, to posterity. We may as well attempt to escape from our own personal identity as to shake off the threefold relation which we bear to others, — the relation of an associate with our contemporaries; of a beneficiary of our ancestors; of a guardian to those who, in the sublime order of Providence, are to succeed us. Out of these relations, manifest duties are evolved. The society of which we necessarily constitute a part must be preserved; and,

in order to preserve it, we must not look merely to what one individual or one family needs, but to what the whole community needs; not merely to what one generation needs, but to the wants of a succession of generations. To draw conclusions without considering these facts is to leave out the most important part of the premises.

A powerfully corroborating fact remains untouched. Though the earth and the beneficent capabilities with which it is endued belong in common to the race, yet we fiud that previous and preseut possessors have laid their hands upon the whole of it, — have left no part of it unclaimed and unappropriated. They have circumnavigated the globe; they have drawn lines across every habitable portion of it, and have partitioned amongst themselves not only its whole area or superficial contents, but have claimed it down to the ceutre, and up to the concave, — a great inverted pyramid for each proprietor, — so that not an unclaimed rood is left, either in the caverns below or in the aerial spaces above, where a new adventurer upon existence can take unresisted possession. They have entered iuto a solemn compact with each other for the mutual defence of their respective allotments. They have created legislators and judges and executive officers, who denounce and inflict penalties even to the taking of life; and they have organized armed bands to repel aggression upon their claims. Indeed, so grasping and rapacious have mankind been in this particular, that they have taken more than they could use, more than they could perambulate and survey, more than they could see from the top of the masthead, or from the highest peak of the mountain. There was some limit to their physical power of takiug possession, but uone to the exorbitancy of their desires. Like robbers, who divide their spoils before they know whether they shall find a victim, men have claimed a continent while still doubtful of its existence, and spread out their title from ocean to oceau before their most adventurous pioneers had ever seen a shore of the realms they coveted. The whole planet, then, having been appropriated, — there being no waste or open lands from which

the new generations may be supplied as they come into existence, — have not those generations the strongest conceivable claim upon the present occupants for that which is indispensable to their well-being? They have more than a pre-emptive, they have a possessory, right to some portion of the issues and profits of that general domain, all of which has been thus taken up and appropriated. A denial of this right by the present possessors is a breach of trust, a fraudulent misuse of power given and of confidence implied. On mere principles of political economy, it is folly; on the broader principles of duty and morality, it is embezzlement.

It is not at all in contravention of this view of the subject that the adult portion of society does take, and must take, upon itself the control and management of all existing property until the rising generation has arrived at the age of majority. Nay, one of the objects of their so doing is to preserve the rights of the generation which is still in its minority. Society, to this extent, is only a trustee managing an estate for the benefit of a part-owner, or of one who has a reversionary interest in it. This civil regulation, therefore, made necessary even for the benefit of both present and future possessors, is only in furtherance of the great law under consideration.

Coincident, too, with this great law, but in no manner superseding or invalidating it, is that wonderful provision which the Creator has made for the care of offspring in the affection of their parents. Heaven did not rely merely upon our perceptions of duty towards our children, and our fidelity in its performance. A powerful, all-mastering instinct of love was therefore implanted in the parental, and especially in the maternal breast, to anticipate the idea of duty, and to make duty delightful. Yet the great doctrine founded upon the will of God as made known to us in the natural order and relation of things would still remain the same, though all this beautiful portion of our moral being, whence parental affection springs, were a void and a nonentity. Emphatically would the obligations of society remain the same for all those children who

have been bereaved of parents; or who, worse than bereavement, have only monster parents of intemperance or cupidity, or of any other of those forms of vice that seem to suspend or to obliterate the law of love in the parental breast. For these, society is doubly bound to be a parent, and to exercise all that rational care and providence which a wise father would exercise for his own children.

If the previous argument began with sound premises, and has been logically conducted, then it has established this position, — that a vast portion of the present wealth of the world either consists in, or has been immediately derived from, those great natural substances and powers of the earth which were bestowed by the Creator alike on all mankind; or from the discoveries, inventions, labors, and improvements of our ancestors, which were alike designed for the common benefit of all their descendants. The question now arises, *At what time* is this wealth to be transferred from a preceding to a succeeding generation? At what point are the latter to take possession of it, or to derive benefit from it? or at what time are the former to surrender it in their behalf? Is each existing generation, and each individual of an existing generation, to hold fast to his possessions until death relaxes his grasp? or is something of the right to be acknowledged, and something of the benefit to be yielded, beforehand? It seems too obvious for argument, that the latter is the only alternative. If the incoming generation have no rights until the outgoing generation have actually retired, then is every individual that enters the world liable to perish on the day he is born. According to the very constitution of things, each individual must obtain sustenance and succor as soon as his eyes open in quest of light, or his lungs gasp for the first breath of air. His wants cannot be delayed until he himself can supply them. If the demands of his nature are ever to be answered, they must be answered years before he can make any personal provision for them, either by the performance of any labor, or by any exploits of skill. The infant must be fed before he can earn his bread, he must be

clothed before he can prepare garments, he must be protected from the elements before he can erect a dwelling; and it is just as clear that he must be instructed before he can engage or reward a tutor. A course contrary to this would be the destruction of the young, that we might rob them of their rightful inheritance. Carried to its extreme, it would be the act of Herod, seeking, in a general massacre, the life of one who was supposed to endanger his power. Here, then, the claims of the succeeding generation, not only upon the affection and the care, but upon the *property*, of the preceding one, attach. God having given to the second generation as full and complete a right to the incomes and profits of the world as he has given to the first, and to the third generation as full and complete a right as he has given to the second, and so on while the world stands, it necessarily follows that children must come into a partial and qualified possession of these rights, by the paramount law of Nature, as soon as they are born. No human enactment can abolish or countervail this paramount and supreme law; and all those positive and often arbitrary enactments of the civil code, by which, for the encouragement of industry and frugality, the possessor of property is permitted to control it for a limited period after his decease, must be construed and executed in subservience to this sovereign and irrepealable ordinance of Nature.

Nor is this transfer always, or even generally, to be made *in kind*, but according to the needs of the recipient. The recognition of this principle is universal. A guardian or trustee may possess lands, while the ward, or owner under the trust, may need money; or the former may have money while the latter need raiment or shelter. The form of the estate must be changed, if need be, and adapted to the wants of the receiver.

The claim of a child, then, to a portion of pre-existent property, begins with the first breath he draws. The new-born infant must have sustenance and shelter and care. If the natural parents are removed, or parental ability fails; in a word, if parents either cannot or will not supply the infant's wants, —

then society at large — the government having assumed to itself the ultimate control of all property — is bound to step in and fill the parent's place. To deny this to any child would be equivalent to a sentence of death, a capital execution of the innocent, — at which every soul shudders. It would be a more cruel form of infanticide than any which is practised in China or in Africa.

But to preserve the animal life of a child only, and there to stop, would be, not the bestowment of a blessing, or the performance of a duty, but the infliction of a fearful curse. A child has interests far higher than those of mere physical existence. Better that the wants of the natural life should be disregarded than that the higher interests of the character should be neglected. If a child has any claim to bread to keep him from perishing, he has a far higher claim to knowledge to preserve him from error and its fearful retinue of calamities. If a child has any claim to shelter to protect him from the destroying elements, he has a far higher claim to be rescued from the infamy and perdition of vice and crime.

All moralists agree, nay, all moralists maintain, that a man is as responsible for his omissions as for his commissions; that he is as guilty of the wrong which he could have prevented, but did not, as for that which his own hand has perpetrated. They, then, who knowingly withhold sustenance from a new-born child, and he dies, are guilty of infanticide. And, by the same reasoning, they who refuse to enlighten the intellect of the rising generation are guilty of degrading the human race. They who refuse to train up children in the way they should go are training up incendiaries and madmen to destroy property and life, and to invade and pollute the sanctuaries of society. In a word, if the mind is as real and substantive a part of human existence as the body, then mental attributes, during the periods of infancy and childhood, demand provision at least as imperatively as bodily appetites. The time when these respective obligations attach corresponds with the periods when the nurture, whether physical or mental, is needed. As the

right of sustenance is of equal date with birth, so the right to intellectual and moral training begins at least as early as when children are ordinarily sent to school. At that time, then, by the irrepealable law of Nature, every child succeeds to so much more of the property of the community as is necessary for his education. He is to receive this, not in the form of lands, or of gold and silver, but in the form of knowledge and a training to good habits. This is one of the steps in the transfer of property from a present to a succeeding generation. Human sagacity may be at fault in fixing the amount of property to be transferred, or the time when the transfer should be made, to a dollar or to an hour; but certainly, in a republican government, the obligation of the predecessors, and the right of the successors, extend to and embrace the means of such an amount of education as will prepare each individual to perform all the duties which devolve upon him as a man and a citizen. It may go farther than this point; certainly it cannot fall short of it.

Under our political organization, the places and the processes where this transfer is to be provided for, and its amount determined, are the district-school-meeting, the town-meeting, legislative halls, and conventions for establishing or revising the fundamental laws of the State. If it be not done there, society is false to its high trusts; and any community, whether national or state, that ventures to organize a government, or to administer a government already organized, without making provision for the free education of all its children, dares the certain vengeance of Heaven; and in the squalid forms of poverty and destitution, in the scourges of violence and misrule, in the heart-destroying corruptions of licentiousness and debauchery, and in political profligacy and legalized perfidy, in all the blended and mutually-aggravated crimes of civilization and of barbarism, will be sure to feel the terrible retributions of its delinquency.

I bring my argument on this point, then, to a close; and I present a test of its validity, which, as it seems to me, defies denial or evasion.

In obedience to the laws of God and to the laws of all civilized communities, society is bound to protect the natural life of children; and this natural life cannot be protected without the appropriation and use of a portion of the property which society possesses. We prohibit infanticide under penalty of death. We practise a refinement in this particular. The life of an infant is inviolable, even before he is born; and he who feloniously takes it, even before birth, is as subject to the extreme penalty of the law as though he had struck down manhood in its vigor, or taken away a mother by violence from the sanctuary of home where she blesses her offspring. But why preserve the natural life of a child, why preserve unborn embryos of life, if we do not intend to watch over and to protect them, and to expand their subsequent existence into usefulness and happiness? As individuals, or as an organized community, we have no natural right, we can derive no authority or countenance from reason, we can cite no attribute or purpose of the divine nature, for giving birth to any human being, and then inflicting upon that being the curse of ignorance, of poverty, and of vice, with all their attendant calamities. We are brought, then, to this startling but inevitable alternative, — the natural life of an infant should be extinguished as soon as it is born, or the means should be provided to save that life from being a curse to its possessor; and, therefore, every State is morally bound to enact a code of laws legalizing and enforcing infanticide, or a code of laws establishing free schools.

The three following propositions, then, describe the broad and ever-during foundation on which the common-school system of Massachusetts reposes: —

The successive generations of men, taken collectively, constitute one great commonwealth.

The property of this commonwealth is pledged for the education of all its youth, up to such a point as will save them from poverty and vice, and prepare them for the adequate performance of their social and civil duties.

The successive holders of this property are trustees, bound to the faithful execution of their trust by the most sacred obligations; and embezzlement and pillage from children and descendants have not less of criminality, and have more of meanness, than the same offences when perpetrated against contemporaries.

Recognizing these eternal principles of natural ethics, the Constitution of Massachusetts, — the fundamental law of the State, — after declaring (among other things), in the preamble to the first section of the fifth chapter, that "the encouragement of arts and sciences, and all good literature, tends to the honor of GOD, the advantage of the Christian religion, and the great benefit of this and the other United States of America," proceeds, in the second section of the same chapter, to set forth the duties of all future legislators and magistrates in the following noble and impressive language: —

"Wisdom and knowledge, as well as virtue, diffused generally among the body of the people, being necessary for the preservation of their rights and liberties; and as these depend on spreading the opportunities and advantages of education in the various parts of the country, and among the different orders of the people, — it shall be the duty of legislatures and magistrates, in all future periods of this Commonwealth, to cherish the interests of literature and the sciences, and all seminaries of them, especially the University of Cambridge, public schools and grammar schools in the towns; to encourage private societies and public institutions, rewards and immunities, for the promotion of agriculture, arts, sciences, commerce, trade, manufactures, and a natural history of the country; to countenance and inculcate the principles of humanity and general benevolence, public and private charity, industry and frugality, honesty and punctuality in their dealings, sincerity, good humor, and all social affections and generous sentiments among the people." — See also Rev. Stat., ch. 23, sect. 7.

Massachusetts is *parental* in her government. More and more, as year after year rolls by, she seeks to substitute pre-

vention for remedy, and rewards for penalties. She strives to make industry the antidote to poverty, and to counterwork the progress of vice and crime by the diffusion of knowledge and the culture of virtuous principles. She seeks not only to mitigate those great physical and mental calamities of which mankind are the sad inheritors, but also to avert those infinitely greater moral calamities which form the disastrous heritage of depraved passions. Hence it has long been her policy to endow or to aid asylums for the cure of disease. She succors and maintains all the poor within her borders, whatever may have been the land of their nativity. She founds and supports hospitals for restoring reason to the insane; and, even for those violators of the law whom she is obliged to sequestrate from society, she provides daily instruction and the ministrations of the gospel at the public charge. To those who, in the order of Nature and Providence, have been bereft of the noble faculties of hearing and of speech, she teaches a new language, and opens their imprisoned minds and hearts to conversation with men and to communion with God; and it hardly transcends the literal truth to say that she gives sight to the blind. For the remnants of those aboriginal tribes, who, for so many ages, roamed over this land without cultivating its soil, or elevating themselves in the scale of being, her annual bounty provides good schools; and when the equal, natural, and constitutional rights of the outcast children of Africa were thought to be invaded, she armed her courts of judicature with power to punish the aggressors. The public highway is not more open and free for every man in the community than is the public schoolhouse for every child; and each parent feels that a free education is as secure a part of the birthright of his offspring as Heaven's bounties of light and air. The State not only commands that the means of education shall be provided for all, but she denounces penalties against all individuals, and all towns and cities, however populous or powerful they may be, that shall presume to stand between her bounty and its recipients. In her righteous code, the interception of knowledge is

a crime; and, if parents are unable to supply their children with books, she becomes a parent, and supplies them.

The policy of the State promotes not only secular but religious instruction, yet in such a way as leaves to every individual the right of private judgment and the sacred freedom of conscience.

Public sentiment exceeds and excels the law. Annually, vast sums are given for eleemosynary and charitable purposes, — to promote the cause of temperance, to send the gospel to the heathen, and to diffuse the doctrines of peace, which are the doctrines of the Prince of Peace.

For public, free education alone, including the direct outlay of money and the interest on capital invested, Massachusetts expends annually more than a million of dollars. To support religious institutions for the worship of God and the salvation of men, she annually expends more than another million; and what she gives away in the various forms of charity far exceeds a third sum of equal magnitude. She explores the world for new objects of beneficence; and so deep and common is the feeling which expects and prompts all this, that she is gradually changing and ennobling the definition of a cardinal word in the language of morals, — doing what no king or court with all their authority, nor royal academy with all its sages and literary men, can do: she is changing the meaning of *charity* into *duty*.

For the support of the poor, nine-tenths of whose cost originate with foreigners or come from one prolific vice, whose last convulsive energies she is now struggling to subdue, she annually pays more than three hundred thousand dollars; for the support and improvement of public highways, she pays a much larger sum; and, within the last dozen or fourteen years, she has invested a capital in railroads, within and without the State, of nearly or quite sixty millions of dollars.

Whence come her means to give, with each returning year, more than a million of dollars to public education; more than another million to religion; and more than a third to amelio-

rate and succor the afflicted and the ignorant at home, and to bless, in distant lands, those who sit in the region and shadow of death? How does she support her poor, maintain her public ways, and contribute such vast sums for purposes of internal improvement, besides maintaining her immense commercial transactions with every zone in the world?

Has she a vast domain? Her whole territory would not make a court-yard of respectable dimensions to stand in front of many of the States and Territories belonging to the Union.

Does she draw revenues from conquered provinces or subjugated realms? She conquers nothing, she subdues nothing, save the great elemental forces of Nature, which God gives freely, whenever and wherever they are asked for in the language of genius and science; and in regard to which no profusion or prodigality to one can diminish the bounty always ready for others.

Does she live by the toil of a race of serfs and vassals whom she holds in personal and hereditary bondage? — by one comprehensive and sovereign act of violence seizing upon both body and soul at once, and superseding the thousand acts of plunder which make up the life of a common robber? Every man who treads her sacred soil is free; all are free alike; and within her borders, for any purpose connected with human slavery, iron will not be welded into a fetter.

Has she rich mines of the precious metals? In all her coffers there is not a drachm of silver or of gold which has not been obtained by the sweat of her brow or the vigor of her brain.

Has she magazines of mineral wealth embedded in the earth? or are her soil and climate so spontaneously exuberant that she reaps luxuriant harvests from uncultivated fields? Alas! the orator has barbed his satire by declaring her only natural productions to be granite and ice.

Whence, then, I again ask, comes her wealth? I do not mean the gorgeous wealth which is displayed in the voluptuous and too often enervating residences of the affluent, but that

golden mean of property — such as Agur asked for in his perfect prayer — which carries blessings in its train to thousands of householders; which spreads solid comfort and competence through the dwellings of the land; which furnishes the means of instruction, of social pleasures and refinement, to the citizens at large; which saves from the cruel sufferings and the more cruel temptations of penury. The families scattered over her hills and along her valleys have not merely a shelter from the inclemencies of the seasons, but the sanctuary of a home. Not only food, but books, are spread upon their tables. Her commonest houses have the means of hospitality; they have appliances for sickness, and resources laid up against accident and the infirmities of age. Whether in her rural districts or her populous towns, a wandering, native-born beggar is a prodigy; and the twelve millions of dollars deposited in her savings institutions do not more loudly proclaim the frugality and providence of the past than they foretell the competence and enjoyments of the future.

One copious, exhaustless fountain supplies all this abundance. It is education, — the intellectual, moral, and religious education of the people. Having no other mines to work, Massachusetts has mined into the human intellect; and, from its limitless resources, she has won more sustaining and enduring prosperity and happiness than if she had been founded on a stratification of silver and gold, reaching deeper down than geology has yet penetrated. From her high religious convictions, she has learned that great lesson, — *to set a value upon time.* Regarding the faculties as the gift of God, she has felt bound both to use and to improve them. Mingling skill and intelligence with the daily occupations of life, she has made labor honorable; and, as a necessary consequence, idleness is disgraceful. Knowledge has been the ambition of her sons, and she has reverenced and venerated the purity and chastity of her matrons and her daughters. At the hearth-stone, at the family table, and at the family altar, — on all those occasions where the structure of the youthful character is *builded up*, —

these sentiments of love for knowledge, and of reverence for maidenly virtue, have been *builded in;* and there they stand, so wrought and mingled with the fibres of being, that none but God can tell which is Nature, and which is education; which we owe primarily to the grace of Heaven, and which to the co-operating wisdom of the institutions of men. Verily, verily, not as we ought have we obeyed the laws of Jehovah, or imitated the divine example of the Saviour; and yet, for such imperfect obedience and distant imitation as we have rendered, God has showered down manna from the heavens, and opened a rock whence flow living waters to gladden every thirsty place. He who studies the present or the historic character of Massachusetts will see (and he who studies it most profoundly will see most clearly), that whatever of abundance, of intelligence, or of integrity, whatever of character at home or of renown abroad, she may possess, all has been evolved from the enlightened, and, at least, partially Christianized mind, not of a few, but of the great masses, of her people. They are not the result of outward riches or art brought around it, or laminated over it, but of an awakened inward force, working energetically outwards, and fashioning the most intractable circumstances to the dominion of its own desires and resolves; and this force has been awakened, and its unspent energies replenished, more than from all things else, by her common schools.

When we witness the mighty achievements of art, — the locomotive, taking up its burden of a hundred tons, and transporting it for hundreds of miles between the rising and the setting sun; the steamboat, cleaving its rapid way, triumphant over wind and tide; the power-loom, yielding products of greater richness and abundance in a single day than all the inhabitants of Tyre could have manufactured in years; the printing-press, which could have replaced the Alexandrian Library within a week after it was burnt; the lightning, not only domesticated in the laboratories of the useful arts, but employed as a messenger between distant cities; and galleries of beautiful paintings, quickened into life by the sunbeams, — when we see all these

marvels of power and of celerity, we are prone to conclude that it is to them we are indebted for the increase of our wealth and for the progress of our society. But were there any statistics to show the aggregate value of all the thrifty and gainful habits of the people at large, the greater productiveness of the educated than of the brutified laborer, the increased power of the intelligent hand, and the broad survey and deep intuition of the intelligent eye; could we see a ledger account of the profits which come from forethought, order, and system, as they preside over all our farms, in all our workshops, and emphatically in all the labors of our households, — we should then know how rapidly their gathered units swell into millions upon millions. The skill that strikes the nail's head instead of the fingers' ends; the care that mends a fence and saves a cornfield, that drives a horseshoe nail and secures both rider and horse, that extinguishes a light and saves a house; the prudence that cuts the coat according to the cloth, that lays by something for a rainy day, and that postpones marriage until reasonably sure of a livelihood; the forethought that sees the end from the beginning, and reaches it by the direct route of an hour instead of the circuitous gropings of a day; the exact remembrance impressed upon childhood to do the errand as it was bidden; and, more than all, the economy of virtue over vice, of restrained over pampered desires, — these things are not set down in the works on political economy; but they have far more to do with the wealth of nations than any laws which aim to regulate the balance of trade, or any speculations on capital and labor, or any of the great achievements of art. That vast variety of ways in which an intelligent people surpass a stupid one, and an exemplary people an immoral one, has infinitely more to do with the well-being of a nation than soil or climate, or even than government itself, excepting so far as government may prove to be the patron of intelligence and virtue.

From her earliest colonial history, the policy of Massachusetts has been to develop the minds of all her people, and to imbue them with the principles of duty. To do this work most

effectually, she has begun it with the young. If she would continue to mount higher and higher towards the summit of prosperity, she must continue the means by which her present elevation has been gained. In doing this, she will not only exercise the noblest prerogative of government, but will co-operate with the Almighty in one of his sublimest works.

The Greek rhetorician Longinus quotes from the Mosaic account of the creation what he calls the sublimest passage ever uttered: "God said, Let there be light, and there was light." From the centre of black immensity, effulgence burst forth. Above, beneath, on every side, its radiance streamed out, silent, yet making each spot in the vast concave brighter than the line which the lightning pencils upon the midnight cloud. Darkness fled as the swift beams spread onward and outward in an unending circumfusion of splendor. Onward and outward still they move to this day, glorifying, through wider and wider regions of space, the infinite Author from whose power and beneficence they sprang. But not only in the beginning, when God created the heavens and the earth, did he say, "Let there be light." Whenever a human soul is born into the world, its Creator stands over it, and again pronounces the same sublime words, "Let there be light."

Magnificent, indeed, was the material creation, when, suddenly blazing forth in mid-space, the new-born sun dispelled the darkness of the ancient night: but infinitely more magnificent is it when the human soul rays forth its subtler and swifter beams; when the light of the senses irradiates all outward things, revealing the beauty of their colors, and the exquisite symmetry of their proportions and forms; when the light of reason penetrates to their invisible properties and laws, and displays all those hidden relations that make up all the sciences; when the light of conscience illumines the moral world, separating truth from error, and virtue from vice. The light of the newly-kindled sun, indeed, was glorious. It struck upon all the planets, and waked into existence their myriad capacities of life and joy. As it rebounded from them, and

showed their vast orbs all wheeling, circle beyond circle, in their stupendous courses, the sons of God shouted for joy. That light sped onward, beyond Sirius, beyond the Pole-star, beyond Orion and the Pleiades, and is still speeding onward into the abysses of space. But the light of the human soul flies swifter than the light of the sun, and outshines its meridian blaze. It can embrace not only the sun of our system, but all suns, and galaxies of suns: ay, the soul is capable of knowing and of enjoying Him who created the suns themselves; and, when these starry lustres that now glorify the firmament shall wax dim and fade away like a wasted taper, the light of the soul shall still remain; nor time nor cloud, nor any power but its own perversity, shall ever quench its brightness. Again I would say, that, whenever a human soul is born into the world, God stands over it, and pronounces the same sublime fiat, "Let there be light;" and may the time soon come when all human governments shall co-operate with the divine government in carrying this benediction and baptism into fulfilment!

REPORT FOR 1847.

GENTLEMEN, —

. . . THE incontestable progress which the cause of popular education is making in Massachusetts, and in some of the other States of our Union, is a subject for hearty congratulation among ourselves, and for devout gratitude to Heaven. It cannot be denied that the cause has won to itself most able and earnest advocates, who are in no way officially connected with it, but who cherish it from the purest motives of duty and philanthropy. But it happens to this, as to all other good causes, that some of its professed friends have attached themselves to it from collateral, and some from sinister motives. It is equally true that the cause has enemies; although, in this community, there are but few who dare to make open proclamation of their hostility. But opponents are all the more formidable when their opposition is secret. Their measures of counteraction are not the less efficient because they are indirect, and hide their origin under specious pretences. There is a third class, who have no faith in the utility of education. They number it among what they are pleased to call the Utopian schemes of reform with which the age is teeming; and they regard with an ill-concealed suspicion either the honesty of purpose or the soundness of intellect of those who are laboring to uphold its banner, and to bear it forward. There are those also who suspect, in education, the existence of some unknown and mys-

tical power, which, should it once obtain the ascendency, would bear the community onward, they know not whither; and having some *ism* or *ology* of their own, by which, provided all civil institutions, and Nature herself, will succumb to their dictation, they can forthwith extricate the world from all its troubles, and carry it forward in the directest line, and with the swiftest speed, to a millennial goal, they discard an agency whose power they can neither control nor comprehend. And, lastly, there are those who array themselves against education solely from mercenary motives, — because of the one or two mills upon the dollar which its support subtracts from their property.

To meet the opposition and the indifference originating in these and similar prejudgments, the subject of education has been very much "agitated," particularly in the northern portion of our country, within the last dozen years. There can be no hazard in affirming, that far more has been spoken and printed, heard and read, on this theme, within the last twelve years, than ever before, were it all put together, since the settlement of the colonies. The consequence certainly has been a very marked development of the merits of the subject, and a corresponding opening or expansion of the public mind for their recognition. To many sensible men, it has come like a revelation, inspiring hopes for the amelioration of mankind, and for the perpetuity of our institutions, which they had never dreamed of before. There are thousands of persons amongst us, whose once darkened minds have been so quickened with life, and illuminated with wisdom, on this subject, as to beget an intolerable impatience under old imperfections, — a perception of which has made rest impossible, and the pleasures of home uncomfortable, until, within their respective spheres, they had effected a reform.

In order to make this subject more intelligible to the common mind, as well as to conform to broad distinctions which Nature herself has established, it has been considered under a threefold aspect, — first, as embracing the proper care and

training of the body, that its health and longevity may be secured; second, as cultivating the faculties by which we perceive, compare, analyze and combine, remember, reason, and perceive natural fitness and the beauty of things, so that we may know more of the world in which we are placed, and of the glorious attributes of its Maker, and so that, by more faithfully harmonizing our conduct with its laws, we may the better enjoy its exquisite adaptations to our welfare; and, thirdly, as fashioning our moral nature into some resemblance to its divine original, — subordinating our propensities to the law of duty, expanding our benevolence into a sentiment of universal brotherhood, and lifting our hearts to the grateful and devout contemplation of God.

In pursuance of these fundamental ideas, it has been shown, by the authority of the highest medical men in the country, that, even in the present imperfect state of physiological science, more than one-half of all the cases of bodily disability and disease, more than one-half of all the pains and expenditures of sickness, more than one-half of all the cases of premature death, — that is, of death under the age of seventy years, — are the consequence of sheer ignorance, not of any irrepealable decree or fatality necessitating their existence, independently of our consent and co-operation, but of our own brutish ignorance of the conditions of health and life to which our bodies have been subjected by their Maker. And I desire, also, to be here understood as not including in this moiety of unnecessary suffering and of untimely death a single one of that extensive class of cases which result from a slavish submission to some tyrannous appetite, — such as intemperance, for instance, — where the knowledge, even if we possessed it, might be overborne in a conflict with the sensual desire: but I mean maladies, pains, and death, which a bad man would be as quick to avoid as a good one; which every sane man would desire to escape from, as he would from blindness or deafness, the gout or the toothache. Even were ignorance, then, to be classed among the greatest luxuries of life, it would be found

too costly an indulgence to be borne by an economical people.*

The indispensableness of education to worldly prosperity has also been demonstrated. An ignorant people not only is, but must be, a poor people. They must be destitute of sagacity and providence, and, of course, of competence and comfort. The proof of this does not depend upon the lessons of history, but on the constitution of Nature. No richness of climate, no spontaneous productiveness of soil, no facilities for commerce, no stores of gold or of diamonds garnered in the treasure-chambers of the earth, can confer even worldly prosperity upon an uneducated nation. Such a nation cannot create wealth of itself; and whatever riches may be showered upon it will run to waste. The ignorant pearl-divers do not wear the pearls they win. The diamond-hunters are not ornamented by the gems they find. The miners for silver and gold are not enriched by the precious metals they dig. Those who toil on the most luxuriant soils are not filled with the harvests they gather. All the choicest productions of the earth, whether mineral or vegetable, wherever found or wherever gathered, will, in a short time, as by some secret and resistless attraction, make their way into the hands of the more intelligent. Within the last four centuries, the people of Spain have owned as much silver and gold as all the other nations of Europe put together; yet, at the present time, poor indeed is the people who have less than they. The nation which has produced more of the raw material, and manufactured from it more fine linen, than all contemporary nations, are now the most ragged and squalid in Christendom. Let whoever will sow the seed or gather the fruit, intelligence will consume the banquet.

It must be admitted, indeed, that, when the people composing any particular state or country are compared with each other, the wisest are not always the wealthiest. This natural law, like others, is liable to fluctuations and disturbances from arti-

* See letters of eminent physicians, in my Sixth Annual Report. Also Common-school Journal, vol. v.

ficial and arbitrary institutions. Primogeniture, entail, monopoly, may derange its action; yet even here, as if to add confirmation to the general principle, it is always found that the families of inferior minds who inherit wealth, and the imbecile sovereigns or rulers who inherit power, owe their elevation to the greatness of some ancestor whose mental superiority not only won pre-eminence for himself, but for his descendants also. Where wealth or social position has not been earned or won by the possessors themselves, it is the representative of some ancestral talent whose force is not yet expended.

Who that visited the late Mechanics' Fair in the city of Boston was not bewildered by the number and diversity of the products of inventive genius and skill there exhibited? To the common observer, it was profusion producing confusion. What would be the result and "sum total" of a Mechanics' Fair among a tribe in the interior of Africa, or among the aborigines of our Western wilderness? Hardly more than a stone hatchet, a flint-headed arrow, a stick burned at the end, and sharpened into a spear, and a few yards of tawdry wampum. Yet the variety and richness of the one, compared with the poverty and rudeness of the other, would be but feeble symbols of the relative power and weakness of the minds from which they sprung. And whence came the vast, the wonderful intellectual superiority? It came from the old slate and pencil; the bit of chalk and the bit of board, planed or unplaned; the spelling-book and the reading-book, which have been found in every household through all our borders, from the time of the first rude huts that went up, amid winter and storm, about Plymouth Rock, — which have been the companions and playthings of every nursery, and the business-things of every schoolroom, for more than two centuries, until the children, as if by force of hereditary instinct, seem to look round inquiringly after them almost as soon as they are born. These are the acorns whence the majestic forest has sprung.

If the difference between persons dwelling in the same community, and living side by side, be less striking to the senses, it

is not less instructive to the reason. In my Fifth Annual Report, I presented the testimony of some of the most eminent and successful business-men amongst us, proving from business-data, and beyond controversy, that labor becomes more profitable as the laborer is more intelligent; and that the true mint of wealth, the veritable coinage of the country, is not to be found in magnificent government establishments, at Philadelphia or New Orleans, but in the humble schoolhouse.

On the occasion referred to, one of our most sagacious manufacturers declared, not only in accordance with the conclusions of his own reason, but as the result of an actual experiment, that the best cotton-mill in New England, if worked by operatives so low in the scale of intelligence as to be unable to read and write, would never yield the proprietor a profit; that the machinery would soon be worn out, the owner impoverished, and the operatives themselves left penniless. Another witness, for a long time superintendent of many work-people, made the following striking remark: "So confident am I that production is affected by the intellectual and moral condition of help, that, whenever a mill or a room should fail to give the proper amount of work, my first inquiry, after that respecting the condition of the machinery, would be *as to the character of the help;* and, if the deficiency remained any great length of time, I am sure I should find many who had made their marks upon the pay-roll, being unable to write their names; and I should be greatly disappointed, if I did not, upon inquiry, find a portion of them of irregular habits and suspicious character." *

Is it not, in fact, most palpably demonstrable, from a comparison of the nature of man with the powers and properties of the material universe in which he is placed, that he was designed to reach a point of intellectual and moral elevation far higher than any which the most favored people on the earth have yet attained? A material world, active with such invisible energies, and constantly displaying such fitful changes, as

* See Fifth Annual Report, pp. 86–100. Also Common-school Journal, vol. iv. p. 361.

belong to our planet, would be the most cruel prison-house to beings capable of perceiving its aspects, but incapable of understanding its laws. The superiority of our affective and sympathetic faculties over those possessed by the lower orders of creation would only render us so much the more miserable and defenceless, if we had not the faculties of reason and judgment also, by which we are able to bring ourselves into harmony with surrounding circumstances. Without knowledge, our present lives would be far more wretched than those of the brutes which perish; for we should be vulnerable on all sides, capable of suffering the keenest pain, while incapable of avoiding its causes. The revolution of the seasons would inflict want and debasement upon the whole race, if we could not foresee their vicissitudes and provide for their varying necessities. Comets and eclipses are fitted, in their very natures, to shed consternation and dismay upon the hearts of men, until the intellect comes in to explain the sublime order that produces them.*

To the savage, thunder and lightning are tokens of divine wrath; while to the Christian philosopher they are only emphatic and vivid proofs of the greatness and wisdom of God. To the enlightened mind, a tempest or a whirlwind is only a tempest or a whirlwind; but a barbarian dreads them a thou-

* It has been well said, "No eye has ever witnessed the spectacle of a total eclipse of the sun, even when announced with every characteristic of accuracy, without a shudder of awe, a sensation of deep terror, which reason in vain essays to subdue. The chilling and sombre darkness which spreads over Nature; the manifest terror of birds and animals, their instinctive retreat to the abodes of man, as if some awful danger were impending; the horror of the idea of the destruction of the great source of light and life, and the possible dissolution of Nature, — all conspire to render this one of the most terrific scenes that the eye of man has ever witnessed. What, then, must have been the horror which seized every spectator of this awful scene in those ages of the world when profound ignorance of its physical causes existed, and this terrible phenomenon burst suddenly upon the world, unanticipated and unannounced!

"The great Roman historian and annalist has, in a few graphic sentences, depicted the effect of an eclipse of the moon on the devoted legions of Pannonia. These hardy veterans, these iron men, born and bred to battle and to war, cowered before the awful spectacle, marched in agony to their contemned commanders, and implored their forgiveness, and deprecated the wrath of the avenging gods, for their disobedience and insubordination." — *Sidereal Messenger*.

sand times more for the anger of the gods which they denote, and for the evils they portend, than for any actual injuries which they inflict. The auroras of the North, so beautiful to the eye of science, have shaken myriads of hearts with fear. That numerous and various class of phenomena which we call optical illusions are sources of the direst terror to the ignorant, while they gratify a philosophic curiosity with the purest delight. In short, we know that all the wonders and glories which Nature displays in her majestic course are only sources of superstition to those who have not learned her sublime laws, darkening the already darkened mind, debasing the debased, and terrifying the affrighted. It seems impossible that a benevolent Being could have gifted the human race with its high faculties, if he had not provided for and ordained their development and edification. All the other orders of animated Nature are adapted to their condition: but a human soul, quickened by irrepressible impulses of curiosity, subject to the illusions of hope and to the agonies of fear, but with no power to unriddle the mysteries by which it is encompassed; with no power to realize the hopes spontaneously springing up within it, or to emancipate itself from the bondage of fear, — such a soul would be forever the trembling slave of Nature; while Nature would be a tyrant over it, deaf and remorseless. Whatever name might be given to the place of its habitation, it would be a habitation of unquenchable fire.

Knowledge and a highly-developed and highly-trained reason are to the temporal necessities of man what instinct is to the brute. But instinct is complete, perfect, self-active; while knowledge and reason can never reach any adequate height without vigorous self-effort and copious instruction from others. Far better, therefore, would it have been for mankind, had they never been elevated in the scale of existence above the *Simia* tribe, — the ape, the monkey, or the baboon, — than that they should have been endowed with the faculties of memory, of hope, of fear, and of imagination, without an adequate ability to derive wisdom from past experience, and to make provision

for future necessities. There is no earthly power but education, which, by supplying these wants, can rescue the human race from sinking as much below the brute creation as they were designed to rise above it.

So, too, if the practice of equity, virtue, and benevolence, were not possible for the race, its condition would be far more deplorable than that of any horde of wild beasts that ever prowled through a wilderness, or hid themselves for ambush in the depths of a jungle. Even tigers and wolves, with all their ferocity, can inflict but a transitory pain upon each other, or upon the weaker races around them. The most ingenious of all the animals have never invented machines to torture those of their own or of an inferior order. The iron boot, the thumb-screw, the rack, the fagot, are dreadful realities in natural history; but the infamy of their invention and their use belongs not to the brute creation. Brutes cannot build ships, and cross oceans, to despoil or enslave a defenceless and kindred race in another hemisphere; nor can they forge any fetters, whether of iron or of law, which shall bind in remorseless bondage, not only the victim himself, but generations of his descendants. Brutes cannot bereave each other of their natural instincts, make the mother forget her young, the mated pair assail each other's lives, or the offspring lay parricidal hands upon its parent by transforming the choicest fruits of the earth into poison, and selling this poison for ignominious gain. The most selfish and ignoble races that ever flew through the air, or swam in the sea, never availed themselves of the accidental possession of power to establish orders of patrician and plebeian, or of lord and commoner, and thus to doom one portion of their number to perform all the toil and bear all the burdens of the tribe, while they themselves monopolized all its leisure and its luxuries. What a spectacle would be presented, if a few individuals of some family of insects, gathering themselves into conclave upon some spire of grass in the middle of a vast plain, or upon some leaf in a boundless forest, should there presume not only to adjudicate upon all the purposes of crea-

tion and all the mysteries of eternity, but should denounce imprisonment and torture, the fagot and the scaffold, upon all who would not bow to their authority, and avow assent to their conclusions! There are tribes of the brute creation, it is true, which prey upon other tribes; but it is only for the satisfaction of a physical want, and, when their hunger is appeased, their fierceness subsides: but not in the north, where their rage is whetted by arctic cold, nor in the south, where their blood is fevered by tropical heats, do they ever inflict upon a victim the life-long solitude of a dungeon, or gratuitously burn his body, and heap contempt upon his ashes, for not believing as they believe, or for not acknowledging, as the Great Spirit of the universe, the idol which they may have set up. If, then, I say, it had not been a part of the divine determination, in the creation of our race, that its terrible propensities should be controlled, and its higher susceptibilities advanced into supremacy, zoölogy has yet to discover the species of animals so vile, so wretched, so mutually predaceous, that mankind has not reason to envy them. If posterity is to be what history shows us that nineteen-twentieths of all the preceding world have been, what not less than four-fifths of it now are, then is man not the noblest, but the ignoblest, work of creation; the accursed, and not the favored, of Heaven. Not believing in such a destiny, I believe there is a way to avoid it.

Having proved, then, in former Reports, by the testimony of wise and skilled men, that disease may be supplanted by health, bodily pain by enjoyment, and premature death by length of life, merely by the knowledge and practice of a few great physiological principles, such as every person can easily master before the age of sixteen years; and having also shown, by testimony equally authentic and satisfactory, that intelligence, co-operating with the bounties of Nature, is sufficient to secure comfort and competence to all mankind, — I propose to myself, in the residue of this Report, the still more delightful task of showing, by proofs equally unexceptionable and convincing, that the great body of vices and crimes which now sadden

and torment the community may be dislodged, and driven out from amongst us, by such improvements in our present common-school system as we are abundantly able immediately to make.

During the last summer, in order to a clear and full presentation of the subject to those persons whose testimony I wished to obtain, I prepared a circular, setting forth, with as much precision and completeness as possible, certain specific emendations of our present school-system, — only such emendations, however, as we can readily make, — and appealing to the experience and judgment of the persons addressed, to know what would be the results, were the system to be so amended. This circular was sent to teachers highly competent to give evidence on so important a subject, — competent from their science and from their personal experience, from the sobriety of their judgment, and from their freedom from any motive to overstate facts, or to deduce inferences too broad for the premises on which they were founded. In fine, the circular was sent to persons whose elevated character, and whose extended personal acquaintance with the subject-matter on which they testify, place them above denial, cavil, or suspicion.

The circular, and the answers to it, follow: —

CIRCULAR.

To —— ——.

I desire to obtain the opinion of teachers who are both scientific and practical on a subject of great importance to the cause of popular education. Your long experience in school-keeping, the great number of children whom you have had under your care, and your well-earned reputation as an instructor and trainer of youth, prompt me to apply to you for answers to the subjoined inquiries.

My general object is to obtain such an opinion as your experience will authorize you to give respecting the efficiency, in the formation of social and moral character, of a good common-school education, *conducted on the cardinal principles of the New-England systems.* In other words, how much of improvement in the upright conduct and good morals of the community might we reasonably hope and expect, if all our common schools were what

they should be, what some of them now are, and what all of them, by means which the public is perfectly able to command, may soon be made to become?

As we look around us, we see that society is infested by vices, both small and great. The value of life is diminished, and even life itself is sometimes made burdensome and odious, by the existence amongst us of pests and nuisances in human form, whom the law forbids us to destroy, and whom, with all our efforts, we are unable wholly to reform. Were we permitted to hunt out and exterminate from society a wicked or mischievous man as we would a prowling wolf from the sheep-fold, or could we apply the sovereign antidote of extinction to a pestilent brood of children whom profligate parents are about to send forth into the world, we might then secure ourselves in a summary manner from present fears and from future annoyance. So, too, if we could arrest the momentum of long habit, or win back to the paths of virtue those, who, by their frequent tread, have worn the highways of vice both smooth and broad, we should then have access to a milder, though a more laborious remedy. But the common sentiments of mankind would revolt at any proposal to prevent all violations of the moral code by extinguishing the life of the violators; and all history and experience afford concurrent proof that the inbred habits of grown men and women — their accustomed trains of thought and of action — are mainly beyond the control of secondary causes. Hence it is, that a great part of the legislation of every state and nation, a vast majority of the decisions of all legal tribunals, and a still larger proportion of all the labors and expenditures of philanthropic and Christian men, have been devoted to the punishment of positive wrong, or to the vain attempt to repair its nameless and numberless mischiefs. Could these wrongs and mischiefs be prevented, our descendants would inherit a new earth.

The *classes* of common offences by which society is vexed and tormented are numerous; but the *individual acts of commission*, under the respective classes, are absolutely incomprehensible, save by the Omniscient.

There is the detestable practice of profane swearing, which is motiveless and gratuitous wickedness. This is a vice which neither gives any property to the poor man, nor any luxury to the rich one. It degrades even the clown to a lower state of vulgarity; and it would render the presence even of the most polished gentleman offensive and disgusting, if it were ever possible for a *gentleman* to be guilty of it.

Though greatly restricted, at the present day, in its destructive agency, and gradually withdrawing itself from the more respectable and intelligent classes to the two extremes of society, — to the luxuriously rich and the self-made poor, — yet the vice of intemperance still exists amongst us. Wherever it invades, it eats out the substance of families; not only consumes the means of educating children, but eradicates also the very disposition to edu-

cate them; involves the innocent in the sufferings of the guilty, even torturing them with superadded pangs of shame which the guilty do not feel; and, according to the divinely-ordained laws of our physical being, it visits the iniquities of the fathers upon the children, unto the third and fourth generation, by sowing in their constitution the seeds of inordinate desires.

Below that degree of slander or defamation which the law denounces as punishable, there exists such an amount of censoriousness and detraction as often estranges acquaintances, dissolves friendships, introduces discord into neighborhoods and communities, and sometimes entails hereditary animosities upon families and circles, which might otherwise be blessed by harmony and peace.

Nor can the gross and cowardly offence of lying be omitted from this odious catalogue. This vice includes in its very nature so much of the assassin and the dastard, that it lurks to inflict secret blows, or only ventures abroad when large numbers, bound together by strong ties of passion or of interest, impart mutual confidence and boldness in the prosecution of a common object. Hence a private individual who is known as a liar is detested, scorned, and shunned; while profligate political defamers and sectarian zealots, inspired by a common sentiment of ambition or of intolerance, and keeping themselves in countenance by their numbers and their partisanship, welcome this vice as an ally, and rejoice in the successes obtained by its aid. No patriotism is proof against the rancor of party spirit; no piety or good works, against the rage and blindness of religious bigotry.

In pecuniary transactions, the temptations to overreaching, to exorbitance, and to actual dishonesty, are yielded to with a most lamentable frequency. The buyer takes advantage of the necessities of the seller, and obtains a transfer of his property for a small part of its value; or sometimes, by adroit management and preliminary scheming, he creates the necessity which places the victim within the jaws of his avarice. The seller knowingly overstates the quantity, the quality, or the value of the commodities he sells; and, perhaps, takes advantage of the ignorance or credulity of the purchaser to obtain a price which he knows to be exorbitant and inequitable. The employer often avails himself of the necessities of the employed to obtain his services for less than they are worth; he summons in hunger and cold, and the sufferings of a dependent family, as advisers in helping to make an unrighteous bargain, and as sureties for its performance. Men, without any pecuniary resources which they can call their own, embark in hazardous speculations, where, if the rash adventure should chance to prove successful, they will pocket all the gain; but, should it turn out to be disastrous, their creditors must suffer all the loss.

In some of the commercial countries of Europe, a merchant's insolvency affects his moral character hardly less than his pecuniary credit. If a bankrupt cannot show that his deficiency of means was occasioned by some dis-

aster which he could not control, or by some loss which he could not reasonably be expected to foresee, he forfeits his mercantile standing amongst honorable dealers, and can retrieve his character only by actual proof of returning or of newly-created honesty. A second failure, unexplained and unatoned for, brands with disgrace, and expels not more from the traffic than from the companionship of honorable men.

The above classes of wrong-doing, together with many others of a kindred nature, are regarded by the law as minor offences. Some of them it does not undertake to punish; yet, from their wide-spread prevalence and great frequency, they perhaps inflict as large an aggregate of evil upon society as those of a more heinous and formidable character, but of less frequent occurrence.

In regard to offences of a graver nature, — such as come under the head of crimes or felonies, — the condition of our country compares favorably with that of any other part of Christendom. Especially will this remark appear true if we consider the slight amount of preventive force made use of, in any part of our Union, to deter from actual transgression, and, as a general rule, the lightness of the penal sanctions held up as a terror to evil-doers. Yet that there does exist amongst us an appalling amount of criminality of this deeper dye; that flagrant offences against the rights of property, of person, of reputation, and of life, are perpetrated, — is proved by the records of our criminal courts, and by the mournful procession of convicts and felons whom we see on their way to our penitentiaries and other receptacles prepared for the guilty.

Including all classes of offenders, both the less and the more flagitious, it is undeniable that there exists amongst us a multitude of men, of whom it may be truly said, that it would be better for the community had they never been born, or had they died in childhood, before their propensities for evil had been developed, or before they had gone abroad to disturb the peace of society, and to destroy that sense of security which every honest man is entitled to feel. To thin the ranks of this host of enemies to the welfare of the race, or to cripple the evil energies of those who could not be wholly reclaimed, has been the object of philanthropists and sages from the beginning of time. Their efforts, however, have been expended a million-fold more upon the old than upon the young; and a million-fold more, also, in the way of punishment than of prevention.

Among the republics of ancient times, a few wise and sagacious men did clearly perceive the bearing of education upon character, and, of course, upon innocence and guilt, both personal and public; but among the masses of the people there never existed any settled and operative conviction of this truth: and not a single year can be pointed out in all their long annals, where a majority of those who held the reins of government, and framed the laws of the State, rose to any practical or even theoretic conception of the

grand idea, that the vital intelligence or the stupidity, the integrity or the dishonesty, of the people at large, will be measured and bounded by the kind and degree of the education imparted to its children, just as the zones upon the earth's surface are measured and bounded by the amount of sunlight which is shed upon them.*

In modern times, this relation of early education to adult character has been more clearly and generally recognized as being, what it truly, to a very great extent, is, a relation between cause and effect. As one means of establishing this truth, many earnest well-wishers of their race have made extensive collections of what are called the "Statistics of Education and Crime." The inmates of large penal establishments have been subjected to a personal examination in order to ascertain whether a greater proportion of them than of the community at large from which they were taken were wholly ignorant of letters. In this investigation, the comparison has been made between those who were able both to read and write, and those who could perform neither or but one of these operations.

I will not dwell here upon the amazing absurdity of any definition of the word "education," whose spirit or whose terms are satisfied by the mere ability to read and write. Reading and writing may be, and, among this class of persons, they usually are, mere mechanical processes: and how such attainments should ever have been dignified by the name of education, or confounded with that noble culture of the soul which pours the noon-day illumination of knowledge upon the midnight darkness of ignorance; which seeks to enthrone the moral faculties over all animal desires and propensities, and to make the entire course of instruction subservient to the great duties of love to God and love to man, — how an absurdity so extravagant, and now so obvious, could ever have been committed, can be explained only by reference to the low and unworthy ideas of education which once prevailed.

The naked capacity to read and write is no more education than a tool is a workman, or a telescope is a La Place or a Le Verrier. To possess the means of education is not the same as to possess the lofty powers and immunities of education, any more than to possess the pen of a poet is to possess a poet's skill and "faculty divine," or than the possession of the gospel is the possession of that liberty wherewith Christ maketh his disciples free; and that reading and writing are only instruments or means to be used in education is a truism now so intuitively obvious as to disdain argument. And hence it is, that of two persons, one of whom can barely write his name or spell out a paragraph in a newspaper, while to the mind of the other the contents of all manuscripts and of all libraries have no more existence than nonentity has to his senses, it would be hazardous to affirm that the chances of the former for a virtuous life are much superior to those of

* Even Marcus Aurelius declared himself satisfied if he could only improve a few persons; and he denied the possibility of establishing Plato's republic.

the latter. Nor do the best authorities dispel all the clouds of doubt which hang over this question. Some writers maintain that crime actually increases in proportion to the diffusion of the rudiments of knowledge, provided the knowledge which is diffused stops with mere rudiments. I think, however, it must be conceded that the preponderance of names aud of statistical results does, on the whole, clearly favor the opinion, that crime recedes as knowledge advances; and that, as the full-risen sun enables a traveller to see his path, and to avoid the dangers that beset it, so the first and faintest gleaming of the morning twilight *helps* him to discover his way, and to shun its perils. It must also be remembered, that when great numbers are taken as the basis of comparison, all of whom possess the rudiments of knowledge, it will always happen that some of them will possess more than the rudiments. Hence, taking whole communities together, I believe the legitimate and inevitable conclusion to be, that every advance in knowledge amongst a people is *pro tanto* an invasion of the domain of crime.

For years past, however, although I have carefully scrutinized these so-called "Statistics of Education and Crime," and am convinced that they do establish a distinction between the two classes, — one of which can read and write, while the other can do neither of these things, or but one of them, — in regard to their relative exemption from crime or exposure to it, yet I have never been able to bring myself to present these schedules to our people as an argument in favor of that elevated and ennobling education to which it is their duty to aspire. I have felt, that, by so doing, the argument would be shorn of half its power by the feebleness of the proofs brought to sustain it. It would be like exhibiting a taper to prove the existence of light while surronnded by the sun's effulgence. Our present state of society, the form of government under which we live, the improvable faculties with which we have been endowed by our Maker, and the solemn destiny that awaits us, — all demand vastly more than "a knowledge of the nature and power of letters, and the just method of spelling words," and the mechanical ability to imitate, with a pen, their written or printed signs.

Yet this degrading idea of education, which was first conceived in reference to the ignorant classes of Europe, has been, to some extent, adopted and acted upon in our own country. The last census of the United States, taken by authority of a law of Congress, and in compliance with a provision of the Federal Constitution, proceeded upon this European fallacy. It virtually adopted the old line of distinction between education and ignorance; for it required an enumeration of all persons over twenty years of age who were unable to read and write. The results have been published, and they are now embodied with the permanent statistics of the country. Towns, counties, and states are classed; their condition is mentioned with honor or with opprobrium, according to their relative position above or below this absurd standard of knowledge and culture. It is inevitable that

this legislative sanction of such a standard — this naturalization of it, so to speak — should have a most baneful effect in debasing public opinion upon the subject. Facts of an interesting nature are presented, it is true; but their tendency is to rob education of all its noblest attributes.

But though the public mind always tends strongly to conform its modes of thinking to legal definitions, and to subscribe to opinions sanctioned by high authority, yet the common sense of the community, especially in the more educated States of the Union, has outgrown these contracted notions, and has claimed for the word "education" a far ampler and loftier significance. All intelligent thinkers upon this subject now utterly discard and repudiate the idea that reading and writing, with a knowledge of accounts, constitute education. The lowest claim which any intelligent man now prefers in its behalf is, that its domain extends over the threefold nature of man, — over his body, training it by the systematic and intelligent observance of those benign laws which secure health, impart strength, and prolong life; over his intellect, invigorating the mind, replenishing it with knowledge, and cultivating all those tastes which are allied to virtue; and over his moral and religious susceptibilities also, dethroning selfishness, enthroning conscience, leading the affections outward in good-will towards men, and upward in gratitude and reverence to God. In thousands of reports prepared by school-committees, in frequent addresses and lectures delivered on public occasions, in all educational documents emanating from high official sources, and in every work pretending to scientific accuracy, or to any comprehensive outline of the subject, these sacred and majestic attributes have been set forth; and it has been demonstrated, hundreds of times over, that the effect of a sound education of the people must, not accidentally, but necessarily, not occasionally, but always, be to repress the commission of crime, and to promote the diffusion of human happiness; and that to act in conscious defiance or disregard of these truths is treachery to the best interests of our fellow-men, and impiety towards the Author of the moral universe.

But notwithstanding all that has been said, and so well said, as to the moral power of education in reforming the world, there have still been a vagueness and an indefiniteness *in regard to the extent of that power*, which have shorn argument and eloquence of much of their strength. Nowhere have its advocates set forth, distinctly and specifically, *how much* they believe can be accomplished by it. When an alleged improvement is presented to a judicious man, he wishes to know whether, and to what extent, its benefit will exceed its cost. A capitalist will not aid a new enterprise with his money until he is satisfied of the profitableness of the investment; nor will a manufacturer purchase new machinery unless he is convinced that it will do better work in the same time, or equal work in less.

It seems to me that the time is now arrived when the friends of this cause should plant themselves on a more conspicuous position; when, surveying

the infinite of wretchedness and crime around them, before which the stoutest heart is appalled, and humanity stands aghast, they should proclaim the power and the prerogatives of education to rescue mankind from their calamities. Founding themselves upon evidence that cannot be disputed, and fortifying their conclusions by the results of personal experience, they should proclaim how far the miseries of men can be alleviated, and how far the dominion of crime can be overthrown, by such a system of education as it is perfectly practicable for every civilized community forthwith to establish; and thus they should awaken the conscience of the public to a sense of its responsibility.

The idea will be more distinctly presented under an inquiry like the following: —

Under the soundest and most vigorous system of education which we can now command, what proportion, or percentage, of all the children who are born, can be made useful and exemplary men, — honest dealers, conscientious jurors, true witnesses, incorruptible voters or magistrates, good parents, good neighbors, good members of society? In other words, with our present knowledge of the art and science of education, and with such new fruit of experience as time may be expected to bear, what proportion, or percentage, of all children, must be pronounced irreclaimable and irredeemable, notwithstanding the most vigorous educational efforts, which, in the present state of society, can be put forth in their behalf? what proportion, or percentage, must become drunkards, profane swearers, detractors, vagabonds, rioters, cheats, thieves, aggressors upon the rights of property, of person, of reputation, or of life; or, in a single phrase, must be guilty of such omissions of right, and commissions of wrong, that it would have been better for the community had they never been born? This is a problem which the course of events has evolved, and which society and the government must meet. If, with such educational means and resources as we can now command, eighty, ninety, ninety-five, or ninety-nine per cent of all children can be made temperate, industrious, frugal, conscientious in all their dealings, prompt to pity and instruct ignorance instead of ridiculing it and taking advantage of it, public-spirited, philanthropic, and observers of all things sacred; if, I say, any given proportion of our children, by human efforts, and by such a divine blessing as the common course of God's providence authorizes us to expect, can be made to possess these qualities, and to act from them, — then, just so far as our posterity shall fall below this practicable exemption from vices and crimes, and just so far as they shall fail to possess these attainable virtues, just so far will those who frame and execute our laws, shape public opinion, and lead public action, *be criminally responsible for the difference.* I can conceive of no moral proposition clearer than this. Society, in its collective capacity, is the possessor of all the knowledge, and the owner of all the property, in existence. Governments

have been organized, and are invested with power, to use any needful amount of this property for purposes of education; and, by holding out adequate inducements and remuneration, they can command the services of the highest talent. Here, then, duty, and the means to perform it, come together. The only remaining question is, *How much can be done?* for, in a cause and for a purpose like this, nothing which can actually be done can be guiltlessly omitted. If it is proved, with a reasonable degree of certainty, that ninety-nine, ninety-five, ninety, eighty, or any other given percentage of all children can be rescued from vice and crime, and can be so educated and trained as to become valuable citizens, but the State refuses or declines to do this work, then the State itself becomes a culprit; and, before the great moral Judge who is seated on the throne of the universe, it must stand a spectacle of shame and guilt, like one of its own inferior culprits before its own judicial tribunals.

With these preliminary observations, which seemed to be necessary in order to a full exposition of the object I have in view, I proceed to submit the following specific inquiries, and to request your answer to them: —

1. How many years have you been engaged in school-keeping? and whether in the country, or in populous towns or cities?

2. About how many children have you had under your care? of which sex? and between what ages?

3. Should all our schools be kept by teachers of high intellectual and moral qualifications, and should all the children in the community be brought within these schools for ten months in a year, from the age of four to that of sixteen years, then what proportion, what percentage, of such children as you have had under your care, could, in your opinion, be so educated and trained, that their existence on going out into the world would be a benefit, and not a detriment, an honor, and not a shame, to society? Or, to state the question in a general form, if all children were brought within the salutary and auspicious influences I have here supposed, what percentage of them should you pronounce to be irreclaimable and hopeless? Of course, I do not speak of imbeciles or idiots, but only of rational and accountable beings.

You will perceive, that, in certain respects, I am supposing no change in the present condition of society. I am taking families as they now are, and am allowing all the unfavorable as well as the favorable influences of the old upon the young to continue to operate, at least for a time, as heretofore. Nor do I suppose any sudden or transforming change in co-operative or auxiliary institutions, — such as the Sabbath school, the pulpit, and so forth, — although it is certain that such a state of things as is here outlined would gradually impart new vigor to all that advances the progress of society, while it would impair the force of all that retards it.

On the other hand, however, I am supposing two great changes. I am supposing all our children to be placed under the care of such a class of men and women as we now honor by the appellation of first-class or first-rate teachers, — of such teachers as are able, in the schoolroom, both to teach and to govern; and who, out of the schoolroom, will be animated by a missionary spirit in furthering the objects of their sacred vocation. I have also supposed that *all* the children in the community shall be brought under the forming hands of such teachers, from the age of four to that of sixteen, for ten months in each year.

While, therefore, the above supposition leaves children exposed, in many cases, to the pernicious family and social influences under which they are now suffering, it assumes that all the children, when out of school, shall meet only such children as are enjoying the same high training, the same daily instillation of moral principles, as themselves. My supposition allows a continuance of the same family and adult influences (at least until these shall be supplanted by the better influences of the rising generation, action and re-action hastening results), because these influences are facts which no earthly power can cause to be immediately changed. But I have supposed this noble company of teachers, this length of schools, and this universality of attendance, because these are reforms on the present condition of things, which can be effected without any great delay, — at the farthest, a very few years being an ample allowance for the completion of such a change.

To reduce my third question, then, within its narrowest limits, and to make it as definite and precise as possible, suppose yourself to be stationed as a school-teacher in a place similar to any of those in which you have before labored; suppose yourself, too, to be surrounded by teachers fully as capable and as zealous in all respects as yourself; and suppose, further, that all the children are brought under your care or theirs, as above specified, — that is, for a period of twelve years, or from four to sixteen, and ten months in each year, — and will you then please to declare what proportion, or percentage, of those under your own care, you believe could be turned out the blessing, and not the bane, the honor, and not the scandal, of society? and on what proportion, or percentage, — the complement of the other, — would your experience compel you to pronounce the doom of hopelessness and irreclaimability?

Very truly and sincerely yours,

HORACE MANN.

I extract from the replies to this circular only the specific answers to the circular: —

LETTER FROM JOHN GRISCOM, Esq.

Burlington, N.J., 8 mo. 27th, 1847.

My Esteemed Friend, — . . . My belief is, that, under the conditions mentioned in the question, not more than two per cent would be irreclaimable nuisances to society, and that ninety-five per cent would be supporters of the moral welfare of the community in which they resided.

With teachers properly trained in normal schools, and with such a popular disposition towards schools as wise legislation might effect, nineteen-twentieths of the immoralities which afflict society might, I verily believe, be kept under hatches, or eradicated from the soil of our social institutions.

Every step in such a progress renders the next more easy. This is proved not only on the grand scale of comparing country with country, and state with state, but district with its adjacent district, and neighborhood with neighborhood.

Finally, in the predicament last stated in the circular, and supposing the teachers to be imbued with the gospel spirit, I believe there would not be more than *one-half of one per cent* of the children educated, on whom a wise judge would be "compelled to pronounce the doom of hopelessness and irreclaimability."

In nothing which I have advanced has it been my intention to advocate any sectarian instruction in our schools, or any thing adverse to the statutory limits of the Massachusetts school-system. I therefore expressly disavow any intention to recommend truths or doctrines, as part of the moral instruction to be given in public schools, which any believer in the Bible would reasonably deem to be sectarian.

I am, with true esteem, thy friend,

Jno. Griscom.

LETTER FROM D. P. PAGE, Esq.

State Normal School, Albany, N.Y., Nov. 20, 1847.

Hon. Horace Mann.

Dear Sir, — . . . Could I be connected with a school furnished with all the appliances you name, where all the children should be constant attendants upon my instruction for a succession of years, where all my fellow-teachers should be such as you suppose, and where all the favorable influences described in your circular should surround me and cheer me, even with my moderate abilities as a teacher, I should scarcely expect, after

the first generation of children submitted to the experiment, to fail, *in a single case*, to secure the results you have named.

. . . But I should not forgive myself, nor think myself longer fit to be a teacher, if, with all the aids and influences you have supposed, I should fail, in one case in a hundred, to rear up children who, when they should become men, would be "honest dealers, conscientious jurors, true witnesses, incorruptible voters or magistrates, good parents, good neighbors, good members of society;" or, as you express it in another place, who would be "temperate, industrious, frugal, conscientious in all their dealings, prompt to pity and instruct ignorance instead of ridiculing it and taking advantage of it, public-spirited, philanthropic, and observers of all things sacred;" and, negatively, who would *not be* "drunkards, profane swearers, detractors, vagabonds, rioters, cheats, thieves, aggressors upon the rights of property, of person, of reputation, or of life, or guilty of such omissions of right, and commissions of wrong, that it would be better for the community had they never been born."

With sincere regard, your friend,

D. P. Page.

LETTER FROM SOLOMON ADAMS, Esq.

Boston, Nov. 24, 1847.

Hon. Horace Mann.

My dear Sir, — . . . 1. I have been engaged in this profession twenty-four years; the first five years in the country, the remainder of the time in a city.

2. My whole number of pupils is a little below two thousand. The last nineteen years, my pupils have been females. Previously, both sexes.

If a well-conducted education produces benevolence, justice, truth, patriotism, love to God and love to man, in one case, the same education, in the same circumstances, will produce the same results in all cases. The results for which we look and labor sometimes fail, not because the great law of uniformity is at fault, but by reason of counteracting causes, which may escape our most careful scrutiny. Does the failure impair our confidence in the uniformity of moral causes and effects? The moment this law fails, every cord that binds society together is sundered; society is disintegrated. Every social enactment by which society attempts to regulate its members, every motive by which one man hopes to influence another, assumes this uniformity. It is the hinge on which all social influences turn. Without it, we could not shape moral means to moral ends. To destroy it, to *doubt* it, would be the moral unhingement of society.

In this great law are the teacher's hopes and encouragements. The great outline of the means he is to employ is well defined. It is his province to bring all those moral appliances to bear upon the soul which are suited to lead it into harmony with truth and with God, to train it to the perception and love of truth and goodness. In doing this, the faithful teacher is a co-worker with God, and may confidently look to the Author of all good to give the crowning blessing to his strenuous endeavors. There are those (and I confess myself of the number) who believe and feel that all human endeavors, unaided by an influence from on high, will prove fruitless, so far as the highest wants of the immortal spirit are concerned. Yet those who feel so can tell us of no way in which they are authorized to expect such an influence, and of no way in which it is exerted even by almighty power, except through the instrumentality of truth presented to the mind. There might as well be a conflagration without fire, or a flood without fluid.

I confess I do not see how our different theological views can essentially alter our modes of instruction. We are all to train the young in the way in which they should go, "giving line upon line, precept upon precept, here a little and there a little," waiting for and expecting precious fruit. The fruit may ripen slowly. From day to day, you may not be able to see any progress. This holds true both in moral and intellectual training. But, by comparing distant intervals, progress is perceptible. At length a result comes, which repays all the teacher's labor, and inspires new courage for new efforts. You ask for my own experience. This is my apology for alluding with freedom to myself. Permit me to say, that in very many cases, after laboring long with individuals almost against hope, and sometimes in a manner, too, which I can now see was not always wise, I have never had a case which has not resulted in some good degree according to my wishes. The many kind and voluntary testimonials given, years afterwards, by persons who remembered that they were once my wayward pupils, are among the pleasantest and most cheering incidents of my life. So uniform have been the results, when I have had a fair trial and time enough, that I have unhesitatingly adopted the motto, *Never despair*. Parents and teachers are apt to look for too speedy results from the labors of the latter. The moral nature, like the intellectual and physical, is long and slow in reaching the full maturity of its strength. I was told, a few years since, by a gentleman who knew the history of nearly all my pupils for the first five years of my labor, that not one of them had ever brought reproach upon himself, or mortification upon friends, by a bad life. I cannot now look over the whole list of my pupils, and find one, who had been with me long enough to receive a decided impression, whose life is not honorable and useful. I find them in all the learned professions, and in the various mechanical arts. I find my female pupils scattered as teachers through half the States of the Union, and as the wives and assistants of Christian missionaries in every quarter of the globe.

So far, therefore, as my own experience goes, so far as my knowledge of the experience of others extends, so far as the statistics of crime throw any light on the subject, I should confidently expect that ninety-nine in a hundred, and I think even more, with such means of education as you have supposed, and with such divine favor as we are authorized to expect, would become good members of society, the supporters of order and law, and truth and justice, and all righteousness.

That I may not be misunderstood, allow me to add a few explanatory remarks.

I have no confidence in the reformatory power of education into which moral and religious influences do not enter. I assume, — as any one having the slightest acquaintance with your writings and teachings on this subject knows that you do, — that the three great classes of powers, the physical, intellectual, and moral, shall each receive its proper training; and then I feel authorized to look confidently for that providential blessing which will secure the high results already alluded to. Without such a training, I have no right to expect the blessing of Heaven, or a good result. I do not fulfil the conditions on which such results are promised.

It is to be feared, yea, to be for a lamentation, that comparatively few of teachers, and still fewer of the community, have looked upon a school-education as any thing more than a very limited intellectual training, leaving physical and moral culture to take care of themselves. The school-laws of Massachusetts have always contemplated other attainments and vastly higher ends. Yet it so happens, that that part of the law has been best remembered and acted on which speaks of reading, writing, and the elements of arithmetic. These have been insisted on chiefly with reference to their direct application to the business and traffic of life; as if it were the chief end of man to count coppers, pocket them, and keep them. While the law contemplates these elementary attainments as merely the beginnings and inlets to all the treasures of wisdom, how many have looked upon them as *the education* of the boy and the man!

Very truly your obedient friend and servant,

S. Adams.

LETTER FROM REV. JACOB ABBOTT.

New-York City, June 25, 1847.

Hon. Horace Mann.

Dear Sir, — . . . 1. I have been engaged in the practical duties of teaching for about ten years, chiefly in private schools in Boston and New York.

2. I have had under my care, for a longer or shorter time, probably nearly eight hundred pupils. They have been of both sexes, and of all ages, from four to twenty-five.

3. If all our schools were under the charge of teachers possessing what I regard as the right intellectual and moral qualifications, and if all the children of the community were brought under the influence of these schools for ten months in the year, I think that the work of training up *the whole community* to intelligence and virtue would soon be accomplished, as completely as any human end can be obtained by human means.

I do not think, however, that, so far as the formation of the habits of virtue in the young is concerned, the accomplishment of the result depends either upon the intellectual powers or attainments of the teacher, or upon the amount of formal moral instructions which he gives his pupils. Knowledge alone has but little tendency to affect the feelings and principles of the heart; and formal moral instructions, except as auxiliaries to other influences, have very little power, according to my experience, over the consciences and characters of the young.

The true power of the teacher in giving to his pupils good characters in future life seems to me to lie in his forming them to *the practice of virtue,* while under his charge, by the influence of *his own personal character and actions.* To do this, however, he must have the right character himself. He must be governed in all that he does by high and honorable principles of action. He must be really benevolent and kind. He must take an honest interest in his pupils, — not merely in their studies and general characters, but in all their childish thoughts and feelings, in the difficulties they encounter, in their temptations and trials, in their sports, in their contentions, in their troubles; in every thing, in fact, that affects them. He must, in a word, feel a strong interest and sympathy for them in the thousand difficulties and discouragements they must encounter in slowly finding their way, with all their ignorance and inexperience, to their place in the complicated and bewildering maze of human life.

A teacher who takes this sort of interest in his pupils will *understand* them and *sympathize* with them in a way which will at once command their kind regard, and give him a powerful, and, in the view of others, a very mysterious, ascendency over their minds. They feel as if he was upon their side, taking their part, as it were, against the difficulties and dangers and troubles which surround them. Thus he becomes one of them, a sharer in their enjoyments, a partaker of their feelings. They come to him with confidence. He plans their amusements, he joins them in conversation, he settles their disputes. They see on what principles he acts; and they *catch,* themselves, the same mode of action from him by a kind of sympathy. They imbibe his sentiments insensibly and spontaneously, not because he enunciates them, or proves them in lectures, but because he

exhibits them in living reality in his conversation and conduct. This sort of sympathetic action between heart and heart has far greater influence among all mankind than formal teachings and exhortations. It is the life and spirit of virtue in contradistinction from the letter and the form.

. . . If all the children of this land were under the charge of such teachers for six hours in the day, and ten months in the year, and were to continue under these influences for the usual period of instruction in schools, I do not see why the result would not be, that, in two generations, substantially the whole population would be trained up to virtue, to habits of integrity, fidelity in duty, justice, temperance, and mutual good-will. It seems to me that this effect would take place in all cases, except where extremely unfavorable influences out of school should counteract it; which, I think, would hardly be the case, except in some districts in the more populous cities.

I am, very respectfully, yours,

JACOB ABBOTT.

LETTER FROM F. A. ADAMS, Esq.

ORANGE, N.J., Dec. 11, 1847.

HON. HORACE MANN.

Dear Sir, — . . . I do not hesitate to express the conviction that there is no agency which society can exert, through the government, capable of exerting so great a moral influence for the rising generation as the steady training of the young in the best schools.

In reply to the specific inquiry, in your circular, what proportion of our youth would probably, under the advantages of schooling presupposed in the circular, fail of fulfilling honorably their social and moral obligations in society, I would say, that in the course of my experience, for ten years, in teaching between three and four hundred children, mostly boys, I have been acquainted with not more than two pupils in regard to whom I should not feel a cheerful and strong confidence in the success of the proposed experiment. In regard to these two cases, I should not despair, but should have a strong preponderance of fear, that, under the best influences such as you have supposed, they would still remain wedded to low and mischievous habits. From their peculiar temperament, there was much reason to suppose that a life of steady and hard labor would do for them much, in a moral point of view, which the influences of school could not accomplish.

The class of youth I have had under my care would, in some respects, afford a better than average chance for the success of the experiment, as

they, in all cases, have been exempt from the evils of poverty. In other respects, however, this exemption was counterbalanced by habits of self-indulgence, which could not have existed had the pecuniary means been wanting.

I remain, dear sir, with sincere respect and esteem, yours,

F. A. Adams.

LETTER FROM E. A. ANDREWS, Esq.

New Britain, Conn., Dec. 8, 1847.

Hon. Horace Mann.

Dear Sir, — . . . In reply to your first and second questions, permit me simply to remark, that I have been connected with the department of education, either as pupil or as teacher, for more than fifty years. I have instructed both in the country and in cities: in the former I have, for the most part, had the charge of only a few select pupils; in the latter, for about twenty years, I was connected with large institutions of instruction. I have no means of determining, with any tolerable approach to accuracy, the whole number of my pupils, nor the proportion of each sex.

I do not hesitate to express my conviction, that such an education as your question supposes, continued for so long a period as twelve years, and including all the children of the community, would remove a very large portion of the evils with which society is now burdened. I need not say, that I would be far from attributing so important results to any system of merely intellectual training, or even to the most perfect combination of intellectual, physical, and moral discipline, to the exclusion of that which is strictly religious. Such a qualification of my meaning might have been necessary, on account of the limited sense in which the word "education" is often used, had not the necessity been removed by the express terms of the conditions annexed to the question in your circular.

It may indeed be feared that society is not yet fully prepared to put forth the effort necessary to accomplish so desirable a result; but I cannot believe that the time is very remote when its attainment will be considered an object of paramount importance. It cannot be that the millions of intelligent men found in this and in other Christian countries can much longer permit their feelings to be enlisted, and the resources of the communities to which they belong to be employed, in promoting objects of far inferior value, while the advantages of a good system of general education are, in so great a degree, overlooked. If, as I fully believe, it is in the power of the people of any State, by means so simple as your question supposes, and so completely in their own power as these obviously are, so to change the whole face of so-

ciety in a single generation that scarcely one or two per cent of really incorrigible members shall be found in it, it cannot be that so great a good will continue to be neglected, and the means for its attainment unemployed.

In forming our estimate of the probability of so important a result as I have supposed, it must not be forgotten, that, simple as are the means now proposed for its attainment, they have never been employed, so far as I know, in any extended community whose experience is on record. In Scotland, and of late in Prussia, a considerable approximation has been made towards reaching the supposed conditions, and with benefits, it is believed, fully corresponding with the degree of perfection of their respective systems. The common schools of New England, which have done so much to elevate her character, have still fallen immeasurably short of the conditions supposed. With all their acknowledged defects, however, the instances, I believe, are few, in which those who have been trained in them, from childhood to the close of the period usually allotted to education in these schools, have afterwards, on mingling with the world, proved to be incorrigibly vicious, a burden rather than a benefit to society. The records of our criminal courts and the doors of our penitentiaries have seldom been opened to those who, in childhood, had been in regular daily attendance for ten or twelve years upon the exercises of our common schools, however imperfect these schools may have been in their organization, and notwithstanding all the evil influences of uneducated associates to which the pupils have been exposed when out of school. The cell of the convict has, on the contrary, been almost uniformly occupied by those who have enjoyed few of the benefits of our common schools; and even the tenants of our poorhouses, it is believed, have, in most instances, belonged to the same unfortunate class.

Very truly yours,

E. A. ANDREWS.

LETTER FROM ROGER S. HOWARD, Esq.

THETFORD, VT., Sept. 1, 1847.

HON. HORACE MANN.

Dear Sir, — . . . Judging from what I have seen and do know, if the conditions you have mentioned were strictly complied with; if the attendance of the scholars could be as universal, constant, and long-continued as you have stated; if the teachers were men of those high intellectual and moral qualities, — apt to teach, and devoted to their work, and favored with that blessing which the word and providence of God teach us always to expect on our honest, earnest, and well-directed efforts in so good a cause,

— on these conditions, and under these circumstances, I do not hesitate to express the opinion, that the failures need not be, would not be, one per cent. Else what is the meaning of that explicit declaration of the Bible, "Train up a child in the way he should go; and, when he is old, he will not depart from it"?

I am aware that the opinion I have expressed above may by some be considered extravagant. But I have not formed or expressed it without deliberation. During all my experience as a teacher, I have never known the scholar, whom, if brought within the reach of these salutary and auspicious influences for the length of time named, I should now be willing to believe, or dare to pronounce, utterly hopeless and irreclaimable. I do not mean to say that I never failed. But I do say, that in some of the most difficult and desperate cases I have ever met with, as a teacher, the result of direct, special, and persevering effort, was such as to create the conviction, that with more zeal, patience, and perseverance, and especially with the favoring influences above alluded to, success would have been certain and complete. And this conviction became more settled and strong the longer I continued to teach.

The power of a truly enlightened and Christian system of common-school education is but little understood and appreciated. When parents shall begin to feel, as they ought, its importance; when the community generally shall be willing to make the necessary efforts and sacrifices; and when teachers of the requisite literary qualifications, and of high moral aims, shall enter upon the work with a martyr's zeal, conscious that every day they are making deathless impressions upon immortal minds, — then shall we see, as I believe, results which will greatly surpass the highest expectations of the most ardent and enthusiastic advocates of popular education.

But I am occupying more space than I intended, and will only add that I am, dear sir,

Very respectfully and truly yours,

ROGER S. HOWARD.

LETTER FROM MISS CATHERINE E. BEECHER.

BRATTLEBOROUGH, Aug. 20, 1847.

HON. HORACE MANN.

Dear Sir, — In reference to the questions you propose, I would reply, that I have been engaged, directly and personally, as a teacher, about fifteen years, in Hartford, Conn., and Cincinnati, O. I have had a few

classes of quite young children under my care for the purpose of making some practical educational experiments; but most of my pupils, in age, have ranged from twelve to twenty. I have had pupils from every State in the Union; and, though I have no precise records, I think the number cannot be less than a thousand.

I have ever considered *intellectual* culture as subordinate to the main end of education, which is the formation of that character which Jesus Christ teaches to be indispensable to the *eternal* well-being of our race. Excepting the few classes of young children before named, my efforts have been directed to measures for reforming bad and supplying good habits and principles in minds already more or less developed by education. And this I consider a much more difficult work than the right training of minds as yet uninjured by pernicious influences.

In reference to the work of reforming miseducated minds, I have found that the noblest-constructed minds, when greatly mismanaged, are most liable to become the worst; while, at the same time, they most readily yield to reformatory measures: so that, as a general rule, with exceptions, of course, I should expect to do the most good to the worst class of pupils, and, in some cases, to make finer characters from this class than from those who, possessing less excitable temperaments, have not fallen so far.

I would also remark, that, in the results I should anticipate in the case to be supposed hereafter, my *chief* hope of success would rest on the *proper* application of those truths and motives which distinguish the *teachings of Jesus Christ* from what is called "*natural religion;*" and by modes of presentation more simple and practical than I have ever seen fully adopted, or than I ever adopted myself when a practical teacher.

With these preliminaries, which I hope will be carefully pondered, and borne in mind as indispensable, I will now suppose that it could be so arranged, that in a given place, containing from ten to fifteen thousand inhabitants, in any part of our country where I ever resided, *all* the children at the age of four shall be placed, six hours a day, for twelve years, under the care of teachers having the same views that I have, and having received that course of training for their office that any State in this Union can secure to the teachers of its children. Let it be so arranged, that all these children shall remain till sixteen under these teachers, and also that they shall spend their lives in this city; and I have no hesitation in saying, I do not believe that *one*, no, *not a single one*, would fail of proving a respectable and prosperous member of society: nay, more, I believe every one would, at the close of life, find admission into the world of endless peace and love. I say this solemnly, deliberately, and with the full belief that I am upheld by such imperfect experimental trials as I have made, or seen made by others; but, more than this, that I am sustained by the authority of Heaven, which sets forth this grand palladium of education, — "*Train*

up a child in the way he should go; and, when he is old, he will not depart from it."

This sacred maxim surely presents the divine *imprimatur* to the doctrine that *all* children *can* be trained up in the way they should go, and that, when so trained, they will not depart from it. Nor does it imply that education *alone* will secure eternal life, without supernatural assistance; but it points to the true method of securing this indispensable aid.

In this view of the case, I can command no language strong enough to express my infinite longings that my countrymen, who, as legislators, have the control of the institutions, the laws, and the wealth of our *physically* prosperous nation, should be brought to see that they now have in their hands the power of securing to *every* child in the coming generation a life of virtue and usefulness here, and an eternity of perfected bliss hereafter. How, then, can I express or imagine the awful responsibility which rests upon them, and which hereafter they must bear before the great Judge of nations, if they suffer the present state of things to go on, bearing, as it does, thousands and hundreds of thousands of helpless children in our country to hopeless and irretrievable ruin?

Respectfully yours,

C. E. BEECHER.

P. S. — All I anticipate, as stated in my communication, may come to pass without any departure from your statutory regulations in regard to religious instruction, *as I understand these statutes*, and as I suppose them to be understood by the great body of those who formed them, and of those who are bound by them. C. E. B.

The above answers are not choice specimens selected from among many; they are all I have received: and every person to whom the circular was sent was pleased to answer it. From conversations held at different times with many other teachers, I believe the *amount* of testimony might have been very much increased, though no confirmation can be needed of its *authority*. The witnesses here introduced certainly possess all the requisites to entitle them to implicit credence. Their character for honor and veracity repels the idea of distrust. Years of experience in different places, and the training of children in great numbers, qualify them, in point of knowledge, to speak with authority; and they are exempt from any imaginable bias to warp or to color the truth.

From time immemorial, it has been customary for parliaments and other legislative bodies to commit important practical subjects to committees, and, through their instrumentality, to obtain the testimony of learned and skilled men on the matter of inquiry. Sometimes witnesses are heard at the bar of the House, — that is, before the legislative body by whom the inquiry was instituted. Now, I have desired in the present case to introduce testimony of such credibility and cogency, that no legislative committee could report against it, and no legislative body could act against it, without incurring an historic odium, either for want of intelligence or want of integrity.

So, too, by the rules of the "common law," all questions of fact are decided by the intervention of a jury. In ancient times, when the character of juries was very different from what it now is, they sometimes gave a corrupt verdict, — that is, a verdict so contradictory to evidence as to be of itself proof that they had discarded the testimony adduced, and been governed by some dishonest motive in their own breasts. A jury convicted of this offence was said to be "*attainted:*" its members were punished by a fine, and rendered infamous ever after. It was my intention, in the present case, to introduce evidence of such authority and directness, as, if submitted to a jury and rejected by them, would, under the ancient law referred to, subject them to the penalties of an "*attaint.*"

There is one quality or characteristic common to all the witnesses whose testimony is above introduced, which, as it seems to me, I am not only justified in stating, but which it would be inexcusable to withhold. All of them, without exception, are well-known believers in a theological creed, one of whose fundamental articles is *the depravity of the natural heart.* They hold, in a literal sense and with regard to all mankind, that the innate affections or dispositions of the soul are "not subject to the law of God, neither indeed can be," until another influence, emanating from the Godhead, and equal in itself to an act of creation, shall have renewed them. With this private

belief of the witnesses, of course, neither the Board of Education, nor any man or body of men, have aught to do, — unless, indeed, it be to affirm their right to hold it, in common with every other man's right either to agree with them or to dissent from them. But, as bearing upon the point under consideration, the fact is most important: it adds great cogency to their testimony, and invests it, as it were, with a compulsory power. For if those who believe that the human heart is by nature alienated from God, that its innate relation to the Holy One is that of natural repulsion, and not of natural attraction, nor even of neutrality, — if they, from their own experience in the education of youth, believe that our common-school system, under certain practicable modifications, can rear up a generation of men who will practise towards their fellow-men whatsoever things are true, honest, just, pure, lovely, and of good report, — then, surely, a rational community can need no additional evidence or motive to impel it to the work of reform. And all those, if such there are, who believe that moral evil comes from the abuse or misuse of powers in themselves good, and not from any inborn and original predilection for wrong, may well take courage, and may tender their heartiest co-operation in furthering an enterprise, which, even under fundamental postulates the most adverse, promises results so glorious. If they who believe that there is a principle of evil in the human soul, lying back of consciousness, incorporated as an original element into its constitution, beginning to be when the spirit itself began to be, and growing with it through all the primordial stages of its growth, — which, indeed, belongs to the ante-natal period of every descendant of Adam as much as spottedness belongs to an unborn leopard before it has a skin, or venom to an unhatched cockatrice before it has a sting, — if those who believe this do nevertheless believe that our common-school system, with certain practicable modifications, can send out redeeming and transforming influences which shall expel ninety-nine hundredths of all the vices and crimes under which society now mourns and agonizes, then those who dissent from the belief

that the natural heart is thus organically intractable and perverse will be all the more ready to proclaim the ameliorating power of education, and will all the more earnestly labor for its diffusion. And the crowning beauty of the whole is, that Christian men of every faith may cordially unite in carrying forward the work of reform, however various may be their opinions as to the cause which has made that work necessary; just as all good citizens may unite in extinguishing a conflagration, though there may be a hundred conflicting opinions as to the means or the men that kindled it. In short, it may be difficult to determine which class will act under the more conscience-moving motives, — those who hold to a total depravity or corruption of the human heart, but still believe it can be emancipated from worldly vices and crimes by such instrumentalities as we can readily command; or those who hold that heart to be naturally capable of good as well as evil, and who therefore believe, not only that a still larger proportion of the race can be rescued from the dominion of wrong-doing, but that a consummation so glorious can be reached at a still earlier period, and with a less expenditure of effort.

But this divine result of staying the desolating torrent of practical iniquity by drying up its fountain-head in the bosoms of the young is promised only on the antecedence or performance of certain prescribed conditions. These conditions are the three following: —

1. That the public schools shall be conducted *on the cardinal principles of the present New-England systems.*

2. That they shall all be taught, for a period of ten months in each year, by persons of high intellectual and moral qualifications; or, in other words, that all the teachers shall be equal in capacity and in character to those whom we now call first-class or first rate teachers. And,

3. That all the children in the Commonwealth shall attend school regularly — that is, for the ten months each year during which they are kept — from the age of four to that of sixteen years.

As it is on the performance of these conditions that the renovation of society is predicated, it is, of course, necessary to show that they are practicable conditions. I therefore proceed to consider, and, as I trust, to establish, their practicability.

I. The first condition — namely, that the schools shall be conducted on the cardinal principles of the New-England systems — is already satisfied. The Massachusetts school-system represents favorably the systems of all the New-England States. Not one of them has an element of prosperity or of permanence, of security against decay within, or the invasion of its rights from without, which ours does not possess. Our law requires that a school shall be sustained in every town in the State, — even the smallest and the poorest not being excepted; and that this school shall be as open and free to all the children as the light of day or the air of heaven. No child is met on the threshold of the schoolhouse-door, to be asked for money, or whether his parents are native or foreign, whether or not they pay a tax, or what is their faith. The schoolhouse is common property. All about it are enclosures and hedges, indicating private ownership, and forbidding intrusion; but here is a spot which even rapacity dares not lay its finger upon. The most avaricious would as soon think of monopolizing the summer cloud, as it comes floating up from the west to shed its treasures upon the thirsty earth, as of monopolizing these fountains of knowledge. Public opinion — that sovereign in representative governments — is in harmony with the law. Not unfrequently there is some private opposition, and occasionally it avows itself, and assumes an attitude of hostility; but perseverance on the part of the friends of progress always subdues it, and the success of their measures eventually shames it out of existence.

The law requires all public schools to be kept by a teacher whose literary and moral qualifications have been examined and approved by a committee chosen for the purpose by the people themselves. Not less than the six following branches of knowledge are to be taught in every town; namely, orthogra-

phy, reading, writing, English grammar, geography and arithmetic. The teaching of "good behavior," which includes all the courtesies of life and all the minor morals, is also expressly enjoined. These peremptory requisitions are the *minimum*, but not the *maximum*. Any town may enlarge the course of studies to be pursued in its schools as much as it may choose, even to the preparation of young men for the university, or for any branch of educated labor. It may also bestow an equivalent education upon the other sex. The law also contains a further provision (subject, however, to be set aside by the *express* vote of a district or town), that, in every school of more than fifty scholars in regular attendance, an assistant teacher shall be employed. Although there is no statutory provision to this effect in any other of the New-England States, yet the good sense of the community everywhere advocates this rule.

Nor are the needs of the intellect alone provided for. In prescribing the education to be given to the moral nature, the law grows more earnest and impressive. Its beautiful and deep-toned language is, "It shall be the duty of the president, professors, and tutors of the University at Cambridge, and of the several colleges, and of all preceptors and teachers of academies, and all other instructors of youth, to exert their best endeavors to impress on the minds of children and youth committed to their care and instruction the principles of piety, justice, and a sacred regard to truth, love to their country, humanity, and universal benevolence, sobriety, industry, and frugality, chastity, moderation, and temperance, and those other virtues which are the ornament of human society, and the basis upon which a republican constitution is founded; and it shall be the duty of such instructors to endeavor to lead their pupils, as their ages and capacities will admit, into a clear understanding of the tendency of the above-mentioned virtues to preserve and perfect a republican constitution, and secure the blessings of liberty, as well as to promote their future happiness, and also to point out to them the evil tendency of the opposite vices." But lest any individual, or body of individuals, forgetful of the

divine precept to do unto others as they would be done unto, should seize upon this statutory injunction, or upon some part of it, as a pretext for turning the schools into proselytizing institutions, the law rears a barrier against all sectarian encroachments. That which is "calculated to favor the tenets of any particular sect of Christians" is excluded from the schools. The use of the Bible in schools is not expressly enjoined by the law, but both its letter and its spirit are in consonance with that use; and, as a matter of fact, I suppose there is not, at the present time, a single town in the Commonwealth in whose schools it is not read. Whoever, therefore, believes in the Sacred Scriptures, has his belief, in form and in spirit, in the schools; and his children read and hear *the words themselves* which contain it. The administration of this law is intrusted to the local authorities in the respective towns. By introducing the Bible, they introduce what all its believers hold to be the rule of faith and practice; and although, by excluding theological systems of human origin, they may exclude a peculiarity which one denomination believes to be true, they do but exclude what other denominations believe to be erroneous. Such is the present policy of our law for including what all Christians hold to be right, and for excluding what all, excepting some one party, hold to be wrong.

If it be the tendency of all parties and sects to fasten the mind upon what is peculiar to each, and to withdraw it from what is common to all, these provisions of the law counterwork that tendency. They turn the mind towards that which produces harmony, while they withdraw it from sources of discord; and thus, through the medium of our schools, that song which ushered in the Christian era — "Peace on earth and good-will to men" — may be taken up and continued through the ages.

The first condition, then, not only *may be*, but actually *is*, complied with in the school-system of Massachusetts, as now established and administered.

II. The second condition requires that all our schools shall

be kept, for ten months in each year, by persons of high intellectual and moral qualifications, — by persons equal in capacity and in character to those whom we now call first-class or first-rate teachers.

This condition supposes two things, which, as yet, we are very far from having attained. The question is, Are they attainable?

In regard to teachers, it supposes such an improvement as shall advance all those who are now behind what we call the front rank, until they shall come upon a line with it. Of course, if this be done, some will be found in advance of this line; for it never can happen with regard to all the members of any profession, that they will stand precisely abreast. It supposes, also, that all our schools shall be kept for ten months each year.

The questions, then, for consideration under this head, are two; namely: —

1. Is there, in the community at large, sufficient natural endowment or capacity, from which, by appropriate training and cultivation, the requisite number of teachers, possessing the supposed qualifications, can be prepared? And,

2. Can the towns and the State, separately or as copartners, bear the expense of maintaining the required class of teachers for the required length of time?

Is not the first question answered in the affirmative by observation and experience? For the last two generations, with exceptions comparatively few, all the eminent men of our State, whether men of letters, physicians, lawyers, clergymen, legislators, or judges, have taught school, more or less, during the early part of their lives. Now, it is no disparagement to say, respecting those who constitute at present our best class of teachers, that they are not superior in endowments or natural capacity, in industry, or in versatility of genius, to a vast number of their predecessors, who, having labored for a limited period in this field, at length abandoned it in quest of some other occupation, truly known to be more lucrative, and falsely supposed to be more honorable. It is no unauthorized assump-

tion, then, to say, that great numbers of those who left the employment of school-keeping for something deemed to be more eligible, would, had they continued in it, have won the honor of standing in the foremost rank of this noble profession.

In the second place, to prove that there is no lack of natural talent in existence from which to form the supposed class of teachers, I may refer to the general history and experience of mankind in all other departments of human effort. No new calling has ever reached such an elevation as to insure honor and emolument to its professors, which has not, without delay, attracted to itself an adequate number of followers. Witness the intrinsically odious profession of arms, — a profession so odious, that those have been held worthy of especial reward who resisted the natural love of ease, and instincts of self-preservation, to encounter its hardships and perils. So, also, has it been in regard to commerce and the useful arts. And in those truly dignified and honorable professions, — the legal and clerical, — where mind is the object to be acted upon, as well as the agent to act, the supply has generally exceeded the demand. Now, could the business of education take its stand in public estimation by the side of the most honorable and lucrative callings in life, we are authorized by all the experience of mankind to conclude that it would soon cluster around itself an amount of talent, erudition, and genius, at least equal to what has ever adorned any other avocation among civilized men.

But, independently of personal knowledge and of historic experience, may not a conclusive argument in support of the general position be drawn from the energy and versatility with which, as we all know, Nature has gifted the minds of her children? In the variety and strength of the capacities belonging to the race, there must be the means or instruments by which Providence can accomplish every good work. Somewhere in each generation, the powers exist by which the generation that is to succeed it may be advanced another stage along the radiant pathway of improvement. But in the whole of the past history of the world, no generation has yet existed, whose faculties

have not, to a very great extent, lain dormant, — to say nothing of the perversion of those which have been developed. But our free institutions cherish growth. The future, with us, is not to be measured by the past. The mind of the masses, which for so many ages had been crippled, and fettered after it was crippled, is here unbound. Under the stimulus applied to native vigor, talent and genius start up as naturally as vegetation in the spring. The desire of bettering one's condition springs from a universal instinct in the human mind. With us, every man sees that the gratification of this desire is within his reach. Including the lifetime of a single generation, — that is, within the last forty or fifty years, — there is not a school-district in Massachusetts, however obscure, which has shown any interest in the character of its schools, that has not sent out one or more men who have become conspicuous in some of the honorable positions of society. They are found throughout the Union, wherever enterprise or talent is rewarded. Those districts, and, still more, those towns, where common schools have been an object of special regard, have sent forth many such men. While visiting different parts of the State for the last ten years, facts, in sufficient numbers to make a most interesting and instructive book, have come to my knowledge, showing that those districts and towns, where special pains have been exerted and special liberality bestowed in behalf of common schools, have supplied a proportion of all the distinguished men of the vicinity, corresponding with the superior excellence of the early education afforded them. So, on the other hand, neglectful towns and districts have been comparatively barren of eminent men. The great ears of corn will not grow on sandhills. Great men will not spring up in an atmosphere void of intellectual nutrition. Nature observes a law in this respect, in regard to her spiritual as well as her physical productions. Now, although something has been done in Massachusetts for the culture and expansion of the common mind, yet indefinitely more may be done. Even were it admitted, therefore, that the State had not been able in past times to supply the requisite

number of teachers of the highest grade, it would by no means follow that she could not do so in future.

The intrinsically noble profession of teaching has, most unfortunately, been surrounded by an atmosphere of repulsion rather than of attraction. Young men of talent are generally determined by two things in selecting an employment for life. The first of these is the natural tendency of the mind, — its predisposition towards one pursuit rather than towards another. In this way, Nature often predetermines what a man shall do; and, to make her purpose inevitable, she kneads it, as it were, into the stamina of his existence. She does not content herself with standing before his will, soliciting or tempting him to a particular course, but she stands behind the will, guiding and propelling it; so that from birth he seems to be projected towards his object like a well-aimed arrow to its mark. Those in whom the love of beautiful forms, colors, and proportions, predominates, are naturally won to the cultivation of the fine arts, or to some branch of the useful arts most congenial to the fine. Those who have a great fondness for botany and chemistry, and to whom physiological inquiries are especially grateful, become physicians. Persons enamoured of forensic contests, roused by their excitements, and panting for the *éclat* which their victories confer, betake themselves to the study of the law, and become advocates. The clerical profession is composed of men whose minds are deeply imbued and penetrated with the religious sentiment, and who ponder profoundly and devoutly upon the solemn concerns of an hereafter.* This constitutional or moral affinity for one sphere of employment rather than for another predetermines many minds in choosing the object of their pursuit for life. It is like the elective attractions of the chemist, existing beforehand, and only awaiting the contiguity of the related substances to make their secret affinities manifest.

* This general remark must be taken with the exception of a few of the very worst men which any age ever produces. These become members of the clerical profession, because, under the mask of its sanctity, they hope to practise their iniquities with impunity.

But this natural tendency is often subjected to a disturbing or modifying force; and it yields to this force the more readily as it is itself less intense and dominant. All minds have a desire, more or less energetic, for pleasure, for wealth, for honor, or for some of that assemblage of rewards which obtains such willing allegiance from mankind. Hence the internal, inborn impulse is often diverted from the specific object to which it naturally points, and is lured away to another object, which, from some collateral or adventitious reason, promises a readier gratification.

There is also a class of minds of vigorous and varied capacities, which stand nearly balanced between different pursuits, and which, therefore, may be turned, by slight circumstances, in any one of many directions. They are like fountains of water rising on a table-land, whose channels may be so cut as to cover either of its slopes with fertility.

Now, the qualities which predispose their possessor to become the companion, guide, and teacher of children, are good sense, lively religious sensibilities, practical, unaffected benevolence, a genuine sympathy with the young, and that sunny, genial temperament which always sees its own cheerfulness reflected from the ever-open mirror of a child's face. The slightest exercise of good sense makes it apparent that any one year of childhood will exert a more decisive control over future destiny than any ten years afterwards. The religious and benevolent elements seize instinctively upon the promise made to those who train up children in the way they should go. The love of children casts a pleasing illusion over the mind in regard to every thing they do, — if, indeed, it be an illusion, and not a truth above the reach of the intellect, — elevating their puerile sports into dignity, hailing each step in their progress as though it were some grand discovery in science, and grieving over their youthful wanderings or backslidings with as deep a sorrow as is felt for the turpitude of a full-grown man, or for the heaven-defying sins of a nation. So that genial, joyous, ever-smiling temperament, which sees only

rainbows where others see clouds, and which is delighted by the reflection of itself when coming from one child's face, will never tire of its labors when the same charming image perpetually comes back from the multiplying glasses of group after group of happy children, — ever-varying, but always beautiful.

Now, I think we have abundant reason to believe that a sufficient number of persons, bearing from the hand of Nature this distinctive image and superscription of a school-teacher, are born into the world with every generation. But the misfortune is, that when they arrive at years of discretion, and begin to survey the various fields of labor that lie open before them, they find that the noblest of them all, and the one, too, for which they have the greatest natural predilection, is neither honored by distinction nor rewarded by emolument. They see, that, if they enter it, many of their colleagues and associates will be persons with whom they have no congeniality of feeling, and who occupy a far less elevated position in the social scale than that to which their own aspirations point. If they go through the whole country, and question every man, they cannot find a single public-school teacher who has acquired wealth by the longest and the most devoted life of labor. They cannot find one who has been promoted to the presidency of a college, or to a professorship in it; nor one who has been elected or appointed to fill any distinguished civil station. Hence, in most cases, the adventitious circumstances which surround the object of their preference repel them from it. Or, if they enter the profession, it is only for a brief period, and for some collateral purpose; and, when their temporary end is gained, they sink it still lower by their avowed or well-understood reasons for abandoning it. Such is the literal history of hundreds and of thousands who have shone or are now shining in other walks of life, but who would have shone with beams more far creative of human happiness had they not been struck from the sphere for which Nature pre-adapted them.

Look at the average rate of wages paid to teachers in some of the pattern States of the Union. In Maine, it is $15.40 per month to males, and $4.80 to females. In New Hampshire, it is $13.50 per month to males, and $5.65 to females. In Vermont, it is $12.00 per month to males, and $4.75 to females. In Connecticut, it is $16.00 per month to males, and $6.50 to females. In New York, it is $14.96 per month to males, and $6.69 to females. In Pennsylvania, it is $17.02 per month to males, and 10.09 to females. In Ohio, it is $15.42 per month to males, and $8.73 to females. In Indiana, it is $12.00 per month to males, and $6.00 to females. In Michigan, it is $12.71 per month for males, and $5.36 for females. Even in Massachusetts, it is only $24.51 per month to males, and $8.07 to females. All this is exclusive of board; but let it be compared with what is paid to cashiers of banks, to secretaries of insurance-companies, to engineers upon railroads, to superintendents in factories, to custom-house officers, navy agents, and so forth, and so forth, and it will then be seen what pecuniary temptations there are on every side, drawing enterprising and talented young men from the ranks of the teacher's profession.

Nor does the social estimation accorded to teachers much surpass the pecuniary value set upon their services. The nature of their calling debars them, almost universally, from political honors, which, throughout our whole country, have a factitious value so much above their real worth. Without entire faithlessness to their trust, they cannot engage in trade or commercial speculations. Modes of education have heretofore been so imperfect, that I do not know a single instance where a teacher has been transferred from his school to any of those departments of educated labor in which such liberal salaries are now given. And thus it is, that the profession at large, while it enjoys but a measured degree of public respect, seems shut out from all the paths that lead to fortune or to fame. No worldly prize is held up before it; and, in the present condition of mankind, how few there are who will

work exclusively for the immortal reward! It supposes the possession only of very low faculties, to derive pleasure from singing the praises of a martyr; but to be the martyr one's self requires very high ones.

Hence it is, as was before said, that when the aspiring and highly-endowed youth of our country arrive at years of discretion, and begin to survey the varied employments which lie spread out before them, they find that the noblest of them all presents the fewest external attractions. Those whose natural or acquired ambition seeks for wealth, go into trade. The mechanical genius applies himself to the useful arts. The politically ambitious connect themselves with some one of those classes from which public officers are usually selected. Medicine attracts those who have the peculiar combination of tastes congenial to it. Those who ponder most upon the ways of God to men, minister in sacred things. Who, then, are left to fill the most important position known to social life? A few remain, whose natural tendencies in this direction are too vehement to be resisted or diverted; a somewhat larger number, who have no strong predilection for one sphere of exertion rather than for another, and to whom, under the circumstances peculiar to each, school-keeping is as eligible as any other employment: but many, very many, the great majority, engage in it, not for its own sake, but only to make it subservient to some ulterior object, or — with humiliation it is said — perhaps only to escape from manual labor.

The profession of school-keeping, then, as a profession, has never had an equal chance with its competitors. On the one hand, it has been resorted to by great numbers, whose only object was to make a little money out of it, and then abandon it; and, on the other, its true disciples, those who might have been and should have been its leaders and priesthood, have been lured and seduced away from it by all the more splendid prizes of life.

Even though, therefore, the profession of school-keeping has not been crowded by learned and able men, devoting their

energies and their lives to its beneficent labors, this fact wholly fails to prove that Nature does not produce, with each generation, a sufficient number of fit persons, who, under an equitable distribution or apportionment of honors and rewards for meritorious services, would be found pre-adapted for school-keeping, in the same way that Newton was for mathematics, or Pope for poetry, or Franklin for the infallibility of his common sense. Indeed, the proportion of good teachers whom we now have, notwithstanding all their discouragements against entering, and their seducements for leaving, the profession, seem demonstrative of the contrary.

Thus far, the argument has proceeded upon the basis that the required number of teachers, possessing the high grade of qualifications supposed, must equal the present number, such as these are. But it is almost too obvious to need mentioning, that if the qualifications of teachers were to be so greatly enhanced, and the term of the schools so materially lengthened, as is proposed, teaching would then really become a profession, and the same teachers would keep school through the year. Instead, therefore, of changing from male teachers in the winter to females in the summer, back again to males in the winter, and so on alternately, — the children of each school suffering under a new step-father or a new step-mother each half-year, — they would enjoy the vastly-improved system of continuous training under the same hands. This would diminish, by almost one-half, the required number of teachers for our schools; the poorer half would be discarded, the better half retained. Surely, under these circumstances, if a sufficient number of the very highest class of teachers could not be found, it would not be owing to any parsimony of Nature in withholding the endowments, but to our unpardonable niggardliness in not cultivating and employing them.

Feeling now authorized to assume that the first proposition has been satisfactorily established, it only remains to be considered, under this head, whether the community at large — the towns separately, or the towns and the State by joint contribu-

tions — can afford to make such compensation as shall attract to this field of labor the high order of teachers supposed, and shall requite them generously for their services.

To induce persons of the highest order of talent to become teachers, and to deter good teachers from abandoning the profession, its emoluments must bear some close analogy to those which the same persons could command in other employments. The case, too, as presented in the circular, and upon which the evidence has been obtained, supposes the schools to continue for ten months in each year. Although in many large towns the schools are now kept more than this portion of the year, yet their average length for the whole State is but eight months. The increased expense, then, both of the longer term and of the more liberal compensation, must be provided for. Can the community sustain this expense?

Let us suppose, for a moment, that ninety-nine per cent of our whole community should be temperate, honest, industrious, frugal people, — conscientious in feeling, and exemplary in conduct, — is it not certain that two grand pecuniary consequences would immediately follow; namely, a vast gain in productive power, and a vast saving in the criminal destruction and loss of property? Either of these sources of gain would more than defray the increased expenses of the system, which, according to the evidence I have obtained, would insure both. The current expenses last year, for the education of all the children in the State between the ages of four and sixteen, was $3.14, on an average, for each one. Look into the police courts of our cities in the morning, and especially on Monday morning, when the ghastly array of drunkards is marched in for trial. A case may not occupy ten minutes; and yet the fine, costs, and expenses would educate two children, for a year, in our public schools, at the present rate, or one child at double the present rate. The expenses incurred in punishing the smallest theft that is committed exceed the present cost of educating a child in our schools for a year. A knave who proposes to obtain goods by false pretences will hardly aim at making less than a

thousand dollars by his speculation. There are more than one hundred and fifty towns in Massachusetts, — that is, about half the whole number in the State, — in each of which the annual appropriation for all its schools is less than one thousand dollars. A burglar or highway robber will seldom peril his life without the prospect of a prize which would educate five hundred or a thousand children for a year. An incendiary exhibits fire-works at an expense which would educate all the children of many a school-district in the State, from the age of four to that of sixteen; while the only reward he expects is that of stealing a few garments or trinkets during the conflagration. In a single city in the State, consisting of sixteen or seventeen thousand inhabitants, it was estimated by a most respectable and intelligent committee, that the cost of alcoholic drinks during the last year far exceeded the combined cost of all the schools and all the churches in it, although, for both religion and education, it is a highly liberal city. The police expenses alone of the city of New York are about half a million a year. But all these are but a part of the sluice-ways through which the hard-earned wealth of the people is wasted. What shall be said of those stock-swindlings and bank-failures whose capitals of hundreds of thousands of dollars are embezzled in "fair business transactions;" whose vaults, sworn to be full of specie or bullion, remind one, on inspection, not merely of a pecuniary, but of a philosophical, vacuum? what of those epidemic speculations in land (often Fairy-land, though void of both beauty and poetry), where fortunes change hands as rapidly as if dependent upon the throw of a gambler's dice? and what of those enormous peculations by government defaulters, where more money is ingulfed by one stupendous fraud than Massachusetts expends for the education of all her children in a year? All this devastation and loss the public bears with marvellous, with most criminal composure. The people at large stand by the wreck-covered shore, where so many millions are dashed in pieces and sunk, and seem not to recognize the destruction; and, what is infinitely worse, there are those who rejoice in the

howl of the tempest and the shrieks of the sufferers, because they can grow rich by plundering only here and there a fragment of property from the dead or the defenceless. By charity, by direct taxes, by paying twenty or thirty per cent more for every article or necessary of life than it is equitably worth, by bad debts, by the occasional and involuntary contribution of a pocket-book, a watch, a horse, a carriage, a ship, or a cargo, to which the robber and the barrator help themselves by paying premiums for insurance, and in a hundred other ways, the honest and industrious part of the people not only support themselves, but supply the mighty current of wealth that goes to destruction through these flood-gates of iniquity. The people do not yet seem to see that all the cost of legislating against criminals; of judges and prosecuting officers, of jurors and witnesses, to convict them; of building houses of correction and jails and penitentiaries for restraining and punishing them, — is not a hundredth part of the grand total of expenditure incurred by private and social immoralities and crimes. The people do not yet seem to see that the intelligence and the morality which education can impart is that beneficent kind of insurance, which, by preventing losses, obviates the necessity of indemnifying for them; thus saving both premium and risk. What is ingulfed in the vortex of crime in each generation would build a palace of more than Oriental splendor in every school-district in the land, would endow it with a library beyond the ability of a life-time to read, would supply it with apparatus and laboratories for the illustration of every study and the exemplification of every art, and munificently requite the services of a teacher worthy to preside in such a sanctuary of intelligence and virtue.

But the prevention of all that havoc of worldly goods which is caused by vice transfers only one item from the loss to the profit side of the account. Were all idle, intemperate, predatory men to become industrious, sober, and honest, they would add vast sums to the inventory of the nation's wealth, instead of subtracting from it. Let any person take a single town, vil-

lage, or neighborhood, and look at its inhabitants individually, with the question in his mind, how many of them are producers, and how many are non-producers, — that is, how many, either by the labor of the body or the labor of the mind, add value and dignity to life, and how many barely support themselves, — and I think he will often be surprised at the smallness of the number by whose talent and industry the storehouses of the earth are mainly filled, and all the complicated business of society is principally managed. Could we convert into co-workers for the benefit of mankind all those physical and spiritual powers of usefulness which are now antagonists or neutrals, the gain would be incalculable.

Add the above two items together, — namely, the saving of what the vicious now squander or destroy, and the wealth, which, as virtuous men, they would amass, — and the only difficulty presented would be to find in what manner so vast an amount could be beneficially disposed of.

But it is not to be disguised, whatever reforms may be instituted, that the cost of crime cannot, at once, be prevented. For a season, therefore, and until the expenses of education shall arrest and supersede the expenses of guilt, both must be borne. I wish to state the difficulty without extenuation. The question, then, is, Can both be temporarily borne?

The appropriations for which the towns voluntarily taxed themselves last year for the current expenses of the schools — that is, for the wages and board of teachers, and for fuel — were $662,870.57. Adding the income of the surplus revenue, when appropriated for the support of schools, it was $670,628.-13. The valuation of the State I suppose to be not less than $450,000,000. Last year's tax, therefore, for the current expenses of the schools, was less than one mill and a half on the dollar, — less than one mill and a half on a thousand mills. Taking the average of the State, then, no man was obliged to pay more than one six hundred and sixty-sixth part of his property for this purpose; or, rather, such would have been the case had there been no poll-tax, — had the whole tax been lev-

ied upon property alone. At this rate, it would take six hundred and sixty-six years for all the property of the State to be *once* devoted to this purpose. And does not the portion of our worldly interests which is dependent upon public schools bear a greater ratio to the whole of those interests than one to six hundred and sixty-six? I need not argue this point; for who, out of an insane asylum, or even of the *curable* classes in it, will question the fact? Who will say that the importance of this interest, as compared with all the earthly interests of mankind, is not indefinitely greater than this? Who will say, that, to secure so precious an end as the diffusion of almost universal intelligence and virtue, and the suppression, with an equal degree of universality, of ignorance and vice, it would not be expedient to do as the Bishop of Landaff once proposed that the British nation should do, in an eventful crisis of its affairs, — vote away, by acclamation, one-half of all the wealth of the kingdom? But there is no need of carrying our feelings or our reason to this pitch of exaltation. There is no need of any signal or unwonted sacrifice. There is no need of a devotion of life, as is done in battle. There is no need of perilling fortunes, as is done every day in trade. There is no need that any man in the community should lose one day from his life, or an hour from his sleep, or a comfort from his wardrobe or his table. Three times more than is now expended — that is, four and a half mills on every thousand mills of the property of the State, or only one part in two hundred and twenty-two, instead of one in six hundred and sixty-six — would defray every expense, and insure the result. Regarded merely as a commercial transaction, — a pecuniary enterprise, whose elements are dollars and cents alone, — there is not an intelligent capitalist in the State who would not, on the evidence here adduced, assume the whole of it, and pay a bonus for the privilege. When the State was convinced of the lucrativeness or general expediency of a railroad from Worcester to its western border, it bound itself, at a word, to the amount of five millions of dollars; and I suppose it to be now the opinion of every

intelligent man in the Commonwealth, that, when the day of payment shall arrive, the road itself, in addition to all the collateral advantages which it will have conferred, will have paid for itself, and will then forever remain, not merely a monument of wisdom, but a reward for sagacity. Yet what is a railroad, though it does cut down the mountains and lift up the valleys, compared with an all-embracing agency of social and moral reform which shall abase the pride of power, and elevate the lowliness of misfortune? And those facilities for travel which supersede the tediousness of former journeyings and the labor of transportation — what are they, when compared with the prevention of that "lamentation, mourning, and woe" which come from the perpetration of crime? When the city of Boston was convinced of the necessity of having a supply of pure water from abroad for the use of its inhabitants, it voted three millions of dollars to obtain it; and he would be a bold man who would now propose a repeal of the ordinance, though all past expenditures could be refunded. Yet all the schoolhouses in Boston, which it has erected during the present century, are not worth a fourth part of this sum. For the supply of water, the city of New York lately incurred an expenditure of thirteen millions of dollars. Admitting, as I most cheerfully do, that the use of water pertains to the moral as well as to the ceremonial law, yet our cities have pollutions which water can never wash away, — defilements which the baptism of a moral and Christian education alone can remove. There is not an appetite that allies man to the brutes, nor a passion for vain display which makes him more contemptible than any part of the irrational creation, which does not cost the country more, every year, than such a system of schools as would, according to the evidence I have exhibited, redeem it, almost entirely, from its follies and its guilt. Consider a single factitious habit of our people, which no one will pretend adds any degree to the health, or length to the life, or decency to the manners, of the nation: I mean the smoking of tobacco. It is said, on good authority, that the *annual* expenditure in the country for the

support of this habit is ten millions of dollars; and if we reflect that this sum, averaged upon all the people, would be only half a dollar apiece, the estimate seems by no means extravagant. Yet this is far more than is paid to the teachers of all the public schools in the whole United States.

Were nations to embark in the cause of education for the redemption of mankind, as they have in that of war for their destruction, the darkest chapters in the history of earthly calamities would soon be brought to a close. But, where units have been grudged for education, millions have been lavished for war. While, for the one purpose, mankind have refused to part with superfluities, for the other they have not only impoverished themselves, but levied burdensome taxes upon posterity. The vast national debts of Europe originated in war; and, but for that scourge of mankind, they never would have existed. The amount of money now owed by the different European nations, is said, on good authority, to be $6,387,000,000. Of this inconceivable sum, the share of Great Britain is about $4,000,000,000 (in round numbers, 800,000,000 pounds sterling); of France, $780,000,000; of Russia and Austria, $300,000,000 each; of Prussia, $100,000,000; and the debts of the minor powers increase this sum to $6,387,000,000. The national debt of Great Britain now amounts to more than $140 for every man, woman, and child in the three kingdoms. Allowing six persons to each family, it will average more than $850 to every household, — a sum which would be deemed by thousands and tens of thousands of families in that country to be a handsome competence, nay, wealth itself, if it were owing *to* instead of *from* them.

It is estimated, that, during the twenty-two years preceding the general peace of 1815, the unimaginable sum of 6,250,000,000 pounds sterling, or $30,000,000,000, had been expended in war by nations calling themselves *Christian*, — an amount of wealth many fold greater than has ever been expended, for the same purpose, by all the nations on the globe whom we call *savage*, since the commencement of the Christian

era. The earth itself could not be pawned for so vast a sum as this, were there any pawn-broker's office which would accept such a pledge. Were it to be set up at auction, in the presence of fierce competitors for the purchase, it would not sell for enough to pay its war-bills for a single century. The war-estimates of the British Government, even for the current year of peace, are $85,000,000 ; and the annual interest on the national debt incurred by war is at least $120,000,000 more, or more than $200,000,000 for a common, and, on the whole, a very favorable year. Well might Christ, in the Beatitudes, pronounce his emphatic benediction upon the "peace-makers."

We have emulated, in this country, the same gigantic scale of expenditure for the same purpose. Since the organization of the Federal Government, in 1789, the expense of our military and naval establishments and equipments, in round numbers, is $700,000,000. Two of our ships of the line have cost more than $2,000,000. The value of the arms accumulated at one time at the Arsenal in Springfield, in this State, was $2,000,000. The Military Academy at West Point has cost more than $4,000,000. In our town-meetings, and in our school-district-meetings, wealthy and substantial men oppose the grant of $15 for a school-library, and of $30 for both library and apparatus ; while at West Point they spend $50 in a single lesson at target-firing ; and the government keeps a hundred horses, and grooms and blacksmiths to take care of them, as an indispensable part of the *apparatus* of the academy. The pupils at our normal schools, who are preparing to become teachers, must maintain themselves : the cadets at the academy receive $28 a month, during their entire term, as a compensation for being educated at the public expense. Adding bounties and pensions to wages and rations, I suppose the cost of a common foot-soldier in the army cannot be less than $250 a year. The average cost of female teachers for the public schools of Massachusetts last year was only $13.60 a month, inclusive of board, or at a rate which would give $163.20 for the year ; but the average length of the schools was but eight

months: so that the cost of *two* common soldiers is nearly that of *five* female teachers. The annual salary of a colonel of dragoons in the United-States army is $2,206; of a brigadier-general, $2,958; of a major-general, $4,512; that of a captain of a ship of the line, when in service, $4,500; and, even when off duty, it is $2,500. There are but seven towns in Massachusetts where any teacher of a public school receives so high a salary as $1,000; and, in four of these towns, one teacher only receives this sum.

Had my purpose been simply to show the pecuniary ability of the people at large to give the most generous compensation to such a company of accomplished, high-minded, noble teachers as would lift the race, at once, out of the pit of vice and ignorance and superstition as safely and as tenderly as a mother bears her infant in her arms, — had my purpose been merely to show this pecuniary ability, then I have already said too much. But my design was, not merely to carry conviction to the minds of those who would contest this fact, but to make the denial of it ridiculous.

III. But the consummation of this reformatory work is not promised, except upon the performance of a third condition, — namely, that all the children in the State between the ages of four and sixteen years shall be brought into school for ten months in each year. In other words, while the schools are kept, the attendance of all the children upon them, with one or two exceptions to be hereafter noticed, must be regular.

Since the keeping of registers in our schools has made known the enormous amount of absences from them, there is but one subject which has excited greater alarm, or given rise to louder complaints. Teachers complain of this absence, because, while it increases their labors, it diminishes their success; indeed, it makes entire success an impossibility. Parents who do send their children regularly to school complain of it, because the tardy and the occasional comers are a dead weight upon the progress of those who are uniformly present and prompt. Committees complain of it, in behalf of

the towns which they represent, because it lowers the general standard of intelligence among the people; and because, taken on an average for the whole State, it incurs a total loss of from one-third to one-half of all the money which is annually levied by taxation for the support of schools. Men of wealth who have no children to send to school, or who for any reason send none, complain of it, because, though they may be willing to be taxed for the education of all, yet they are not willing to be taxed to have their money taken and thrown away. They think it, and with good reason too, to be an intolerable hardship to be first confronted with the argument that they are bound to secure the general intelligence and morality of the people through the instrumentality of schools, and when they have acknowledged the validity of this argument, and cheerfully paid their money, to have the very men who so argued and so claimed turn upon them, and say, "We are still at liberty to throw your money away by keeping our children at home; and, though you must keep the school regularly for us, we have a right to use it irregularly, or not at all, as we please." Thus the delinquents, where they owe apology and repentance, retort with indignity, and persevere in injustice.

I cannot believe that our people will always, or even long, submit to this enormous abuse, now made known to them by well-authenticated documents. For an economical people, who form political parties on the subject of expenditures by the government, and make "retrenchment" a watch-word; for a people whose legislature sometimes debates for days together whether the salary of an officer shall be a few hundred dollars more or less, — to continue to throw away, as was done last year, more than $200,000 on account of voluntary, gratuitous, and, in most cases, wanton absences from school, is not credible. For a people who are sufficiently proud, to say the least, of their general intelligence, and who are sincerely anxious to perpetuate and improve their moral character, to be willing to forfeit one-third part of all the blessings of their free-school system, without any necessity, or any plausible pretext, is not

to be believed. This great evil must be dealt with according to its magnitude. Violent diseases demand energetic remedies. It would be as unwise in a State as in an individual to allow its precautions to diminish while its dangers increase; to sleep more quietly as peril becomes more imminent. When we know that a malady is dangerous, and that a remedy is at hand, wisdom dictates its speedy application.

I propose, then, to consider the objections that may possibly be urged to the regular attendance of all our children upon school for ten months in each year, from the age of four to that of sixteen years. I believe them to be by no means insurmountable; nay, that their formidableness will wholly disappear if subjected to a candid examination.

1. It may be said that there is a class of parents amongst us who depend partially upon the labor of their children for the support of their families, and who are too poor to forego the earnings of these children for ten months in the year, and for twelve years of their minority.

With regard to a portion of the class of parents referred to, this suggestion would have a foundation in fact; with regard to another portion of them, it would have no such foundation. It is well known that a class of parents exists amongst us, who work their children that they may themselves be idle; who coin the health, the capacities, and the future welfare, of their own offspring into money, which money, when gained, is not expended for the necessaries or the comforts of life, but is wasted upon appetites that brutify or demonize their possessor. The objections of this class against permitting their children to be educated at the public expense are not legitimate. It would be infinitely better for them, for their families, and for the public, if they were cut off from these means of sinful indulgence. It would improve their condition still further, if they were obliged to be industrious, even though coerced to labor by the goads of hunger and cold. The best of all conditions for them would be, that they should themselves labor for the support of their children at school, where those intellectual and vir-

tuous habits would be formed, and that filial piety inculcated, which would lead the children, in after-years, to return to the parents, with a generous requital, the favors they had received.

There is, doubtless, another portion of this general class, with whom the alleged necessity for their children's earnings as a part of the means for family support is no pretence. The number or age of the family, sickness, misfortune, or other cause, may render this or some other resource indispensable to the procurement of the necessaries and decencies of life. I would not underrate the number or the necessities of this class of persons; they have claims upon our warmest sympathies: but I have reason to believe that the class itself is not a very large one. Where the heads of the family enjoy good health; where they may have the assistance of their children, who are of an age able to render it, for several hours each day, for one or two entire half-days each week, and for two months uninterruptedly each year, — the circumstances must be peculiar where industry and frugality, with such favors as the honest and praiseworthy poor may always count upon from their better-conditioned neighbors, will not supply the means of a comfortable subsistence.

Still, cases of necessity do and will exist; and, where the need is not supplied by individual charity, there is no other alternative but to do it at the public expense. This would introduce no new principle into our legislation. It would be only a moderate but highly beneficial extension of an existing one. Our laws now provide for physical destitution, whatever may be its cause; and they enjoin upon school-committees the duty of furnishing all needful school-books, at the expense of their respective towns, to all children whose parents are unable to procure them.

The question then arises, What degree of destitution — and there is no propriety in restricting this to physical destitution — makes it expedient for a wise government to interfere, and afford relief? "Poor-laws," as we understand the term, are

of modern origin. They were not only unknown to all barbarous nations, but to most Christian and civilized ones until a recent period. In England, they date from the reign of Elizabeth. In Scotland, although in a small class of extreme cases legal relief may have been rendered, yet "poor-laws" can hardly be said ever to have had an effective existence in that country. In Ireland, they were unknown until recently. In this country, they are almost coeval with our colonial settlements.

But there neither is, nor ever has been, any legal standard of poverty. The degree of destitution which shall entitle the sufferer to relief is not a fixed quantity, like the statutory length of a yard, or the Winchester bushel. The general notions of men as to what constitutes poverty range between wide extremes, according to their prevalent style of living, their enlightenment, and their benevolence. It is said, that when the present king of France heard that the income of the Jewish banker in London amounted only to some hundreds of dollars each hour, he expressed his deep grief at learning that he was so poor. With us, he who can command a comfortable shelter, decent clothes, and a sufficient supply of wholesome food, for himself and family, excites no special commiseration for his poverty; while there are places upon the earth where a potato a day is considered an independent fortune. Now, between these extremes, what shall the true definition of poverty be?

So the line which divides poverty from competence is not a stationary but a movable one. The laws themselves change; and the same law, on a question like this, will be made to speak a very different language under different administrators. In favor of the militia, or of the country's defence, our law exempts from attachment, execution, and distress, whether for debt or for taxes, the uniform, arms, ammunition, and accoutrements which officers, non-commissioned officers, and privates, are required to possess. In favor of the common sentiments of humanity, our law exempts also from attachment and execu-

tion not only wearing apparel, but a great variety of articles of household furniture, — bedsteads, beds, bedding, an iron stove, fuel, and other commodities, to the value of fifty dollars; also a cow, six sheep, one swine, and two tons of hay; also the tools and implements used by a debtor in his trade, not exceeding fifty dollars in value; and also rights of burial, and tombs used as repositories for the dead. Our legislation on this subject has been humanely progressive, as may be seen by reference to statutes 1805, ch. 100; 1813, ch. 172; 1822, ch. 93, § 8; 1832, ch. 58; 1838, ch. 145, &c. In a neighboring State, by a late law, a portion of the debtor's homestead is also brought within the same rule. In favor of learning and religion, all school-books and Bibles used in the family are also exempted from attachment and execution for debt: and, as was before said, all school-children destitute of school-books are first supplied with them at the public expense; and, where the parents are unable to reimburse the cost, the supply is gratuitous. Massachusetts has, from time to time, founded and endowed hospitals for the insane; and she makes annual and liberal appropriations for the education of the blind and the deaf and dumb. She is now engaged in erecting a noble institution for the reformation of juvenile delinquents; and a commission instituted by her is inquiring, at the present time, into the condition of idiots, — which unfortunate, repulsive, and hitherto outcast portion of the community, it is not to be doubted, she will soon gather together, and, in imitation of the noble examples set by France, Switzerland, and Prussia, will educate to cleanliness, to decency, and to no inconsiderable degree of positive enjoyment and usefulness. Each one, too, of all these great movements, when carried out into execution, has proved economical as well as philanthropic and Christian. What striking results, in proof of this, are exhibited by the statistics of the State Lunatic Hospital at Worcester! According to the last report of that institution which Dr. Woodward made, the average expense of twenty-four old cases — taking the first twenty-four on the list, and not selecting them, or

taking them at random — was $1,945.83 each; and their aggregate expense, $46,700: while the average expense of the same number of recent cases, taking the last on the list who were discharged cured, was $41.53 each; and their aggregate expense, $996.75: so that the whole expense of *twenty-four* recent cases was but about one-half as much as of *one* old one. That hospital already has far more than paid for itself by the saving it has effected; because, without it, all the new cases would have been old ones. I present these economical aspects of the subject, by no means because I deem them to be the most important, but because, all over the world, there is a large class of persons with whom the pecuniary argument is the most persuasive and eloquent, and who will be induced to lend their services in aid of great social ameliorations only when they find that humanity is economy, and that "godliness" is "great gain" in a worldly sense. They will then enlist for the sake of the "great gain," though quite indifferent as to the other quality. When I have been asked by persons from the fertile and exuberant regions of our own country, or from transatlantic nations, how it is, that, with our ungenerous soil and ungenial clime, we are pecuniarily able to support these various and costly establishments, my answer has been, that we are able *because we do support them.*

But the question recurs, What is poverty? What is that straitness of circumstances, which, for educational purposes, would require a wise and profound statesman, and, of course, the State itself, to interpose, and to supply those means for the education of the child which the parent is unable to render? It being proved, if all our children were to be brought under the benignant influences of such teachers as the State can supply, from the age of four years to that of sixteen, and for ten months in each year, that ninety-nine in every hundred of them can be rescued from uncharitableness, from falsehood, from intemperance, from cupidity, licentiousness, violence, and fraud, and reared to the performance of all the duties, and to the practice of all the kindnesses and courtesies, of domestic and social life;

made promoters of the common weal, instead of subtracters from it, — this being proved, I respectfully and with deference submit to the Board, and, through them, to the legislature, and to my fellow-citizens at large, that *every man is* POOR, *in an educational sense, who cannot both spare and equip his children for school for the entire period above specified;* and that, while he remains thus poor, it is not only the dictate of generosity and Christianity, but it is the wisest policy and profoundest statesmanship too, to supply from the public treasury — municipal or state, or both — whatever means may be wanted to make certain so glorious an end. These principles and this practice the divine doctrines of Christianity have always pointed at, and a progressive civilization has now brought us into proximity to them. How is it that we can call a man *poor* because his body is cold, and not because his highest sympathies and affections have been frozen up within him, in one polar and perpetual winter, from his birth? Hunger does not stint the growth of the body half so much as ignorance dwarfs the capacities of the mind. No wound upon the limbs, or gangrene of vital organs, is a thousandth part so terrible as those maladies of the soul that jeopard its highest happiness, and defeat the end for which it was created. And infinitely aggravated is the case where children are the sufferers; where moral distempers are inflicted upon them by parents, or are inherited by them from ancestors; where they are born into an atmosphere saturated with the infection of crime; where vice obtrudes itself upon every sense, and presses inward, through every pore, to be imbibed and copied, just as the common air forces itself into the nostrils to be breathed; and where, in their early imitative transgressions, they are no more consciously guilty than in the heaving of their lungs in an act of respiration.

Were a ship, in mid-ocean, to be overtaken by a storm, to be dismantled, dismasted, and reduced to an unmanageable hulk, and while its crew were famishing, and in momentary danger of foundering, were another ship to pass within hail, but to refuse all succor and deliverance, should we not justly

regard the deed as an enormous atrocity? But what moral difference does it make whether we pass by our perishing "neighbor" on the sea or on the dry land? The pitfalls of perdition on shore are deeper and far more terrible, and are inhabited by direr monsters, than any ocean-caves. Now, it is the children of the man who, through sickness or other misfortune, has not the means fully and thoroughly to educate them for the duties of life, who represent this perishing and foundering crew; and the man who has superfluities, or even an independency of means, but refuses to aid in giving these children an education sufficient for all the common responsibilities of life, — *he* is the hardened mariner who sails recklessly by, and sees the helpless sufferers ingulfed in the wake of his own proud vessel.

On this point, then, are we not authorized to conclude, in the first place, that the cases are comparatively few where parents cannot afford to forego the earnings of their children, and to send them to school for the length of time and with the regularity proposed? and, in the second place, were the cases of destitution far more numerous than they are, that there is still an abundance of means, as well as an obvious duty, on the part of the public, to supply all deficiencies? Assuming the value of all the property in the State to be four hundred and fifty millions of dollars, the simple interest upon it alone, at six per cent, and without any addition from earnings, is twenty-seven millions annually. The industrial statistics of the State show that its income, from all its occupations and trades, is more than a hundred millions of dollars annually; and even this does not include improvements upon its wharves, bridges, roads, or lands. Must such a State pare and clip and scrimp, and dole out its means with a niggardly hand, when unfolding the mortal and the immortal capacities of its children?

2. But though the means for supporting the schools are abundant, and though the earnings of children, as a part of the family's daily livelihood, may be forborne in one class of cases, and made up in the other, a further question still remains, —

Can the State itself afford to forego these juveniles services? Can the machinery be operated, the shoes bound, the types set, the errands and "chores" done, and the door-bells tended, if all children under sixteen years of age are withdrawn from the performance of these kinds of service for ten months each year? Minors, under sixteen, are let out to corporations to be employed in manufacturing establishments; they are taken into the families of the wealthy and forehanded as under-servants; a few are employed as errand-boys in the offices and shops of cities; and, in several of the lighter handicrafts, they are put to regular labor. There are no exact data by which to determine the number of children so employed in the State. Compared with the whole number of children in it between the ages of four and sixteen, I suppose it to be inconsiderable; so inconsiderable, indeed, that, if their services in these employments were henceforth to be wholly discontinued, it would subtract hardly an appreciable fraction from the aggregate products of our labor and machinery. A highly-intelligent gentleman, who has been engaged in manufacturing business for many years, informs me that the company with which he is associated now employs 3,119 persons, — namely, 2,571 in five cotton-mills, 450 in two machine-shops, and 98 in one woollen-mill. In the cotton-mills, 346 persons are employed who are under sixteen years of age, — equal to thirteen per cent. In the machine-shops, there are none. In the woollen-mill, there are six, or six per cent. The average for the whole is about eleven per cent. He adds, "I am of the opinion that this statement may be taken as a fair representation, in regard to age, of the persons in these several employments. Very few are under fifteen. . . . This class of labor is not profitable to the employer, and, except in particular cases, is only employed from motives of charity. From my recollection of the labor required in print-works" [he was formerly extensively engaged in printing calicoes], "I am inclined to think the proportion of persons under sixteen is not greater than the average in the mills and shops before mentioned."

Here, then, is a statement, worthy of implicit reliance, respecting the largest branch of labor in which those children are employed, who, on the proposed reformatory plan, would be sent to school. Can a substitute be found for this juvenile labor?

In the first place, if that class of parents who now coin into money their children's highest capacities for usefulness and enjoyment, that they themselves may live in idleness and intemperance, were peremptorily deprived of this source of gain, they could perform a portion of the labor now exacted of the children; or, if not capable of performing this particular kind of labor, they could at least do some other work, and thus set free a class of persons who could perform it.

In the second place, manufacturers could employ, at a slightly-enhanced price, a few more adults, or more persons over the age of sixteen. I trust that no liberal-minded manufacturer would object to employing older help, at the present time, on the plea of non-remunerating returns.

But, thirdly, — a consideration of more significance than all the rest, — the children who had enjoyed such a school development and training as we are now supposing would go into the mills, after the completion of their educational course, with physical and intellectual ability to help, and with a moral inability to harm, which, of itself, would far more than compensate for all the loss of their previous absence. Take any manufacturer whose mind has ever wandered, even by chance, to a contemplation of the only true sources and securities of wealth, and what would he not give to have all his operatives transformed at once into men and women of high intelligence and unswerving morality? to have them become so faithful and honest, that they would always turn out the greatest quantity and the best quality of work, without the trouble and expense of watching and weighiug and counting and superintending? that they would be as careful of his machinery as though it were their owu? that they would never ask or accept more in payment than their just due? that they would always consult

their employer's interest, and never sacrifice it from motives of personal ease or gain or ill-will?

I have been told by one of our most careful and successful manufacturers, that, on substituting in one of his cotton-mills a better for a poorer educated class of operatives, he was enabled to add twelve or fifteen per cent to the speed of his machinery, without any increase of damage or danger from the acceleration. Here there was a direct gain of twelve or fifteen per cent, — a larger percentage than that of the supposed whole number of children under sixteen years of age in all our factories. And this gain was effected, too, without any additional investment of capital, or any increased expense for board. The gain from improved morals would far exceed that from increased intelligence. On the whole, then, if all children under sixteen years of age were withdrawn from the factories for ten months of each year in order to be sent to school, there is reason to believe that the aggregate amount of the fabrics produced by the mills would not be diminished even a yard.

The above considerations have special reference to children employed in factories. I have selected this department of labor, because I suppose that at least as many children under sixteen are let out to service in factories as in all other branches of business taken together. The same views, with inconsiderable modifications, will apply to all others. It will be seen at a glance, therefore, that the contemplated diversion of children from manual labor to mental and moral pursuits will not be such as to impair the industrial resources of the State, or to diminish the marketable value of its products.

But there is one remark which applies alike to all these classes of employers. They use the services of children not their own. Now, it must be conceded, that there exists a well-grounded reluctance, on the part of free governments, to any such interference with parental relations as is not made necessary by the nature of the government itself, or by the criminal conduct or culpable neglect of the parents. But those who employ other men's children for their own profit cannot

intrench themselves behind the sacredness of parental rights. Their object is their own personal gain, — a lawful and laudable object, it is true, when pursued by justifiable means, but one which cannot sanction for a moment the infliction of a positive injury upon any child, or the deprivation of any privilege essential either to his well-being, or to the permanence and prosperity of the republic. The republic, indeed, if true to itself, can never allow any of its members to do what will redound to its own injury; and, where no parental title can be alleged, the assertion of any right over the labor of children has as little foundation in natural justice or equity as the tyrant's claim to the toil of his vassals. How can any man, having any claim to the character, I will not say of a Christian or a philanthropist, but to the vastly lower one of a patriot, use the services of a child in his household, his shop, his office, or his mill, when he knows that he does it at the sacrifice, to say the least, of that child's highest earthly interests? How can any man seek to enlarge his own gains, or to pamper his own luxurious habits, by taking the bread of intellectual and moral life from the children around him?

I can anticipate but one objection more, having the aspect of plausibility. It may be said, that although the schools should be kept for the proposed length of time by teachers ennobled with all the intellectual and moral attributes contemplated, yet there are persons capable, like brutes, of bringing children into the world, but impervious to those moral considerations which should impel them to train up those children in the way they should go; and that, in regard to this class of parents, some coercive measures will be necessary to secure the attendance of their children at school. I admit this. But is coercion a new idea in a community where there are houses of correction and jails and state-prisons and the gallows? Surely, bolts and bars, granite walls, and strangulating hemp, are strange emblems of the voluntary principle. Massachusetts has, at the present moment, about two thousand persons under lock and key, nineteen-twentieths of whom, had they been

blessed with a good common-school education, would, according to the testimony I have adduced, be now useful and exemplary citizens, — building up, instead of tearing down, the fabric of public welfare. With a population of between eight hundred thousand and nine hundred thousand, she has at least five thousand police-officers and magistrates, armed with power to seize and restrain, and bring to trial and punishment, any transgressors of those laws which she has paid many other thousands for enacting. Does it not argue, then, a perversion of intellect, or an obliquity of the moral sense, to contend that a child, for the purpose of being blessed by the influences of a good school, cannot be taken from a parent who is preparing him to become at least a private, if not an officer, in the great army of malefactors; while it is conceded, that by and by, when this same child becomes a parent, he may then be taken from *his* children, imprisoned, put to hard labor, or put to death? So far as force is concerned, so far as any supposed invasion of private rights is concerned, does not the greater contain the less a thousand times over? If the State can send a sheriff's *posse* to take a man from his own bed at midnight, and carry him to jail, to trial, and to execution, does it require a greater extension, or a bolder use, of its prerogatives, for the same State to send a kind moral guardian to take a child from the temptations of the street, or from the haunts of wickedness, and bring him within the benign influences of a good school?

Should it be said, that, in the case of the adult offender, there has been a forfeiture of civil rights by some overt act of violation, while in the case of the child the violation is prospective only, I reply, that nothing is more common than to arrest and imprison men on probable suspicion merely; nothing is more common than to hold men to bail in sums proportioned to the suspected offence; and when a man gives proof that he intends to do a wrong, and is only awaiting a favorable opportunity to execute his intention, nothing is more common than to put him under bonds for his good behavior. Every child who is not receiving a good education comes at least within these latter

categories. He is an object of violent suspicion. The presumption is strong that he will not make a good citizen; that, in some form or other, he will get his living out of the earnings of his fellow-men, or offend against their welfare. If the Commonwealth, then, has a right to imprison an adult, or hold him to bail on suspicion, or to bind him over to keep the peace and be of good behavior, has it not an equal, nay, a superior right, to demand guaranties for the child's appearance upon the stage of manhood, there to answer to the great duties that shall be required of him as a citizen? — and a good education is surely better security than any bail-bond that ever was executed. Has not the State a right to bind each child to his good behavior by imparting to him the instruction, and by instilling into his mind the principles, of virtue and religion, by which he shall be twice-bound or doubly-fastened (for such is the etymological meaning of the word "religion") to perform, with intelligence and uprightness, his social and political duties when he becomes a man?

Nor is our legislation without numerous precedents in favor of securing education, even at the expense of coercive measures. These precedents are scattered along our annals from the earliest periods of our colonial existence. The colonial law of 1642, after premising that "forasmuch as the good education of children is of singular behoof and benefit to any commonwealth," ordered "that the selectmen of every town . . . shall have a vigilant eye over their brethren and neighbors, to see, first, that none of them shall suffer so much barbarism in any of their families as not to endeavor to teach, by themselves or others, their children and apprentices so much learning as may enable them perfectly to read the English tongue, and knowledge of the capital laws;" and it imposed upon parents what in those times was a heavy penalty for neglect.

By the law of 1671, the selectmen were again required to see that all children and youth "be taught to read perfectly the English tongue, have knowledge in the capital laws," &c.

So the laws of the Plymouth Colony, after setting forth that "whereas many Parents & Masters, either through an over-respect to their own occasions and business, or not duely considering the good of their Children & Servants, have too much neglected their duty in their Education, whilest they are young & capable of Learning," proceeded to make substantially the same requirements as were made by the above-cited provisions in the laws of the Massachusetts Bay Colony; and then declared, that if any parents or masters, after warning and admonition, should still remain negligent in their duty, "whereby Children & Servants may be in danger to grow Barberous, Rude, or Stubborn, & so prove Pests instead of Blessings to the Country," then "a fine of ten shillings shall be levied upon the goods of such negligent Parent or Master." If, after three months subsequent to the levying of this fine, "no due care shall be taken & continued for the Education of such children & apprentices," then a fine of twenty shillings was to be levied. "And Lastly, if, in three months after that, there be no Reformation of the said neglect, then the Select-men, with the help of two Magistrates, shall take such children & servants from them [the parents], & place them with some Masters for years, (boyes till they come to twenty-one, and girls eighteen years of age), which will more strictly educate and govern them, according to the rules of the Order."

Nor were the above enactments a dead letter. The earlier judicial and municipal records show, that, when the natural parent broke from the ties of consanguinity and duty by neglecting the education of his children, the law interfered, and provided a civil parent for them.

Modern legislation, it is true, has greatly relaxed the stringency of these provisions. No adequate substitute is to be found for them in our present educational code; and already neglected childhood is avenging itself upon society by its manhood of crime, — not unfrequently by its precocity in crime long before the years of manhood have been reached.

Compulsory enactments, however, still attest that all the

spirit of our ancestors is not yet gone. Our laws provide, in various cases, that minor children may be bound out to service, — males to the age of twenty-one years, and females to the age of eighteen years; but, in all cases, it is to be stipulated in the contract that they shall be taught to "read, write, and cipher." "Stubborn children" may be committed to the house of correction. Children in the city of Boston, under the age of sixteen years, whose "parents are dead, or, if living, do, from vice or any other cause, neglect to provide suitable employment for or to exercise salutary control over" them, may be sent by the court to the house of reformation. By the late act establishing the State Reform School, male convicts under sixteen years of age may be sent to this school from any part of the Commonwealth, to be there "instructed in piety and morality, and in such branches of useful knowledge as shall be adapted to their age and capacity." The inmates may be bound out; but, in executing this part of their duty, the trustees "shall have scrupulous regard to the religious and moral character of those to whom they are to be bound, to the end that they may secure to the boys the benefit of a good example and wholesome instruction, and the sure means of improvement in virtue and knowledge, and thus the opportunity of becoming intelligent, moral, useful, and happy citizens of the Commonwealth." Manufacturers, and overseers in manufacturing establishments, are prohibited, under a penalty, from employing any child in their factories under fifteen years of age who has not attended some day-school for a specified portion of the year within which he may be so employed; and they are also prohibited from employing any child under twelve years of age more than ten hours a day, under any circumstances. In the case of fires, of explosive commodities, of contagious diseases, of immigrant passengers from infected countries, and so forth, the law vests its officers with plenary and summary powers "to save the republic from detriment."

Paley has said, that "to send an uneducated child into the world is injurious to the rest of mankind: it is little better than

to turn out a mad dog or a wild beast into the streets." It is difficult to conceive why he thought it to be any "*better*," since one uneducated, vicious man may do infinitely more harm to the world than all the rabid dogs or wild beasts that ever existed. Much as we may need energetic remedies against contagious diseases, we need them against contagious vices more; and quarantine-laws in favor of moral health are the most necessary of all sanitary regulations.

But I forbear to press further considerations of this character upon the attention of the Board. I hope that the great majority of our people will rather wonder why such an argument should be deemed necessary than be disposed to question its conclusions.

Having now surveyed, somewhat at length, the various points pertaining to this subject, a brief recapitulation may not be amiss.

The basis on which it is suggested that our public school-system shall be put is carefully defined in the circular.

In some important particulars, no change is necessary, as our practice has already reached the point of theoretic excellence. Such are the unconditional rights of all children to enter the school, — or their entire exemption from rate-bills or any capitation-tax, either as a condition precedent or subsequent of their attending school, — the range of studies which may be taught, the provision for moral and religious instruction, with guaranties against its abuse, and so forth.

But, in other respects, important improvements are contemplated, — no cardinal or organic change in the system itself, but only progression in courses already begun. Such are, more befitting qualifications in teachers for the great work they undertake; the maintenance of the schools for a period of ten months in each year, instead of the present average of eight months, and, as a necessary consequence, the appropriation of moneys sufficient to sustain the prolonged school, and to pay the better-qualified teachers; and, finally, the gathering into the schools, during their entire term, of all the children

in the community between the ages of four and sixteen years.

From the comprehensiveness of this last condition, it is obvious that all cases of sickness, casualty, or other reasonable cause of absence, must be excepted. And equally clear is it, that when any parent or guardian prefers to educate his children at home, or in a private school, he should be allowed to do so, — the *means* of education to be left wholly optional with every one, provided assurance is given to the State that the *end* is attained.

So far as the proposed changes involve the appropriation of more money, it has been shown that the State possesses not only a sufficiency, but a redundancy of wealth for the purpose. Besides, when once in operation, the system will be found not merely a self-supporting one, but one yielding large revenues, — both saving and producing many times more than it will cost, — requiting a single expenditure by a manifold remuneration.

So far as higher mental and moral attributes in teachers will be required, reasons have been offered to show that Nature, or the common course of Providence, supplies an abundance of intellectual power and of moral capability; but that, through our present misuse or mal-administration of these noble qualities, they are either lost by neglect of culture, or diverted to less worthy pursuits. There is no more iron in the world now than there ever was; we have only discovered how to use it more advantageously, — for steamboats, for railroads, for machinery, and a thousand mechanical purposes: and thus, in point of mere pecuniary value, we have given it the first rank among the precious metals. There is no more water flowing down our streams now than there was centuries ago; but we have just found out how to make it saw timber, grind wheat, and make cloth: and already it does a thousand times more work than all our twenty millions of people could do by their own unassisted strength, should every man vie with his neigh-

bor in the severity of his toil and in the amount of his productions. There are no more individual particles of electricity in the air or in the earth to-day than there always have been. Forever, since the creation, there has been an inconceivable host of these particles, — a multitude deriding all human power of computation, — which have careered round the earth by laws of their own, each one being as distinct from all the rest, and having as separate and independent an existence, as one wild horse upon the prairies has from another. Long ago, science learned how to catch and confine these natural racers; but it was not until our day that she discovered how to take them, — one, ten, a hundred, or a thousand, — and despatch them as messengers to distant cities; to make them the common carriers of intelligence, whom no pursuers can overtake, no bribe can corrupt, nor robbers despoil. Thus it is with the capacities of the human mind. By the bounty of Providence, they may be employed and made sufficient for the greatest work of reform. It is through our blindness and perversity that they are not yet used to achieve their sublime purposes. Like the iron, like the gravity of falling water, like the electric coursers, they, too, have the power of conferring unimaginable blessings upon the race; but as yet they have only been very partially enlisted in the highest services of humanity.

On the third point, — that which contemplates the regular attendance of *all* the children upon the school (with certain specified exceptions), and even their compulsory attendance in a class of extreme cases, — I rely upon legal precedents and analogies; upon the necessity which is imposed upon a republican government, if it means to keep itself republican; and upon the broad principle, that a parent who neglects to educate his child up to the point proposed proves that he has taken the parental relation upon himself without any corresponding idea of its solemnity, and thus, by the non-performance of his parental duties, forfeits his parental rights.

The coincidence of the results, too, to which the witnesses

have come, is, on its face, a very remarkable circumstance; but it is rendered still more remarkable by the fact, that they made their statements without any concert or comparison of views, and in entire independence of each other. The proof, therefore, is not cumulative merely; but its cogency is raised to a mathematical power equal to the number of the witnesses.

Such, then, is a condensed view or summary of the testimony given by credible and trustworthy witnesses on a subject so unspeakably important. The judicial mind cannot fail to observe that the section of country whence these results of experience have been gathered is large, embracing all the States north and east of Pennsylvania. The schools have been both public and private, in town and country; have consisted of both sexes and of all ages; and have contained children from all the States in the Union. They have embraced thousands and thousands of the youth of the land; and, commencing at a point of time now more than fifty years gone by, they reach in unbroken continuity to the present day. We have, therefore, no isolated or solitary case, illogically generalized, and made to yield an inference too broad for its premises.

Nor is it to be forgotten that each of the witnesses, in theological character, is a sincere believer in such an innate natural condition of the human heart as opposes the most formidable obstacles to success in moral training. Sovereign, indeed, must be the influences which can educe exemplary lives and a well-ordered society from a race, each one of whom could say literally, "I was shapen in iniquity, and in sin did my mother conceive me," — in a race whose alienation from the righteous law of God is supposed to antedate volition, and even consciousness, and to be mingled and inbred with the primary corpuscles of being. It was no disrespect towards the many able and eminent teachers of a different religious faith which deterred me from propounding the same questions to them, and soliciting the results of their experience; but it was because I wished to know what was deemed to be practicable by those who saw the great-

est difficulties to be overcome before success could be achieved. While, therefore, their statements were solicited respecting the moral efficacy or "potentiality" of schools "*conducted on the cardinal principles of the New-England systems*," yet it was my wish that each one should make his own theological views manifest on the face of his communication; so that governors and legislators, and all leaders of public opinion, might see how much was believed to be attainable, even while contending against the most formidable obstacles. I reasoned thus, — that if those who believe the battle-ground to be most nearly inaccessible, and the enemy's intrenchments to be most nearly impregnable, and his power to be most nearly invincible, do still believe that victory can be won, then all would say there should be no sleep in the camp until the war-cry is rung, and the hand-to-hand struggle is begun.

But I must not disguise the fact, nor in any way divert attention from it, that universality of education (either public or private) is a substantive part of the plan here proposed, and indispensable to its successful working. Indeed, I should have thought it nugatory and trifling to ask the opinion of any teacher about attainable results, had this condition been omitted from the scheme. Had it been stipulated, or supposed, as a preliminary of the plan, that one per cent only of the children might be left out of the schools, doubtless the witnesses would have made a deduction of at least five per cent in their estimate of results. They would have felt bound to make an allowance, not only for the abandoned class themselves, but for the poisonous influence of that class upon all the rest. Doubtless every advance in the qualification of teachers, and in gathering more and more of the children within the renovating influences of the schools, will yield a great reward of mental and moral benefits; but universality in the end to be accomplished demands universality in the means to be employed. If a contagious or infectious distemper were to break out in any quarter of a city, and all its victims but one were to be removed, though this removal would abate something from the

malignant type of the disease, and contract the circle of its ravages, yet who would feel secure while even *one* should remain to impart its virus by contact, or radiate its noxious effluvia? In moral, no less than in physical maladies, the security of each is conditioned on the security of all. The confidence of every rational man must be impaired respecting the prospective virtue of his own children while the children of his neighbor are vicious; and, for the comprehensive meaning of the word "neighbor," Christ is our authority. I thank God that there can be no safety for any until there is safety for all. Were the sky to be opened, and a voice to address us audibly from the heavens, it could not proclaim more articulately than is done by the common course of Divine Providence, that God has made of one blood *all* nations of men to dwell on *all* the face of the earth; and that, therefore, being by the law of consanguinity one brotherhood and one body, no one member of this body can suffer but all the members must suffer with it, and no one member can be truly honored but all the members must rejoice with it. Where men are religious, therefore, this principle appeals to their religion, and enforces all its dictates; where men are not religious, but have only an enlightened selfishness, it invokes that selfishness to do good to others for the reflected benefits upon itself: and thus it leaves only those to pursue a different course who are morally selfish and intellectually blind. Hence, any system of education which does violence to this great principle of universal benevolence — which circumscribes itself within the limits of a family, a caste, a party, or a sect — is but human weakness wrestling against Divine Power; and, under whatever specious disguises it may mask itself, it is only mortal selfishness, seeking, by feigned and counterfeited compliances, to cajole Heaven out of blessings promised only to those who do unto others as they would that others should do unto them. What right has any man, or body of men, to make the second table of the law of less account than the first? or to delude themselves with the belief that they love the Lord their God

with all the heart, while they do not love their neighbor as themselves? If God is our *Father*, all men must be our *brethren*.

I believe it would not be only practicable, but easy, for the legislature, at its ensuing session, now so soon to be commenced, to initiate a series of measures, which, in a very brief period, would carry us through the earlier stages of the contemplated reform, — measures which would command the ready assent of a vast majority of the citizens of Massachusetts, and would thus leave but few of those unnatural cases — of those parents who are *not* parents — to be dealt with compulsively.

In concluding this Report, I shall not attempt to heighten the effect of the evidence and the argument which have been submitted by any effort to describe the blessedness of that state of society which the universal application of this reformatory agency would usher in. Such an endeavor would be vain. He who would do this must first behold the scenes, and be thrilled by the joys, he would delineate; he must borrow the language of the Paradise he would describe. And, more than this, he must be able to depict the depth and fierceness of the pains which have been inflicted by the crimes of mankind, not only upon the guilty perpetrators themselves, but upon the innocent circles of their families and friends; the terrors of the conscience-stricken malefactor; the sorrow and shame of children bemoaning a parent's guilt; the madness of the mother at the ruin of her child; the agony which brings down a father's gray hairs with sorrow to the grave; the pangs of fraternal and sisterly affection, to which a stain upon a brother's or a sister's name is a dark spot upon the sun of life, which spreads and deepens until it eclipses all the light of existence; all the varied cries of this mingled wail of distress, which have been heard in all lands and at all times, from the death of Abel to the present hour, — all these *he* must have power to describe who would describe the blessedness of a deliverance from them.

There is one consideration, however, which I cannot forbear

to introduce, because it appeals alike to all those various and oftentimes conflicting classes of men who are endeavoring in so many different ways to ameliorate the condition of mankind. Will not a moment's reflection convince them all, that, so far as human instrumentality is concerned, education encompasses, pervades, and overrules all their efforts, grants them whatever triumphs they may achieve, and sets bounds to their successes which they cannot overpass? Why does the advocate of temperance, every time he returns upon his circuit of beneficence, find his way again blocked up with the prostrate victims of inebriation? Why so long, in both hemispheres, have the divinest appeals of the advocate of peace been drowned by the din of mustering squadrons and the clarion of war? Why does the opponent of slavery, before he can strike the fetters even from one victim, see other fetters riveted upon the limbs of many more? Why do our moral-reform societies and our home-mission societies call annually for more money and more laborers wherewith to enter the ever-enlarging fields, as they open before them, of licentiousness and of irreligion? Why do those rich and powerful associations formed for evangelizing the heathen world see the very ships which carry out the gospel and its heralds freighted also with idols, made in Christian lands, for those heathen to buy, and to worship as true gods, and laden with a liquid poison, too, which sinks its victims to such a depth of debasement as to make common heathenism enviable? Why is it that the political parties into which our country is divided, persist, year after year, in solemnly and unceasingly charging each other with heinous and premeditated offences against the fundamental principles of our government and the highest welfare of the people? — charges which, if true, must brand the accused with infamy; if untrue, the accusers. So far as the members of any one of these various parties are lovers of truth, of righteousness, and of peace, let them be asked what is the reason why they accomplish so little, and why so much ever remains to be done, and they will answer, and answer truly, that they do not fail through lack of reason

or of authority, but because of blindness of mind, or perversity of heart, in those whom they address. The admonitions of history, the precepts of the gospel, the attributes of the Deity, are all on their side; but they are not heard, because they speak to adders' ears; they are not felt, because their words of fire fall upon stony hearts. It is not, therefore, better or more arguments that they need, but men capable of appreciating argument. Their eloquence is sufficiently electric and powerful, were it not for the flintiness of the hearts that glance off its lightnings. They want men whose intellects are not blind to the most radiant truths, whose consciences are not as the nether mill-stone, whose prejudices have not become fossilized. The merits of the divinest cause may be all cancelled by the demerits of the hearers; as the innocence of Christ was no better than guilt at the unholy tribunal of Pilate.

But, in universal education, every "follower of God and friend of human kind" will find the only sure means of carrying forward that particular reform to which he is devoted. In whatever department of philanthropy he may be engaged, he will find that department to be only a segment of the great circle of beneficence, of which *universal education* is centre and circumference; and that it is only when these segments are fitly joined together that the wheel of progress can move harmoniously and resistlessly onward. Whether, therefore, he is struggling, on the one hand, to emancipate society from the thraldom of some particular enormity which to him seems more flagitious than all the rest, or whether, on the other hand, he is striving to endue his age with some special virtue, in no way can he pursue his own peculiar aim so directly and so speedily as by preparing a generation of men, ninety-nine in every hundred of whom — even of the first subjects submitted to the experiment — shall be trained "to do justly, to love mercy, and to walk humbly with God." And however a portion of my fellow-mortals, or I myself, may feel in regard to the highest religious concernments of the soul, I trust there are none who believe that such an education as is here contemplat-

ed would be an obstacle, and not an aid, to the reception of divine truth. I trust there are none who would not readily adopt the language of Mr. Page, in his letter above cited, where he says, "I am fully of the opinion that *the right of expectation of a religious character* would be increased very much in proportion to the excellence of the training given, since God never ordains means which he does not intend to bless."

REPORT FOR 1848.

GENTLEMEN, —

. . . MASSACHUSETTS may be regarded either as a State by herself, or as a member of a mighty and yet increasing confederacy of States. In the former capacity, she has great and abiding interests, which are mainly dependent upon her own domestic or internal policy. In the latter relation, her fate depends upon the will of her partners in the association. Hence, although, in regard to all nations, the Minister for Foreign Affairs is the officer of first importance in the State, yet, in regard to our own Commonwealth, the Home Department has decided precedence.

As an individual State, the geographical extent of Massachusetts, and her civil and social interests, will remain the same; but when compared, or rather contrasted, with the vast domain, and the magnificent and overshadowing interests, of the whole Union, she is, and from year to year must be, growing relatively less and less and less. At the epoch of the Revolution, she was one of thirteen States. Now she is one of thirty. Even so late as 1790, when the first census of the United States was taken, there were but three States whose population exceeded hers. Deducting slaves, of whom she had none, there were but two. Her population at that time amounted to about one-tenth part of the population of the whole Union. It is now much below one-twentieth. At the time, too, of the adoption of the Federal Constitution, the area of Massachusetts bore

some assignable and palpable proportion to that of the whole United States. The Mississippi was then the western bouudary of the nation. Now our domain not only extends to the Pacific, but stretches through almost seventeen degrees of latitude upon that ocean. Florida then lay between us and the Gulf of Mexico; and, the gates of the Mississippi River being liable at any time to be closed against the Western States, their only unobstructed egress to the Atlantic was through Eastern ports. Now the Gulf is our southern boundary; and the Mississippi and its tributaries, with their more than sixteen thousand miles of waters navigable by steam, afford a channel capacious enough to drain the West of its vast productions, and then, with the refluent tide of commerce, to supply their demands for foreign merchandise. Territorially considered, the loss of Cape Cod, or of the few acres that compose the Islands of Nantucket and the Vineyard, would be greater to Massachusetts than the loss of Massachusetts would be to the Union. Our native and beloved State, indeed, seems contracting and dwindling away so fast as to suggest the idea of its more careful perambulation to see if some clandestine and rapacious neighbor has not incurred the curse of the Mosaic law by removing our landmarks inward and inward. It is only by taking Massachusetts as a unit, and comparing her area with that of other States in the Union, that we can realize how narrow and diminutive she is becoming. Ohio and Kentucky could each be divided into five States, and each of the ten would be larger than our own. New York, Pennsylvania, North Carolina, Alabama, Louisiana, Mississippi, and Tennessee would each make considerably more than six States — or the whole of them more than forty-two States — of the size of Massachusetts. Michigan, Illinois, Iowa, Wisconsin, Georgia, and Arkansas are each equal in territory to seven such States as ours, — amounting to another group of forty-two. Virginia and Florida are each equal to more than eight; Missouri is equal to nine; and Texas alone, according to the boundaries now claimed by her, would make forty-four such States. Taking an official estimate of the area

of the United States, exclusive of the portion lately acquired from Mexico, it is divisible into three hundred and seventy-six such States as Massachusetts. The territory ceded by the treaty with Mexico, which was ratified on the thirtieth day of May last, exclusive of what is claimed by Texas, would make more than seventy-two States of equal dimensions. Hence it is plain that Massachusetts, territorially considered, constitutes, not exceeding, in round numbers, one four-hundred and forty-eighth part of the Union to which she belongs, or far less than the proportion which a single degree bears to the three hundred and sixty degrees of a circle. The bull's hide mentioned in Virgil's epic would nearly enclose her.*

* *Table exhibiting the areas of the several States and Territories of the United States in square miles and acres.*

FREE STATES.

	Sq. Miles.	Acres.
Maine	35,000	22,400,000
New Hampshire	8,030	5,139,200
Vermont	8,000	5,120,000
Massachusetts	7,250	4,640,000
Rhode Island	1,200	768,000
Connecticut	4,750	3,040,000
New York	46,000	29,440,000
New Jersey	6,851	4,384,640
Pennsylvania	47,000	30,080,000
Ohio	39,964	25,576,960
Indiana	33,809	21,637,760
Illinois	55,405	35,459,200
Michigan	56,243	35,995,520
Iowa	50,914	32,584,960
Wisconsin	53,924	34,511,360
Total	454,340	290,777,600

SLAVE STATES.

	Sq. Miles.	Acres.
Delaware	2,120	1,356,800
Maryland	11,000	7,040,000
Virginia	61,352	39,265,280
North Carolina	45,500	29,120,000
South Carolina	28,000	17,920,000
Georgia	58,000	37,120,000
Kentucky	37,680	24,115,200
Tennessee	44,000	28,160,000
Louisiana	46,431	29,715,840
Mississippi	47,147	30,174,080
Alabama	50,722	32,462,080
Missouri	67,380	43,123,200
Arkansas	52,198	33,406,720
Florida	59,268	37,931,520
Texas (if bounded by *Rio Grande*)	325,520	208,332,800
Dist't of Columbia	50	32,000
Total	936,368	599,275,520

Territory north and west of Mississippi River, and east of the Rocky Mountains.

	Sq. Miles.	Acres.
Bounded north by 49° north latitude, east by Mississippi River, south by the State of Iowa and Platte River, and west by the Rocky Mountains	723,248	462,878,720
Indian Territory, situated west of Arkansas and Missouri, and south of Platte River	248,851	159,264,640
Carried forward	972,099	622,143,360

In other elements of national greatness, — in mineral resources, in productiveness of soil, and in natural facilities for internal intercourse, — she falls far below even this insignificant fraction. She has not an inland bay, not a navigable river; no gold is scattered among her sands; granite is her best mineral, and ice the only pearl to be found in her waters.

So far, too, as political power, founded on numbers, is concerned, Massachusetts is shrinking hardly less rapidly than in the relative compass of her borders. Out of two hundred and thirty representatives in the national Congress, she has but ten; and the next census, now so soon to be taken, will seriously reduce this meagre proportion. In the first Congress, she had eight out of sixty-five, or one in eight (and a fraction), instead of one in twenty-three, as at present, with waning prospects for the future. In the presidential election of the current year, she gives but twelve out of two hundred and ninety votes. In choosing electors, therefore; in declaring war and in making peace; and in all the mighty interests, political and moral, that depend upon war and peace; in the deep pecuniary stake which every commercial and manufacturing people have in questions of foreign commerce and domestic currency; and in all civil, military, and diplomatic appointments which require

	Sq. Miles.	Acres.
Brought forward	972,099	622,143,360
Old North-west Territory, balance remaining east of Mississippi River, and north-west of Wisconsin	22,336	14,295,040
Oregon Territory west of Rocky Mountains	341,463	218,536,320
Total of old territory not organized into States	1,335,898	854,974,720
California	448,691	287,162,240
New Mexico	77,387	49,527,680
Total	526,078	336,689,920
Grand Aggregate.		
Total in Free States	454,340	290,777,600
Total in Slave States	936,368	599,275,520
Total in States	1,390,708	890,053,120
Total, old territory	1,335,898	854,974,720
Total, new territory	526,078	336,689,920
Total	3,252,684	2,081,717,760

the concurrence of the Senate, — Massachusetts is at the mercy of her sisters ; and if those sisters become imperious and aggressive, as some of them give significant tokens of becoming, she must succumb and suffer, like the abused Cordelia among the haughty Gonerils and Regans of the family.

This picture is no fancy-sketch. It is drawn from the original without the exaggeration of a color or a line. We are confronted by these stern realities, these incontrovertible facts : —

	Miles.
Length of the Atlantic Coast to the mouth of St. Mary's River . .	1,450
From mouth of St. Mary's River to Cape of Florida	450
Gulf Coast to mouth of the Sabine River	1,200
Total	3,100

Those States where the public lands are situated are generally exclusive of lakes, ponds, &c. Marshes are estimated.

The Territories include such waters as are interior.

And no illusions of a poetic temperament, no complacent retrospection over periods of past renown, can avert or delay our impending fate. Like the foolish bird which supposes it can avoid danger by hiding its head from its pursuer, we may hide our eyes and avert our thoughts from all contemplation of the fortunes that await us ; but those fortunes will nevertheless overtake us with a speed that we cannot escape from, and a resistlessness that we cannot overcome.

What, then, shall save our native and beloved State from vanishing quite away, from being unknown in the councils of the nation, and lost to the history of the world? In our domestic legislation, and in all our social relationships, what policy shall prevail, and by what spirit shall we be animated, in order to avert so deplorable a fate? Has not every patriot, every worthy son of a Pilgrim sire, an answer at hand? If Massachusetts can no longer challenge respect on account of her numbers, she must challenge it on account of her character. If she is no longer visible by her magnitude, she must become so by her light. She must be, like Hesper, " fairest of all the train of night," and compensate for the diminutiveness of her size by the intenseness of her brilliancy.

Let us reflect, then, in the first place, that Massachusetts has an absolute as well as a relative existence. She exists for her present people and for their posterity, as well as for the Union at large. Though relatively declining, when compared with the whole country, yet there is an actual and constant increase in her numbers. Within her narrow borders she will soon have a million of people; and what finite power can adequately comprehend the joys and sorrows, the hopes and fears, the honor or shame, of a million of human beings belonging to the same generation, or sum up the fearful aggregate of happiness or misery for themselves and their descendants!

Let us thank Heaven, too, that there are other standards of greatness besides vastness of territory, and other forms of wealth besides mineral deposits or agricultural exuberance. Though every hill were a Potosi, though every valley, like that of the Nile, were rank with fatness, yet might a nation be poor in the most desperate sense, — benighted in the darkness of barbarism, and judgment-stricken of Heaven for its sins. A State has local boundaries which it cannot rightfully transcend; but the realm of intelligence, the sphere of charity, the moral domain in which the soul can expand and expatiate, are illimitable, — vast and boundless as the omnipresence of the Being that created them. Worldly treasure is of that nature that rust may corrupt, or the moth destroy, or thieves steal; but even upon the earth there are mental treasures which are unapproachable by fraud, impregnable to violence, and whose value does not perish, but is redoubled with the using. A State, then, is not necessarily fated to insignificance because its dimensions are narrow, nor doomed to obscurity and powerlessness because its numbers are few. Athens was small; yet, low as were her moral aims, she lighted up the whole earth as a lamp lights up a temple. Judæa was small; but her prophets and her teachers were, and will continue to be, the guides of the world. The narrow strip of half-cultivable land that lies between her eastern and western boundaries is not Massachusetts; but her noble and incorruptible men, her pure and exalted

women, the children in all her schools, whose daily lessons are the preludes and rehearsals of the great duties of life, and the prophecies of future eminence, — THESE ARE THE STATE.

Under the providence of God, our means of education are the grand machinery by which the "raw material" of human nature can be worked up into inventors and discoverers, into skilled artisans and scientific farmers, into scholars and jurists, into the founders of benevolent institutions, and the great expounders of ethical and theological science. By means of early education, those embryos of talent may be quickened which will solve the difficult problems of political and economical law; and by them, too, the genius may be kindled which will blaze forth in the poets of humanity. Our schools, far more than they have done, may supply the presidents and professors of colleges, and superintendents of public instruction, all over the land; and send, not only into our sister States, but across the Atlantic, the men of practical science to superintend the construction of the great works of art. Here, too, may those judicial powers be developed and invigorated which will make legal principles so clear and convincing as to prevent appeals to force; and, should the clouds of war ever lower over our country, some hero may be found — the nursling of our schools, and ready to become the leader of our armies, that best of all heroes — who will secure the glories of a peace, unstained by the magnificent murders of the battle-field.

The fortunes of a State depend upon antecedent causes, working with greater or less energy through longer or shorter periods of time. By virtue of this universal law, the future condition of the people of Massachusetts will be modified, and to a great extent determined, by the force of causes now put in operation. Enlightened reason discerns the connection between cause and effect; it measures the efficiency of causes; and thus, to a great extent, it is able to adopt and adapt means to the accomplishment of designed ends. Feeble and erring as is the reason of man, yet in this attribute, far more nearly than in any other, does he preserve the divine image in which

he was originally formed. Supposing matter to have been first created by the fiat of the Almighty, a substantial and beautiful analogy may be traced between the methods pursued by the Creator and the creature in the formation of the works of their hands. When the fulness of time for creating the parent of the human race had arrived, we must suppose the idea or archetype of a *man* to have existed in the divine Mind as really as "the dust of the earth" from which he was to be formed existed in his hand; and that, in obedience to the sovereign volition, all the elements of which man is composed — the oxygen, the hydrogen, the nitrogen, the carbon, and all the rest — were brought together, and were arranged into his hundreds of bones and of muscles, his thousands of blood-vessels, and his millions of nerves; in fine, into his limbs, and into the manifold apparatus of his senses; into that wonderful organ, the heart; and, if any thing can surpass the heart as a miracle of creative power, into that still more wonderful organ, the brain, — we must suppose, I say, that the elements for the formation of this work were assigned, each to its appropriate place, until God saw the noble and majestic structure of the human form before him, perfect in all its parts. At a vast distance, but still in humble imitation of the divine processes, does man proceed for the completion of every work of his hands. The architect, for instance, through the medium of his senses, acquires a knowledge of all the various properties of all the substances which enter into the construction of an edifice. By his reason, he discovers the special uses and capabilities of all the materials to be employed. Then, in the solitude of his closet, or in the darkness of midnight, he revives in his mind the images of all the substances and ingredients necessary to his work; he measures and arranges and combines *the ideas* of them; he applies to them the architectural laws of fitness, proportion, and strength, until, at last, the grand conception of the edifice — whether sacred temple or human dwelling — rises in his mind, complete from foundation to turret. *He brings together and adjusts the ideas of things, just*

as an omnipotent arm would bring together and adjust the ponderous things themselves. After this, he orders the materials to be collected from their respective localities, — it may be from different quarters of the globe, — the wood from the forest, the marble from the quarry, the iron from the mine, the bricks from the clay-pit, the glass, the furniture, the tapestry, and so forth, each from its place, until that ideal image which had before risen up in the silent recesses of his mind now stands forth in full and majestic proportions, embodied in visible and enduring substance, and supplying for centuries to come a fit place for the dwelling of man, or for the worship of God. So, when the Garden of Eden was planted, and when every tree that is pleasant to the sight and good for use was made to grow out of the ground, we must suppose that the Creator, proceeding upon the perfect ideas already in his mind, mingled together, in due proportion, those few chemical elements, which, in their various combinations, make up the almost infinite varieties of the vegetable world, until all of nourishment and perfume and beauty which enters into our imagination of Paradise clustered and glowed and bloomed around, and filled the air with its sweets. In like manner, the gardener, who wishes to bring together, within a narrow compass, specimens of the various plants and flowers that grow between the Equator and the Arctic, first acquires a knowledge of whatever he would cultivate; he classifies them, and arranges all the classes in his mind according to their respective natures; he encloses and prepares his grounds; and then he gathers together seed and plant and vine, indigenous and exotic: on some he pours a double portion of the sun, some he removes into the shade, others he buries in darkness to imitate the growth of caverns, and others still he surrounds with ice, to reproduce the dwarfish vegetation of the frigid zone; for some he prepares a soil dry as an Arabian desert, and for others he makes an artificial pool; until that, which at first was only a bodiless creation of fancy in the mind of the designer, becomes a utility and an embellishment, sustaining the life, and ministering to the luxury, of men.

Now, it is the especial province and function of the statesman and the lawgiver — of all those, indeed, whose influence moulds or modifies public opinion — to study out the eternal principles which conduce to the strength, wisdom, and righteousness of a community; to search for these principles as for hidden riches; to strive for them as one would strive for his life; and then to form public institutions in accordance with them. And he is not worthy to be called a statesman, he is not worthy to be a lawgiver or leader among men, who, either through the weakness of his head or the selfishness of his heart, is incapable of marshalling in his mind the great ideas of knowledge, justice, temperance, and obedience to the laws of God, — on which foundation alone the structure of human welfare can be erected; who is not capable of organizing these ideas into a system, and then of putting that system into operation, as a mechanic does a machine. This only is true statesmanship.

The chief men in society, whether they derive their pre-eminence from birth or wealth or office, or superiority in natural endowments, are mainly responsible for the institutions they leave behind them; because it is in their power to form or conform those institutions according to their own ideas of excellence. The leading spirits of one of the great nations of antiquity had no higher idea of female excellence than that of personal beauty and the attractions of voluptuousness; and hence their brightest and most boasted female ornament was a courtesan. The leading spirits of that other ancient nation, whose perpetual and disgraceful boast it was that it had conquered the whole world, were proud to trace back their ferocious lineage, through patrician and regal blood, to the wolf that suckled their founder, — a tradition, which, whether fact or fiction, is full of allegoric truth. The founders of communities contemporaneous with our own, and now component parts of this republic, filled their veins at their birth with the cancerous blood of slavery, which has now spread itself over and corrupted their whole organism; and yet the tormented sufferer contends for his disease as for his life, — fights for the devil that rends

him, because, as he affirms, the exorcism of the evil spirit will be death to himself. For centuries, a leading feature in the policy of Great Britain towards Ireland was the utter abolition of all education which did not conform to the government standard of theology, and was not administered by teachers of its own choosing. None but a *Protestant* was allowed to keep a school. From 1709 to 1782, any Roman Catholic who should presume to be a schoolmaster, or assistant to a schoolmaster, *or even a tutor in a private family*, was to be transported; and if the party returned, then he was to be adjudged guilty of high treason, and to be hung, drawn, and quartered. A great portion of the present agony of starving, diseased, distracted Ireland, is directly referable to the ignorance which has resulted from those imperial interdicts against knowledge. No other acts of British oppression have been so fatal in driving sanity out of the head, and kindness out of the heart, of that maddened country, as the cruel laws by which every child in Ireland was prohibited from nourishing himself with a grain of knowledge, unless he would swallow with it a scruple of theology. These are a few specimens taken from the great storehouse of history, showing how those who enact laws and organize public institutions predetermine the fate of the masses. And are not all those who control legislation, and lead public opinion among ourselves, adjured by these admonitions of history, as well as by the voice of conscience and the precepts of Christianity, to form a model idea of a healthy, industrious, frugal, temperate, wise Christian Commonwealth, and then to exert all their faculties and all their activities in turning this idea into a living reality?

Without undervaluing any other human agency, it may be safely affirmed that the common school, improved and energized as it can easily be, may become the most effective and benignant of all the forces of civilization. Two reasons sustain this position. In the first place, there is a universality in its operation, which can be affirmed of no other institution whatever. If administered in the spirit of justice and conciliation,

all the rising generation may be brought within the circle of its reformatory and elevating influences. And, in the second place, the materials upon which it operates are so pliant and ductile as to be susceptible of assuming a greater variety of forms than any other earthly work of the Creator. The inflexibility and ruggedness of the oak, when compared with the lithe sapling or the tender germ, are but feeble emblems to typify the docility of childhood when contrasted with the obduracy and intractableness of man. It is these inherent advantages of the common school, which, in our own State, have produced results so striking, from a system so imperfect, and an administration so feeble. In teaching the blind and the deaf and dumb, in kindling the latent spark of intelligence that lurks in an idiot's mind, and in the more holy work of reforming abandoned and outcast children, education has proved what it can do by glorious experiments. These wonders it has done in its infancy, and with the lights of a limited experience; but when its faculties shall be fully developed, when it shall be trained to wield its mighty energies for the protection of society against the giant vices which now invade and torment it, — against intemperance, avarice, war, slavery, bigotry, the woes of want, and the wickedness of waste, — then there will not be a height to which these enemies of the race can escape which it will not scale, nor a Titan among them all whom it will not slay.

I proceed, then, in endeavoring to show how the true business of the schoolroom connects itself, and becomes identical, with the great interests of society. The former is the infant, immature state of those interests; the latter their developed, adult state. As "the child is father to the man," so may the training of the schoolroom expand into the institutions and fortunes of the State.

PHYSICAL EDUCATION.

In the worldly prosperity of mankind, health and strength are indispensable ingredients. Reflect, for a moment, what an inroad upon the comfort of a family, and its means of support,

is a case of chronic sickness or debility in a single one of its members. Should a farmer contract to support, and to continue to pay, his laborer, or a manufacturer his operative, whether able or unable to work, they would demand a serious abatement of wages as a premium for the risk. But whatever drawback a sick member would be to the pecuniary prosperity of a family, or a sick laborer to that of an employer bound to support him, just such a drawback is a sick or disabled member of the community to the financial prosperity of the State to which he belongs. The amount of loss consequent upon such sickness or disability may not be drawn out of the public treasury; but it is subtracted from the common property of the State in a way still more injurious than if the same amount of gold were taken from the public coffers by warrant of the Executive. Money so taken would be transferred to another hand. It would still exist. But the want of health and strength is a dead loss to the community; and, whenever the next valuation is taken, there will be a corresponding deficit in the aggregate of national property. Hence, every citizen, as such, is pecuniarily interested in the health and strength of all his fellow-citizens. It is right, therefore, that he should look upon them all, not only as a benevolent and Christian man would do, pitying and succoring their misfortunes; but he should look upon them, also, as a man of business, — as one who contributes, or is bound to contribute, to a reserved fund from which all the non-producing sick and valetudinary are supported.

Men see this community of interests plainly enough when sickness comes in the form of a pestilence, and decimates and redecimates a city, arresting all the currents of business, gathering the well about the sick-bed or the hearse, or scattering them abroad with fear. But in the aggregate of its periods of sickness, and in the number of its victims, the plague itself is less destructive to human life than the ordinary and stereotyped causes of mortality, which familiarity has bereft of their terrors. It is the concentration of its havoc that makes pesti-

lence terrific. This concentration men's senses can perceive, and therefore they are affrighted. But to the eye of reason that is most alarming which is most injurious; and it is this eye with which a statesman or philosopher should look when he takes a survey of human interests.

Leaving out, then, for the present purpose, all consideration of the pains of sickness and the anguish of bereavement, the momentous truth still remains, that sickness and premature death are positive evils for the statesman and political economist to cope with. The earth, as a hospital for the diseased, would soon wear out the love of life; and, if but the half of mankind were sick, famine, from non-production, would speedily threaten the whole.

Now, modern science has made nothing more certain than that both good and ill health are the direct result of causes mainly within our own control. In other words, the health of the race is dependent upon the conduct of the race. The health of the individual is determined primarily by his parents, secondarily by himself. The vigorous growth of the body, its strength and its activity, its powers of endurance, and its length of life, on the one hand; and dwarfishness, sluggishness, infirmity, and premature death on the other, — are all the subjects of unchangeable laws. These laws are ordained of God; but the knowledge of them is left to our diligence, and the observance of them to our free agency. These laws are very few: they are so simple, that all can understand them; and so beautiful, that the pleasure of contemplating them, even independent of their utility, is a tenfold reward for all the labor of their acquisition. The laws, I repeat, are few. The circumstances, however, under which they are to be applied, are exceedingly various and complicated. These circumstances embrace the almost infinite varieties of our daily life, — exercise and rest; sleeping and watching; eating, drinking, and abstinence; the affections and passions; exposure to vicissitudes of temperature, to dryness and humidity, to the effluvia and exhalations of dead animal or decaying vegetable matter: in fine, they

embrace all cases where excesses, indiscretions, or exposures may induce disease; or where exercise, temperance, cleanliness, and pure air may avert it. Hence it would be wholly impossible to write out any code of "rules and regulations" applicable to all cases. So, too, the occasions for applying the laws to new circumstances recur so continually, that no man can have a mentor at his side, in the form of a physician or physiologist, to direct his conduct in new emergencies. Even the most favored individual, in ninety-nine cases in a hundred, must prescribe for himself. And hence the uncompromising necessity that all children should be instructed in these laws; and not only instructed, but that they should receive such a *training* during the whole course of pupilage as to enlist the mighty forces of habit on the side of obedience; and that their judgment also should be so developed and matured, that they will be able to discriminate between different combinations of circumstances, and to adapt, in each case, the regimen to the exigency.

Looking to the various disorders and disabilities, which, as every one's experience or observation shows him, do invade and prostrate the human frame, some may be slow to believe that all men, or even the majority of them, will ever be able to administer to those which fall to their share. But, in the first place, it may be remarked that a judicious course of physical training, faithfully observed through all the years of infancy, childhood, and adolescence, will avert a vast proportion of the pains and distempers that now besiege and subdue the human system or some of its vital organs; and hence, that one may safely be ignorant of symptoms and of remedies which he will never have occasion to recognize or to use, as one who seeks a residence remote from wild beasts has no practical occasion to know how they are hunted; and in the next place, that if every one does not know, in all cases, how to prescribe for himself, yet he may always know what part of his machinery is out of order, and how necessary it is to apply promptly to a repairer. Even such a degree of anatomical knowledge as

enables one to point out the suffering organ is of great value: for, doubtless, not merely children, but ignorant men, have killed themselves by giving a false location to their malady; or, which is the same kind of error, have caused their physician so to prescribe as to inflict disease on a sound organ, instead of healing a diseased one. It is not every one that can inform a dentist which tooth is the offender.

But to the objection, that all men and women cannot be physicians, the decisive answer is, that the physician must be acquainted with the laws of disease, which are countless in number, and are ever developing new symptoms. But the sound man or woman needs to be acquainted only with the laws of health, which are few, and whose results, though acting upon different systems, are substantially uniform. The pharmacopœia of the physician embraces nearly all minerals and all vegetables, and several of the more offensive classes of the animal kingdom, with the various mechanical or chemical combinations which can be formed from or among them. But the whole pharmacopœia of the healthy man comprises but little more than pure water and pure air, simple viands, vegetables, and bread. In quality, they are as different as in number; as different as the sweet and savory contents of store-room and larder from those acrid and mephitic substances which make the druggist's warehouse a universal conservatory of particular abominations.

Is it too much, then, to say that the leaders of society, whether makers of law, or creators of custom and fashion, are bound, by the most solemn obligations of duty as well as by interest, to curtail the ravages of sickness and untimely death, and, as far as possible, to make health and longevity the common property of men? The civil government takes cognizance of pauperism; and men of worldly substance are obliged to bear its expenses. The disabilities of ill health, and the pecuniary losses by early death, are among the leading causes of pauperism. He, therefore, who would prevent the latter, must prevent the former. The civil government exercises penal juris-

diction over crimes, and over the grosser vices; and is it not true that many of those morbid appetites and unnatural desires that seek to assuage their longings by indulgence and excess have their origin in the action of a distempered body upon the mind, rather than of the mind upon the body? Indeed, how often have pure and pious hearts encountered a relentless antagonist to their highest and most devout resolves and aspirations in the pruriences and hankerings of the body in which they were imprisoned! Many a waspish man would become amiable if he could be hung on a new set of nerves. Many a misanthropic disposition would warm into kindliness, could the acrid humors of the body be evaporated or washed away. The dyspeptic contends with evil spirits, "blue and black," against whom the eupeptic bears an invincible charm.

The civil government, too, is bound to provide for the insane, — both for the security of the sane, and for the recovery or amelioration of the insane. The diseases incident to several bodily organs give direct birth to insanity. A disease of the brain induces it at once. Indeed, insanity is often only an exacerbation of some bodily disorder. As a brook swells into a river, so the inflammation of certain organs matures into insanity. General health would greatly reduce the size of those deplorable necessities of an imperfect civilization, — hospitals for the insane.

In extraordinary emergencies, governments do not hesitate to interfere for preventing the spread of contagion, and for excluding the media through which diseases are propagated. When sudden pestilence breaks out in a city, the infected district is put under a bar of non-intercourse with the healthy. When a crew of men, or a cargo of merchandise, arrives from an infected port, a quarantine is enforced. In these cases, the civil magistracy acts under the impulse of fear. But has not government a capacity of reflection and of foresight, as well as a susceptibility to fear? Is a civilized government of modern times to be classified with those orders of existence that have propensity and appetite merely, but not reason and providence?

If not, then, surely, is the government bound to do all it can against the wastings of ill health, and the havoc of unnecessary death; and it is bound to use equal vigilance, whether these calamities invade us from abroad, or are born of home-bred ignorance and folly. And, as has been before intimated, who does not know that the aggregate suffering and loss from general and diffused causes of ill health are indefinitely greater than from the sudden irruption or outbreak of all the contagions and epidemics with which we are ever afflicted? For this greater evil, then, society is bound to provide, not a remedy, but something better than a remedy, — a preventive. Intelligence and obedience would be an antidote, sovereign in its efficacy, and universal in its applicability.

Now, it is beyond all question, that, with the rarest exceptions, every child in the Commonwealth may be endued with this intelligence, and, what is equally important, trained to conforming personal habits. Enlightened by knowledge, and impelled by the force of early and long-continued habit, he would not only see the reasonableness of adapting his regimen to his condition in the varying circumstances of life, but he would feel a personal interest in doing so, as men now feel a personal interest in procuring the gratifications of money or of power. Habit and knowledge will coincide; they will draw in the same direction; they will not be antagonists, as is now so generally the case with those adult men who acquire sound knowledge after bad habits have been enthroned, — the blind force of the latter spurning all the arguments and warnings of the former. This work may be mainly done during the period of non-age, or before children are emancipated from parental control. Let a child wash himself all over every morning for sixteen years, and he will as soon go without his breakfast as his bath. This is but a specimen of the effect of a long-continued observance of Nature's "health regulations."

Not only will a general knowledge of human physiology, or the laws of health, do much to supersede the necessity of a knowledge of pathology, or the laws of disease, but the for-

mer is as much better than the latter as prevention is better than remedy, — as much better as all the comforts and securities of an unburnt dwelling are than two-thirds of its value in money from the insurance-office. A general diffusion of physiological knowledge will save millions annually to the State. It will gradually revolutionize many of the absurd customs and usages of society, — conforming them more and more to the rules of reason and true enjoyment, and withdrawing them more and more from the equally vicious extremes of barbarism and of artificial life. It will restrain the caprices and follies of fashion in regard to dress and amusement, and subordinate its ridiculous excesses to the laws of health and decency. It will reproduce the obliterated lines that once divided day and night. It will secure cleanliness and purity, more intimate and personal than any the laundress can supply. It will teach men "to eat that they may live, instead of living that they may eat." When Satan approaches in that form in which he has hitherto been most seductive and successful, — the form of intoxicating beverages, — those who wear the talisman of this science will have an antidote against his temptations. It is a lesson of unspeakable importance to learn that nourishment, and not pleasure, is the primary object of food. God, indeed, in his benevolence, has made the reception of this food not only reparative, but pleasant. But to lose sight of the first object, in a brutish desire for the second, is voluntarily to alter our position in the scale of being, and from the rank of men to descend to the order of beasts. Physiology would reverse the ancient fable, and transform into men the swine who now sit at epicurean tables, and drink of the Circean cup. Every intelligent man deplores the almost universal condition of our dwelling-houses and public edifices, which have been built without regard to the necessities of the human system for pure air. Were physiology universally understood, no man would think of erecting a mansion without an apparatus for its thorough ventilation at all times, any more than without windows for the admission of light. Apertures and flues for the ingress and egress of air

into and from sitting-rooms and sleeping-rooms are as necessary to the architectural idea of a well-finished house as nasal orifices are to the anatomical idea of a man; and a dwelling without the means of ventilation is as incomplete and as unsightly as a man without a nose. A knowledge of this science would establish a new standard of beauty, — the classic standard of the Greeks, in which strength was a primary and indispensable element; and it would demonstrate the unspeakable folly and guilt of those matrimonial alliances where hereditary disease, and even insanity itself, are wedded, and the health, mind, and happiness of a family of children are sacrificed for the mercenary object of a dowry.

But an immunity from expense, privation, pain, and bereavement, is not the only boon connected with health and longevity. Sound health is not merely the negation of ill: it is a medium through which alone we can gain access to many invaluable blessings. It enhances every pleasure, and is indispensable to the full performance of almost every duty. The elements environ us with fatal dangers, against which health is our only preserver. The vicissitudes of the climate must be encountered. We have no power to arrest the north wind that congeals by its cold, nor the south that dissolves by its heat. The humidity of one part of the year, and the aridness of another, are equally beyond human control. As our planet wheels around the sun, now turning up our hemisphere to its vertical and fervid rays, and now, by its oblique position, reducing temperature to an opposite extreme, we have no choice but to attend its circuit, and abide its changes. It is certain that nothing but health will enable us to survive exposure to these natural extremes. A thousand causes exist, too, which engender impurity in the air we breathe; we ourselves being the principal. Nothing but knowledge can enable us to eliminate the grossest of these noxious ingredients; and nothing but health, to resist the poison of those which remain. The waste constantly going on in the particles that compose our bodies lays us under an ever-recurring necessity to replenish their exhausted sub-

stance by the reception of food. And here, if the food we take is not subjected to the transforming and assimilating power of the alimentary organs, — a power which is wholly lost with the loss of health, — it will prove our destruction. Each of our organs is an avenue, through which death may invade us; and innumerable deaths — that is, innumerable agencies, each one of which has the power of causing death — hold perpetual siege at every avenue, and watch for an opportunity to enter and destroy. And yet air and nourishment, heat and cold, moisture and dryness, we must encounter, and we must have; for they are the permanent conditions of our being. How intelligible, then, and how authoritative, does the doctrine become, that high health, and high health alone, is harmony with Nature! A person without high health is just as much at war with Nature as a guilty soul is at war with the spirit of God; and the struggles of our frail bodies against the resistless might of the elements will be as unavailing as that of our souls against the retributions of Omnipotence.

The capacities of the body for resisting the force of the elements, and for appropriating and assimilating the substances around it into its own substance, is one thing; its capacities for labor are another. Let any man, who has fallen from a state of vigorous health to that of a valetudinary, compare his standard of "a day's work" in the one state with that in the other, and he can then form a better estimate of the value of the health that measures the difference between the two conditions. Sound health opens new and more lucrative employments to its possessor. Ill health often closes a career of the highest usefulness: and though the mind may have been prepared by splendid natural endowments, and by years of study and experience, to lead forward the race in the march of civilization, yet it is stricken down in the midst of its beneficence by the assaults of disease; and thus the onward movement of humanity is arrested, or becomes retrograde, and must wait through another cycle for another leader. What great works in art, in science, and in morals, have been left unfinished or unattempted by

reason of the slow decays, or the sudden extinction, of health and of life! When any man of sense has an important work to perform, the first thing he does is to provide a fitting instrument — a tool, a machine, or whatever it may be — with which the work can be done. Health is the prime instrument for the performance of all the labors of life.

One more idea is inseparable from this subject. When the religious man reflects that our bodies are God's workmanship, he sees that the laws impressed upon them can be no less than God's laws. If these laws, then, are God's laws, we are bound to recognize and obey them. We are bound to obey a law which God has impressed upon the body, on the same principle that we are bound to obey a law which he has impressed upon the soul. And here how pertinent and forcible is the great idea which has been set forth so distinctly by a late writer,* that, when we know a law to be God's law, it matters not by what means we may have arrived at the knowledge, the law becomes imperatively and equally binding upon us! Between the law of the body and the law of the soul, there may, indeed, sometimes arise what we call a conflict of duty, when the subordinate obligation of the former must yield to the supremacy of the latter; but this refers to relative importance, and not to inherent obligation.

My general conclusion, then, under this head, is, that it is the duty of all the governing minds in society — whether in office or out of it — to diffuse a knowledge of these beautiful and beneficent laws of health and life throughout the length and breadth of the State; to popularize them; to make them, in the first place, the common acquisition of all, and, through education and custom, the common inheritance of all, so that the healthful habits naturally growing out of their observance shall be inbred in the people, exemplified in the personal regimen of each individual, incorporated into the economy of every household, observable in all private dwellings, and in all public edifices, especially in those buildings which are erected by capitalists for the residence of their work-people, or for renting to the

* Mr. George Combe.

poorer classes; obeyed, by supplying cities with pure water; by providing public baths, public walks, and public squares; by rural cemeteries; by the drainage and sewerage of populous towns, and by whatever else may promote the general salubrity of the atmosphere: in fine, by a religious observance of all those sanitary regulations with which modern science has blessed the world.

For this thorough diffusion of sanitary intelligence, the common school is the only agency. It is, however, an adequate agency. Let human physiology be introduced as an indispensable branch of study into our public schools; let no teacher be approved who is not master of its leading principles, and of their applications to the varying circumstances of life; let all the older classes in the schools be regularly and rigidly examined upon this study by the school-committees, — and a speedy change would come over our personal habits, over our domestic usages, and over the public arrangements of society. Temperance and moderation would not be such strangers at the table. Fashion, like European sovereigns, if not compelled to abdicate and fly, would be forced to compromise for the continued possession of her throne by the surrender to her subjects of many of their natural rights. A sixth order of architecture would be invented, — the hygienic, — which, without subtracting at all from the beauty of any other order, would add a new element of utility to them all. The "health-regulations" of cities would be issued in a revised code, — a code that would bear the scrutiny of science. And, as the result and reward of all, a race of men and women, loftier in stature, firmer in structure, fairer in form, and better able to perform the duties and bear the burdens of life, would revisit the earth. The minikin specimens of the race, who now go on dwindling and tapering from parent to child, would re-ascend to manhood and womanhood. Just in proportion as the laws of health and life were discovered and obeyed, would pain, disease, insanity, and untimely death, cease from among men. Consumption would remain; but it would be consumption in the active sense.

INTELLECTUAL EDUCATION AS A MEANS OF REMOVING POVERTY, AND SECURING ABUNDANCE.

Another cardinal object which the government of Massachusetts, and all the influential men in the State, should propose to themselves, is the physical well-being of all the people, — the sufficiency, comfort, competence, of every individual in regard to food, raiment, and shelter. And these necessaries and conveniences of life should be obtained by each individual for himself, or by each family for themselves, rather than accepted from the hand of charity or extorted by poor-laws. It is not averred that this most desirable result can, in all instances, be obtained; but it is, nevertheless, the end to be aimed at. True statesmanship and true political economy, not less than true philanthropy, present this perfect theory as the goal, to be more and more closely approximated by our imperfect practice. The desire to achieve such a result cannot be regarded as an unreasonable ambition; for, though all mankind were well fed, well clothed, and well housed, they might still be but half civilized.

Poverty is a public as well as a private evil. There is no physical law necessitating its existence. The earth contains abundant resources for ten times — doubtless for twenty times — its present inhabitants. Cold, hunger, and nakedness are not, like death, an inevitable lot. There are many single States in this Union which could supply an abundance of edible products for the inhabitants of the thirty States that compose it. There are single States capable of raising a sufficient quantity of cotton to clothe the whole nation; and there are other States having sufficient factories and machinery to manufacture it. The coal-fields of Pennsylvania are sufficiently abundant to keep every house in the land at the temperature of sixty-five degrees for centuries to come. Were there to be a competition, on the one hand, to supply wool for every conceivable fabric, and, on the other, to wear out these fabrics as fast as possible, the single State of New York would beat the whole country. There is, indeed, no assignable limit to the capacities of the earth for

producing whatever is necessary for the sustenance, comfort, and improvement of the race. Indigence, therefore, and the miseries and degradations incident to indigence, seem to be no part of the eternal ordinances of Heaven. The bounty of God is not brought into question or suspicion by its existence; for man who suffers it might have avoided it. Even the wealth which the world now has on hand is more than sufficient to supply all the rational wants of every individual in it. Privations and sufferings exist, not from the smallness of its sum, but from the inequality of its distribution. Poverty is set over against profusion. In some, all healthy appetite is cloyed and sickened by repletion; while in others, the stomach seems to be a supernumerary organ in the system, or, like the human eye or human lungs before birth, is waiting to be transferred to some other region, where its functions may come into use. One gorgeous palace absorbs all the labor and expense that might have made a thousand hovels comfortable. That one man may ride in carriages of Oriental luxury, hundreds of other men are turned into beasts of burden. To supply a superfluous wardrobe for the gratification of one man's pride, a thousand women and children shiver with cold; and, for every flash of the diamonds that royalty wears, there is a tear of distress in the poor man's dwelling. Not one Lazarus, but a hundred, sit at the gate of Dives. Tantalus is no fiction. The ancient one might have been fabulous; but the modern ones are terrible realities. Millions are perishing in the midst of superfluities.

According to the European theory, men are divided into classes, — some to toil and earn, others to seize and enjoy. According to the Massachusetts theory, all are to have an equal chance for earning, and equal security in the enjoyment of what they earn. The latter tends to equality of condition; the former, to the grossest inequalities. Tried by any Christian standard of morals, or even by any of the better sort of heathen standards, can any one hesitate, for a moment, in declaring which of the two will produce the greater amount of human welfare, and which, therefore, is the more conformable to the

divine will? The European theory is blind to what constitutes the highest glory as well as the highest duty of a State. Its advocates and admirers are forgetful of that which should be their highest ambition, and proud of that which constitutes their shame. How can any one possessed of the attributes of humanity look with satisfaction upon the splendid treasures, the golden regalia, deposited in the Tower of London or in Windsor Palace, each "an India in itself," while thousands around are dying of starvation, or have been made criminals by the combined forces of temptation and neglect? The present condition of Ireland cancels all the glories of the British crown. The brilliant conception which symbolizes the nationality of Great Britain as a superb temple, whose massive and grand proportions are upheld and adorned by the four hundred and thirty Corinthian columns of the aristocracy, is turned into a loathing and a scorn when we behold the five millions of paupers that cower and shiver at its base. The galleries and fountains of Versailles, the Louvre of Paris, her Notre Dame, and her Madeleine, though multiplied by thousands in number and in brilliancy, would be no atonement for the hundred thousand Parisian *ouvriers* without bread and without work. The galleries of painting and of sculpture at Rome, at Munich, or at Dresden, which body forth the divinest ideals ever executed or ever conceived, are but an abomination in the sight of Heaven and of all good men, while actual, living beings — beings that have hearts to palpitate, and nerves to agonize, and affections to be crushed or corrupted — are experimenting all around them upon the capacities of human nature for suffering and for sin. Where standards like these exist, and are upheld by council and by court, by fashion and by law, *Christianity is yet to be discovered;* at least, it is yet to be applied in practice to the social condition of men.

Our ambition as a State should trace itself to a different origin, and propose to itself a different object. Its flame should be lighted at the skies. Its radiance and its warmth should reach the darkest and the coldest abodes of men. It should seek

the solution of such problems as these: To what extent can competence displace pauperism? How nearly can we free ourselves from the low-minded and the vicious, not by their expatriation, but by their elevation? To what extent can the resources and powers of Nature be converted into human welfare, the peaceful arts of life be advanced, and the vast treasures of human talent and genius be developed? How much of suffering, in all its forms, can be relieved? or, what is better than relief, how much can be prevented? Cannot the classes of crimes be lessened, and the number of criminals in each class be diminished? Our exemplars, both for public and for private imitation, should be the parables of the lost sheep and of the lost piece of silver. When we have spread competence through all the abodes of poverty, when we have substituted knowledge for ignorance in the minds of the whole people, when we have reformed the vicious and reclaimed the criminal, then may we invite all neighboring nations to behold the spectacle, and say to them, in the conscious elation of virtue, "Rejoice with me," for I have found that which was lost. Until that day shall arrive, our duties will not be wholly fulfilled, and our ambition will have new honors to win.

But is it not true that Massachusetts, in some respects, instead of adhering more and more closely to her own theory, is becoming emulous of the baneful examples of Europe? The distance between the two extremes of society is lengthening, instead of being abridged. With every generation, fortunes increase on the one hand, and some new privation is added to poverty on the other. We are verging towards those extremes of opulence and of penury, each of which unhumanizes the human mind. A perpetual struggle for the bare necessaries of life, without the ability to obtain them, makes men wolfish. Avarice, on the other hand, sees, in all the victims of misery around it, not objects for pity and succor, but only crude materials to be worked up into more money.

I suppose it to be the universal sentiment of all those who mingle any ingredient of benevolence with their notions on

political economy, that vast and overshadowing private fortunes are among the greatest dangers to which the happiness of the people in a republic can be subjected. Such fortunes would create a feudalism of a new kind, but one more oppressive and unrelenting than that of the middle ages. The feudal lords in England and on the Continent never held their retainers in a more abject condition of servitude than the great majority of foreign manufacturers and capitalists hold their operatives and laborers at the present day. The means employed are different; but the similarity in results is striking. What force did then, money does now. The villein of the middle ages had no spot of earth on which he could live, unless one were granted to him by his lord. The operative or laborer of the present day has no employment, and therefore no bread, unless the capitalist will accept his services. The vassal had no shelter but such as his master provided for him. Not one in five thousand of English operatives or farm-laborers is able to build or own even a hovel; and therefore they must accept such shelter as capital offers them. The baron prescribed his own terms to his retainers: those terms were peremptory, and the serf must submit or perish. The British manufacturer or farmer prescribes the rate of wages he will give to his work-people; he reduces these wages under whatever pretext he pleases; and they, too, have no alternative but submission or starvation. In some respects, indeed, the condition of the modern dependant is more forlorn than that of the corresponding serf class in former times. Some attributes of the patriarchal relation did spring up between the lord and his lieges to soften the harsh relations subsisting between them. Hence came some oversight of the condition of children, some relief in sickness, some protection and support in the decrepitude of age. But only in instances comparatively few have kindly offices smoothed the rugged relation between British capital and British labor. The children of the work-people are abandoned to their fate; and notwithstanding the privations they suffer, and the dangers they threaten, no power in the realm

has yet been able to secure them an education; and when the adult laborer is prostrated by sickness, or eventually worn out by toil and age, the poor-house, which has all along been his destination, becomes his destiny.

Now, two or three things will doubtless be admitted to be true, beyond all controversy, in regard to Massachusetts. By its industrial condition, and its business operations, it is exposed, far beyond any other State in the Union, to the fatal extremes of overgrown wealth and desperate poverty. Its population is far more dense than that of any other State. It is four or five times more dense than the average of all the other States taken together; and density of population has always been one of the proximate causes of social inequality. According to population and territorial extent, there is far more capital in Massachusetts — capital which is movable, and instantaneously available — than in any other State in the Union; and probably both these qualifications respecting population and territory could be omitted without endangering the truth of the assertion. It has been recently stated in a very respectable public journal, on the authority of a writer conversant with the subject, that from the last of June, 1846, to the first of August, 1848, the amount of money invested by the citizens of Massachusetts "in manufacturing cities, railroads, and other improvements," is "fifty-seven millions of dollars, of which more than fifty has been paid in and expended." The dividends to be received by citizens of Massachusetts from June, 1848, to April, 1849, are estimated by the same writer at ten millions, and the annual increase of capital at "little short of twenty-two millions." If this be so, are we not in danger of naturalizing and domesticating among ourselves those hideous evils which are always engendered between capital and labor, when all the capital is in the hands of one class, and all the labor is thrown upon another?

Now, surely nothing but universal education can counterwork this tendency to the domination of capital and the servility of labor. If one class possesses all the wealth and the edu-

cation, while the residue of society is ignorant and poor, it matters not by what name the relation between them may be called: the latter, in fact and in truth, will be the servile dependants and subjects of the former. But, if education be equably diffused, it will draw property after it by the strongest of all attractions; for such a thing never did happen, and never can happen, as that an intelligent and practical body of men should be permanently poor. Property and labor in different classes are essentially antagonistic; but property and labor in the same class are essentially fraternal. The people of Massachusetts have, in some degree, appreciated the truth, that the unexampled prosperity of the State — its comfort, its competence, its general intelligence and virtue — is attributable to the education, more or less perfect, which all its people have received: but are they sensible of a fact equally important; namely, that it is to this same education that two-thirds of the people are indebted for not being to-day the vassals of as severe a tyranny, in the form of capital, as the lower classes of Europe are bound to in the form of brute force?

Education, then, beyond all other devices of human origin, is the great equalizer of the conditions of men, — the balance-wheel of the social machinery. I do not here mean that it so elevates the moral nature as to make men disdain and abhor the oppression of their fellow-men. This idea pertains to another of its attributes. But I mean that it gives each man the independence and the means by which he can resist the selfishness of other men. It does better than to disarm the poor of their hostility towards the rich: it prevents being poor. Agrarianism is the revenge of poverty against wealth. The wanton destruction of the property of others — the burning of hay-ricks and corn-ricks, the demolition of machinery because it supersedes hand-labor, the sprinkling of vitriol on rich dresses — is only agrarianism run mad. Education prevents both the revenge and the madness. On the other hand, a fellow-feeling for one's class or caste is the common instinct of hearts not wholly sunk in selfish regards for person or for family. The spread of edu-

cation, by enlarging the cultivated class or caste, will open a wider area over which the social feelings will expand; and, if this education should be universal and complete, it would do more than all things else to obliterate factitious distinctions in society.

The main idea set forth in the creeds of some political reformers, or revolutionizers, is, that some people are poor *because* others are rich. This idea supposes a fixed amount of property in the community, which by fraud or force, or arbitrary law, is unequally divided among men; and the problem presented for solution is, how to transfer a portion of this property from those who are supposed to have too much to those who feel and know that they have too little. At this point, both their theory and their expectation of reform stop. But the beneficent power of education would not be exhausted, even though it should peaceably abolish all the miseries that spring from the co-existence, side by side, of enormous wealth and squalid want. It has a higher function. Beyond the power of diffusing old wealth, it has the prerogative of creating new. It is a thousand times more lucrative than fraud, and adds a thousand-fold more to a nation's resources than the most successful conquests. Knaves and robbers can obtain only what was before possessed by others. But education creates or develops new treasures,— treasures not before possessed or dreamed of by any one.

Had mankind been endowed with only the instincts and faculties of the brute creation, there are hundreds of the irrational tribes to which they would have been inferior, and of which they would have been the prey. Did they, with other animals, roam a common forest, how many of their fellow-tenants of the wood would overcome them by superior force, or outstrip them by greater fleetness, or circumvent them by a sharper cunning! There are but few of the irrational tribes whose bodies are not better provided with the means of defence or attack than is the body of a man. The claws and canine teeth of the lion and of the whole tiger family, the beak and talons of the eagle and the vulture, the speed of the deer and of other timid

races, are means of assault or of escape far superior to any we possess; and all the power which we have, like so many of the reptile and insect classes, of secreting a deadly venom, either for protection or for aggression, has relation to moral venom, and not to physical.

In a few lines, nowhere surpassed in philosophic strength and beauty, Pope groups together the remarkable qualities of several different races of animals, — the strength of one class, the genial covering of another, the fleetness of a third. He brings vividly to our recollection the lynx's vision of excelling keenness, the sagacity of the hound that reads a name or a sign in the last vanishing odor of a footprint, the exquisite fineness of the spider's touch, and that chemical nicety by which the bee discriminates between honey and poison in the same flower-cup. He then closes with an interrogatory, which has human reason both for its subject and its object: —

> "The powers of all subdued by thee alone:
> *Is not thy reason all these powers in one?*"

When Pope, now a little more than a century ago, mingled these beauties with his didactic strains, he had no conception, the world at that time had no conception, of other powers and properties, infinitely more energetic and more exhaustless than all which the animal races possess, to which the reason of man is an equivalent. It was not then known that God had endued the earth and the elements with energies and activities as much superior to those which animals or men possess as the bulk and frame of the earth itself exceeds their diminutive proportions. It was not then known that the earth is a great reservoir of powers, and that any man is free to use any quantity of them if he will but possess himself of the key of knowledge, — the only key, but the infallible one, by which to unlock their gates. At that time, if a philosopher wished to operate a mechanical toy, he could lift or pump a few gallons of water for a moving-power: but it was not understood that Nature, by the processes of evaporation and condensation, is constantly lifting up into

the sky, and pouring back upon the earth, all the mass of waters that flow in all the rivers of the world; and that, in order to perform the work of the world, the weight of all these waters might be used again and again in each one of their perpetual circuits.* The power-press and the power-loom, the steamboat and the locomotive, the paper-machine and the telegraph, were not then known. All these instruments of human comfort and aggrandizement, and others almost innumerable, similar to them, are operated by the energies and the velocities of Nature; and, had Pope grouped together all the splendid profusion and prodigality of her powers, he might still have appealed to man, and said, —

"Is not thy reason all these powers in one?"

To the weight of waters, the velocity of winds, the expansive force of heat, and other kindred agencies, any man may go, and he may draw from them as much as he pleases without money and without price: or rather, I should say, any educated man may go; for Nature flouts and scorns, and seems to abhor, an ignorant man. She drowns him, and consumes him, and tears him in pieces, if he but ventures to profane with his touch her divinely-wrought machinery.

Now, these powers of Nature, by being enlisted in the service of man, ADD to the wealth of the world, — unlike robbery or slavery or agrarianism, which aim only at the appropriation, by one man or one class, of the wealth belonging to another man or class. One man, with a Foudrinier, will make more paper in a twelvemonth than all Egypt could have made in a hundred years during the reign of the Ptolemies. One man, with a power-press, will print books faster than a million of scribes could copy them before the invention of printing. One man, with an iron-foundery, will make more utensils or machinery than Tubal-Cain could have made had he worked

* The waters of the Blackstone River, which flows partly in Massachusetts, and partly in Rhode Island, are used for driving mills, twenty-five times over, in a distance of less than forty miles.

diligently till this time.* And so in all the departments of mechanical labor, in the whole circle of the useful arts. These powers of Nature are able to give to all the inhabitants of the earth, not merely shelter, covering, and food, but all the means of refinement, embellishment, and mental improvement. In the most strict and literal sense, they are bounties which God gives for proficiency in knowledge.

The above ideas are beginning to be pretty well understood by all men of respectable intelligence. I have adverted to them, not so much on their own account, as by way of introduction or preface to two or three considerations, which certainly are not understood, or not appreciated, as they deserve to be.

It is a remarkable fact, that human progress, even in regard to the worldly interests of the race, did not begin with those improvements which are most closely allied to material prosperity. One would have supposed, beforehand, that improvements would commence with the near rather than with the remote. Yet mankind had made great advances in astronomy, in geometry, and other mathematical sciences; in the writing of history, in oratory, and in poetry: it is supposed by many to have reached the highest point of yet attained perfection in painting and in sculpture, and in those kinds of architecture which may be called regal or religious, centuries before the great mechanical discoveries and inventions which now bless the world were brought to light. And the question has often forced itself upon reflecting minds, why there was this preposterousness, this inversion of what would appear to be the natural order of progress. Why was it, for instance, that men should have learned the courses of the stars, and the revolutions of the planets, before they found out how to make a good wagon-wheel? Why was it that they built the Parthenon and the Colosseum before they knew how to construct a comfortable, healthful

* In 1740, the whole amount of iron made in England and Wales was seventeen thousand tons; in 1840, it was more than a million tons, notwithstanding all that had been manufactured and accumulated in the intervening century. What would a Jewish or a Roman artificer have said to an annual product of a million tons of iron?

dwelling-house? Why did they construct the Roman aqueducts before they constructed a saw-mill? Or why did they achieve the noblest models in eloquence, in poetry, and in the drama, before they invented movable types? I think we have now arrived at a point where we can unriddle this enigma. *The labor of the world has been performed by ignorant men*, by classes doomed to ignorance from sire to son, by the bondmen and bond-women of the Jews, by the helots of Sparta, by the captives who passed under the Roman yoke, and by the villeins and serfs and slaves of more modern times. The masters — the aristocratic or patrician orders — not only disdained labor for themselves and their children, which was one fatal mistake, but they supposed that knowledge was of no use to a laborer, which was a mistake still more fatal. Hence, ignorance, for almost six thousand years, has gone on plying its animal muscles, and dropping its bloody sweat, and never discovered any way, nor dreamed that there was any way, by which it might accomplish many times more work with many times less labor. And yet nothing is more true than that an ignorant man will toil all his life long, moving to and fro within an inch of some great discovery, and will never see it. All the elements of a great discovery may fall into his hands, or be thrust into his face; but his eyes will be too blind to behold it. If he is a slave, what motive has he to behold it? Its greater profitableness will not redound to his benefit; for another stands ready to seize all the gain. Its abridgment of labor will not conduce to his ease; for other toils await him. But the moment an intelligent man applies himself to labor, and labors for his own benefit or for that of his family, he begins to inquire whether the same task cannot be performed with a less expenditure of strength, or a greater task with an equal expenditure. He makes his wits save his bones. He finds it to be easier to think than to work; nay, that it is easier both to think and work than to work without thinking. He foresees a prize as the reward of successful effort; and this stimulates his brain to deep contrivance, as well as his arms to rapid motion. Taking,

for illustration, the result of an experiment which has been actually made, let us suppose this intelligent laborer to be employed in moving blocks of squared granite, each weighing 1080 pounds. To move such a block along the floor of a roughly-chiselled quarry requires a force equal to 758 pounds. An ignorant man, therefore, must employ and pay several assistants, or he can never move such a block an inch. But to draw the same block over a floor of planks will require a force of only 652 pounds. The expense of one assistant, therefore, might be dispensed with. Placed on a platform of wood, and drawn over the same floor, a draught of 606 pounds would be sufficient. By soaping the two surfaces of the wood, the requisite force would be reduced to 182 pounds. Placed on rollers three inches in diameter, a force equal to 34 pounds would be sufficient. Substituting a wooden for a stone floor, and the requisite force is 28 pounds. With the same rollers on a wooden platform, 22 pounds only would be required. And now, by the invention and use of locomotives and railroads, a traction or draught of between *three* and *four* pounds is found to be sufficient to move a body weighing 1080 pounds. Thus the amount of force necessary to remove the body is reduced about two hundred times. Now, take away from these steps the single element of intelligence, and each improvement would have been impossible. The ignorant man would never have discovered how nearly synonymous are freight and friction.

If a savage will learn how to swim, he can fasten a dozen pounds' weight to his back, and transport it across a narrow river or other body of water of moderate width. If he will invent an axe, or other instrument, by which to cut down a tree, he can use the tree for a float, and one of its limbs for a paddle, and can thus transport many times the former weight many times the former distance. Hollowing out his log, he will increase what may be called its tonnage, or rather its *poundage;* and, by sharpening its ends, it will cleave the water both more easily and more swiftly. Fastening several trees together, he makes a raft, and thus increases the buoyant

power of his embryo water-craft. Turning up the ends of small poles, or using knees of timber instead of straight pieces, and grooving them together, or filling up the interstices between them in some other way, so as to make them water-tight, he brings his rude raft literally into *ship-shape*. Improving upon hull below and rigging above, he makes a proud merchantman, to be wafted by the winds from continent to continent. But even this does not content the adventurous naval architect. He frames iron arms for his ship; and, for oars, affixes iron wheels, capable of swift revolution, and stronger than the strong sea. Into iron-walled cavities in her bosom he puts iron organs of massive structure and strength, and of cohesion insoluble by fire. Within these he kindles a small volcano; and then, like a sentient and rational existence, this wonderful creation of his hands cleaves oceans, breasts tides, defies tempests, and bears its living and jubilant freight around the globe. Now, take away intelligence from the ship-builder, and the steamship — that miracle of human art — falls back into a floating log; the log itself is lost; and the savage swimmer, bearing his dozen pounds on his back, alone remains.

And so it is, not in one department only, but in the whole circle of human labors. The annihilation of the sun would no more certainly be followed by darkness than the extinction of human intelligence would plunge the race at once into the weakness and helplessness of barbarism. To have created such beings as we are, and to have placed them in this world without the light of the sun, would be no more cruel than for a government to suffer its laboring classes to grow up without knowledge.

In this fact, then, we find a solution of the problem that so long embarrassed inquirers. The reason why the mechanical and useful arts, — those arts which have done so much to civilize mankind, and which have given comforts and luxuries to the common laborer of the present day, such as kings and queens could not command three centuries ago, — the reason why these arts made no progress, and until recently, indeed,

can hardly be said to have had any thing more than a beginning, is, that the labor of the world was performed by ignorant men. As soon as some degree of intelligence dawned upon the workman, then a corresponding degree of improvement in his work followed. At first, this intelligence was confined to a very small number, and therefore improvements were few; and they followed each other only after long intervals. They uniformly began in the nations and among the classes where there was most intelligence. The middle classes of England, and the people of Holland and Scotland, have done a hundred times more than all the Eastern hemisphere besides. What single improvement in art, or discovery in science, has ever originated in Spain, or throughout the vast empire of the Russias? But just in proportion as intelligence — that is, education — has quickened and stimulated a greater and a greater number of minds, just in the same proportion have inventions and discoveries increased in their wonderfulness, and in the rapidity of their succession. The progression has been rather geometrical than arithmetical. By the laws of Nature, it must be so. If, among ten well-educated children, the chance is that at least one of them will originate some new and useful process in the arts, or will discover some new scientific principle, or some new application of one, then, among a hundred such well-educated children, there is a moral certainty that there will be more than ten such originators or discoverers of new utilities; for the action of the mind is like the action of fire. One billet of wood will hardly burn alone, though dry as suns and north-west winds can make it, and though placed in the range of a current of air; ten such billets will burn well together; but a hundred will create a heat fifty times as intense as ten, will make a current of air to fan their own flame, and consume even greenness itself.

For the creation of wealth, then, — for the existence of a wealthy people and a wealthy nation, — intelligence is the grand condition. The number of improvers will increase as the intellectual constituency, if I may so call it, increases. In former

times, and in most parts of the world even at the present day, not one man in a million has ever had such a development of mind as made it possible for him to become a contributor to art or science. Let this development precede, and contributions, numberless, and of inestimable value, will be sure to follow. That political economy, therefore, which busies itself about capital and labor, supply and demand, interest and rents, favorable and unfavorable balances of trade, but leaves out of account the element of a widespread mental development, is nought but stupendous folly. The greatest of all the arts in political economy is to change a consumer into a producer; and the next greatest is to increase the producer's producing power, — an end to be directly attained by increasing his intelligence. For mere delving, an ignorant man is but little better than a swine, whom he so much resembles in his appetites, and surpasses in his powers of mischief.

But there is a class of persons who are not unwilling to concede the advantages which education has over ignorance, both in the more rapid and perfect performance of all kinds of labor, and in the creation of all those mechanical instruments through which Nature stands ready to do the work of the world: but, while they acknowledge all this, they seem to think that the argument in favor of knowledge has lost much of its force, because mechanical ingenuity and scientific discovery must have nearly reached the outermost limit of possible advancement; that either the powers of Nature are exhausted, or human genius is in its decrepitude. The past achievements of the mind excite their admiration, but not their hope. They are regarded as the measure of what man can perform, but not as the promise of what he is yet to perform. They are accepted, not as a little earnest-money, but as full payment.

Now, the view which I am constrained to take of the history and destiny of man is exactly the contrary of this one. I hold all past achievements of the human mind to be rather in the nature of prophecy than of fulfilment, — the first-fruits of the beneficence of God in endowing us with the faculties of per-

ception, comparison, calculation, and causality, rather than the full harvest of their eventual development. For look at the magnificent creation into which we have been brought, and at the adaptation of our faculties to understand, admire, and use it. All around us are works worthy of an infinite God; and we are led, by irresistible evidence, to believe, that, just so far as we acquire his knowledge, we shall be endued with his power. From history and from consciousness, we find ourselves capable of ever-onward improvement: and therefore it seems to be a denial of first principles — it seems no better than impiety — to suppose that we shall ever become such finished scholars, that the works of the All-wise will have no new problem for our solution, and will, therefore, be able to teach us no longer. Nor is it any less than impiety to suppose that we shall ever so completely enlist the powers of Nature in our service, that exhausted Omnipotence can reward our industry with no further bounties. This would be to suppose that we shall arrive at a period when our active and progressive natures will become passive and stationary; when we shall have nothing to do but to sit in indolent and inglorious contemplation of past achievements; and when, all aspirations having been lost in fruition, we shall have outlived the joys of hope and the rewards of effort, and no new glories will beckon us onward to new felicities.

Neither our faculties, nor their spheres of action, seem to have been projected on any such narrow plan. Ever-expanding powers are within us; eternity lies before us; and an Infinite Being, amidst his works, is the adorable object of these faculties throughout this eternity. These, no height of attainment which our powers will ever reach, and no length of duration to which the cycles of eternity shall ever have run, will enable us to exhaust or fully to comprehend. To affirm the contrary would be to affirm that our finite minds can embrace and encircle their infinite Author, as his mind embraces and encircles ours. Our relation to our Maker, then, is a moral phase of the problem of the asymptote, — a line forever approaching a point which it can never reach.

And, if we believe in our individual capacity for indefinite improvement, why should we doubt the capacity of the race for continued progress as long as it dwells upon the earth? Can man, "by searching, find out God" in a physical sense any more than in a moral one? or can all the generations of the race, by the longest and the profoundest investigations, ever fathom the depths of eternal wisdom and power as they are incorporated into this earthly frame? However far, then, science and art may push their explorations, there will always be a frontier bounding their advances; there will always be a *terra incognita* beyond the regions they have surveyed, — beyond the utmost verge of the horizon which the eye can see from the topmast pinnacle of existing discoveries. Each new adventurer can gain new trophies by penetrating still deeper into the illimitable solitudes where alone Omnipotence dwells and works. The most perfect instrument which the brightest genius of any age may ever construct will be excelled by another instrument, made after a higher ideal of perfection by the brighter genius of a succeeding age. The most rapid processes of art known to any generation will be accelerated in the generation that shall follow it, and science will be found not only a plant of perennial growth, but, in each succeeding age, it will bear blossoms of a more celestial splendor, and fruits of beneficence unknown before.

Astronomers now tell us, that the sun is not a stationary orb, fixed and immovable at one place in the heavens, as, since the days of Copernicus, it had been supposed to be, but that, in some far-off region of immensity, at a distance wholly inconceivable by us, there is a central point of attraction, around which our sun, with its attendant train of planets, is performing a magnificent revolution; just as, within their narrow orbits, the planets of our local system are revolving about the sun. They tell us, further, that the circumference of this solar orbit is so vast, that, during the six thousand years which are supposed to have elapsed since the creation of Adam, the sun has not yet travelled through so much as one of the three hun-

dred and sixty degrees that make up its mighty circle; not through so much as one of those hundreds of astronomical spaces through which it must move before it will complete a single revolution. What number of these immense circuits the earth is destined to perform, or what part even of a single revolution it will accomplish, before it will meet with some such catastrophe as will unfit it to be the abode of a race like ours, we know not; but we have no reason to believe, even if the mighty years of the solar revolutions should equal the number of our terrestrial years since the creation of Adam, that the race will ever have exhausted the earth of all the latent capacities for ministering to the improvement and happiness of man with which God has endued it. No invention or discovery will ever be made, upon which the author can stand, and lift up his proud voice, and exclaim, "*I have found the last miracle of the miracle-working God!*"

Now, so far as these natural and yet undeveloped resources of the earth are hereafter to be brought to light, and made the ministering servants of human welfare, we suppose they are to be brought to light by the exercise of the human faculties, in the same way that all the scientific and mechanical improvements of past times have been brought to light, — that is, by education. And the greater the proportion of minds in any community which are educated, and the more thorough and complete the education which is given them, the more rapidly, through these sublime stages of progress, will that community advance in all the means of enjoyment and elevation, and the more will it outstrip and outshine its less educated neighbors. The advance-guard of education and intelligence will gather the virgin wealth of whatever region they explore, as the reward of their knowledge, just as the Portuguese reaped the great harvest of the riches of India as their reward for discovering the new route to India.

I know that it may be said, and said, too, not without a certain measure of truth, that when a more intelligent community has made a discovery in science, or devised or perfected the

processes of any art, a less intelligent community by its side may adopt and copy them, and thus make the improvements their own by possession, though the invention belonged to another. After a bold navigator has opened a new channel of commerce, and while he is gathering the first-fruits of his sagacity, the stupid or the predatory may follow in his wake, and share the gains of his enterprise. Dr. Franklin may discover the uses of the lightning-rod; but when once discovered, and the manner of its use exhibited, any half-taught son of Vulcan can make and erect one by copying the given model. When a school-boy of New England has invented the cotton-gin, or perfected cotton machinery, the slaves of the South, stupid and ignorant as cattle, "according to the form of the statute in such cases made and provided," can operate them with a greater or less degree of success and profit. But there are two considerations which show how inferior the condition of the aping community must always be to that of the originating one.

In the first place, all copying is in the nature of empiricism. The copyist operates blindly, and not on principle; and therefore he is constantly exposed to failure. In untried emergencies, he never knows what to do, for the light of example shines only in one direction; while it is the very nature of principle, like its divine Author, to circumfuse its beams, and so to leave no darkness in any direction.

And, in the second place, even supposing the aping community to be able, after long delays and toils, to equal the originating one, still, before the period shall have elapsed which the pupil will require for studying out or copying the old lesson, his master will have studied out some new one; will have discovered some new improvement, diffusive of new utility, and radiant with new beauty: so that the distance will be kept as great as ever between him and the learner.

The slave States of this Union may buy cotton machinery made by the intelligent mechanics of the free States, and they may train their slaves to work it with more or less skill; but

should they succeed ever so well, should they eventually become able to meet their entire home demand, it will nevertheless be true, that, in the mean time, the new wants and refinements generated by the progress of the age will demand some new fabric, requiring for its manufacture either more ingeniously-wrought machinery, or greater skill in the operator: and thus will the more educated community forever keep ahead of the less educated one. The progress of mankind may be compared to an ascending spiral. In moving upward along this spiral, the less intelligent community will see the more intelligent one at a point above its head. It will labor on to overtake it, and, making another toilsome circuit, will at length reach the place where the victor had been seen; but, lo! the victor is not there: he, too, has made a circuit along the ascending curve, and is still far aloft, above the head of his pursuer.

Another common idea is this: it is supposed that intelligence in workmen is relatively less important in agricultural labors than in the mechanic and manufacturing arts. The great agricultural staples of the country — corn, cotton, sugar, rice, and so forth — have been stigmatized, or at least characterized, as "coarser" products, and, therefore, requiring less skill and science for their culture and improvement than the fabrics of the loom and the workshop. This may be true; but I am by no means convinced of its truth. It seems to me that there is, as yet, no adequate proof that skill and science, if applied to agriculture, will not yield practical benefits as copious and as wonderful as any that have rewarded the mechanician or the artisan in any department of their labors. Why vegetable growths, so exquisite in their organization, animated by the mysterious principle of life, and so susceptive of all the influences of climate, whether good or ill, — why these should be called "coarser" than iron-ore or other unorganized metals, or any kind of wealth that is found in mines; or why cotton or flax, wool or leather, wood or grain, should be denominated "coarser" before they have been deprived of the principle of life than after

it, and before they have lost the marvellous power of assimilating inorganic matter to their own peculiar substance, — it is not easy to perceive. May it not yet be found that a better knowledge of the laws that govern vegetable growth; a better knowledge of the properties and adaptations of different soils; a better knowledge of the conditions of fructification and germination, and of the mysterious chemistry that determines the quality of texture, color, flavor, and perfume; a better knowl- of the uncombined gases, and of the effect of light, heat, electricity, and other imponderable agents, upon the size, rapidity, and variegation of vegetable growths, — in fine, a better knowledge of vegetable physiology, and of that, too, which may be called vegetable pathology, — will redeem the whole circle of agricultural occupations from the stigma of requiring less intelligent cultivators than are required for other pursuits, and thus supply a new and irresistible argument in favor of diffusing a vastly-increased amount of knowledge among our free field-laborers and our rural population generally? The marvellous improvements which have been made under the auspices of the Massachusetts Horticultural Society, in horticulture, floriculture, and pomology, already betoken such a result.*

Now, it is in these various ways that all the means of human subsistence, comfort, improvement, or what, in one word, we call wealth, are created, — additional wealth, new wealth, not another man's earnings, not another nation's treasures or lands, tricked away by fraud or wrested by force, but substantially, and for all practical purposes, knowledge-created, mind-created wealth; as much so as though we had been endued with a miraculous power of turning a granite quarry into a city at a word, or a wilderness into cultivated fields, or of commanding harvests to ripen in a day. To see a community acquiring and redoubling its wealth in this way; enriching itself with-

* As an illustration of the value of knowledge in agricultural pursuits, it may be mentioned, that the researches and discoveries by M. Meneville, in regard to the fly which was lately so destructive to the olive in the south of France, have increased the annual product of this fruit almost a million of dollars' worth. When would an ignorant man, or a slave, have made such a discovery?

out impoverishing others, without despoiling others, — is it not a noble spectacle? And will not the community that gains its wealth in this way, ten times faster than any robber-nation ever did by plunder, — will not such a community be a model and a pattern for the nations, a type of excellence to be admired and followed by the world? Has Massachusetts no ambition to win the palm in so glorious a rivalry?

But suppose that Massachusetts, notwithstanding her deplorable inferiority in all natural resources as compared with other States, should be content to be their equal only in the means of education, and in the development of the intelligence of her present children and her future citizens, down, down to what a despicable depth of inferiority would she suddenly plunge! Her ancient glory would become dim. No historian, no orator, no poet, would rise up among her children. Her sons would cease, as now, to fill chairs in the halls of learning in more than half the States of the Union. Her jurists would no longer expound the laws of Nature, of nations, and of States, to guide the judicial tribunals of the country. Her skilled artisans and master-mechanics would not be sought for, wherever, throughout the land, educated labor is wanted. Her ship-captains would be driven home from every ocean by more successful competitors. At home, a narrowing in the range of thought and action, a lowering of the tone of life and enterprise, a straitening in the means of living and of culture, a sinking in spirit and in all laudable and generous ambitions, the rearing of sons to obscurity and of daughters to vulgarity, would mark the incoming of a degenerate age, — an age too ignorant to know its own ignorance, too shameless to mourn its degradation, and too spiritless even to rise with recuperative energy from its guilty fall. But little less disastrous would it be to stop where we now are, instead of pressing onward with invigorated strength to a further goal. What has been done is not the fulfilment or consummation of our work. It only affords better vantage-ground from which our successors can start anew in a nobler career of improvement. And if there is any

one thing for which the friends of humanity have reason to join in a universal song of thanksgiving to Heaven, it is that there is a large and an increasing body of people in Massachusetts who cannot be beguiled or persuaded into the belief that our common schools are what they may and should be; and who, with the sincerest good-will and warmest affections towards the higher institutions of learning, are yet resolved that the education of the people at large — of the sons and daughters of farmers, mechanics, tradesmen, operatives, and laborers of all kinds — shall be carried to a point of perfection indefinitely higher than it has yet reached.*

POLITICAL EDUCATION.

The necessity of general intelligence, — that is, of education (for I use the terms as substantially synonymous, because general intelligence can never exist without general education, and general education will be sure to produce general intelligence), —

* In the letter of the Hon. Abbott Lawrence, making a donation of fifty thousand dollars for the purpose of founding a scientific school at Cambridge (to which he has since added fifty thousand dollars more), the following expression occurs: "Elementary education appears to be well provided for in Massachusetts." And in the Memorial in behalf of the three colleges, — Harvard, Amherst, and Williams, — presented to the legislature in January, 1848, and signed by each of the three presidents of those institutions, it is said, "The provision [in Massachusetts] for elementary education . . . seems to be all that can be desired, or that can be advantageously done by the legislature." The average salaries of female teachers throughout the State, at the time when these declarations were made, was only $8.55 a month (exclusive of board), which, as the average length of the schools was only eight months, would give to this most faithful and meritorious class of persons but $68.40 a year. The whole value of the apparatus in all the schools of the State was but $23,826; and the whole number of volumes in their libraries was only 91,539, or an average of but twenty-five volumes for each school. In accordance with the prayer of the Memorial, the Committee on Education reported a bill, making a grant of half a million of dollars to the colleges. The House of Representatives, after maturely considering the bill, changed the destination of the money from the colleges to the common schools, and then passed it. The donation of Mr. Lawrence will be highly beneficial to the few hundreds of students who will have the direct enjoyment of his munificence; and, through them, it will also benefit the State. So, too, would the contemplated grant to the colleges. Thus far, it is believed, all liberal minds will agree. But what is needed is the universal prevalence of the further idea, that there are two hundred thousand children in the State, each one of whom would be far more than proportionally benefited by the expenditure for their improved education of one-tenth part of sums so liberal.

the necessity of general intelligence under a republican form of government, like most other very important truths, has become a very trite one. It is so trite, indeed, as to have lost much of its force by its familiarity. Almost all the champions of education seize upon this argument first of all, because it is so simple as to be understood by the ignorant, and so strong as to convince the sceptical. Nothing would be easier than to follow in the train of so many writers, and to demonstrate by logic, by history, and by the nature of the case, that a republican form of government, without intelligence in the people, must be, on a vast scale, what a mad-house, without superintendent or keepers, would be on a small one, — the despotism of a few succeeded by universal anarchy, and anarchy by despotism, with no change but from bad to worse. Want of space and time alike forbid me to attempt any full development of the merits of this theme; but yet, in the closing one of a series of reports partaking somewhat of the nature of a summary of former arguments, an omission of this topic would suggest to the comprehensive mind the idea of incompleteness.

That the affairs of a great nation or state are exceedingly complicated and momentous, no one will dispute. Nor will it be questioned that the degree of intelligence that superintends should be proportioned to the magnitude of the interests superintended. He who scoops out a wooden dish needs less skill than the maker of a steam-engine or a telescope. The dealer in small wares requires less knowledge than the merchant who exports and imports to and from all quarters of the globe. An ambassador cannot execute his functions with the stock of attainments or of talents sufficient for a parish clerk. Indeed, it is clear that the want of *adequate* intelligence — of intelligence *commensurate* with the nature of the duties to be performed — will bring ruin or disaster upon any department. A merchant loses his intelligence, and he becomes a bankrupt. A lawyer loses his intelligence, and he forfeits all the interests of his clients. Intelligence abandons a physician, and his patients die with more than the pains of natural dissolution. Should

judges upon the bench be bereft of this guide, what havoc would be made of the property and the innocence of men! Let this counsellor be taken from executive officers, and the penalties due to the wicked would be visited upon the righteous, while the rewards and immunities of the righteous would be bestowed upon the guilty. And so, should intelligence desert the halls of legislation, weakness, rashness, contradiction, and error would glare out from every page of the statute-book. Now, as a republican government represents almost all interests, whether social, civil, or military, the necessity of a degree of intelligence adequate to the due administration of them all is so self-evident, that a bare statement is the best argument.

But, in the possession of this attribute of intelligence, elective legislators will never far surpass their electors. By a natural law, like that which regulates the equilibrium of fluids, elector and elected, appointer and appointee, tend to the same level. It is not more certain that a wise and enlightened constituency will refuse to invest a reckless and profligate man with office, or discard him if accidentally chosen, than it is that a foolish or immoral constituency will discard or eject a wise man. This law of assimilation between the choosers and the chosen results, not only from the fact that the voter originally selects his representative according to the affinities of good or of ill, of wisdom or of folly, which exist between them, but if the legislator enacts or favors a law which is too wise for the constituent to understand, or too just for him to approve, the next election will set him aside as certainly as if he had made open merchandise of the dearest interests of the people by perjury and for a bribe. And if the infinitely Just and Good, in giving laws to the Jews, recognized the "hardness of their hearts," how much more will an earthly ruler recognize the baseness or wickedness of the people when his heart is as hard as theirs! In a republican government, legislators are a mirror reflecting the moral countenance of their constituents. And hence it is, that the establishment of a republican government, without well-appointed and efficient means for the universal education

of the people, is the most rash and fool-hardy experiment ever tried by man. Its fatal results may not be immediately developed, they may not follow as the thunder follows the lightning; for time is an element in maturing them, and the calamity is too great to be prepared in a day: but, like the slow-accumulating avalanche, they will grow more terrific by delay, and at length, though it may be at a late hour, will overwhelm with ruin whatever lies athwart their path. It may be an easy thing to make a republic; but it is a very laborious thing to make republicans; and woe to the republic that rests upon no better foundations than ignorance, selfishness, and passion! Such a republic may grow in numbers and in wealth. As an avaricious man adds acres to his lands, so its rapacious government may increase its own darkness by annexing provinces and states to its ignorant domain. Its armies may be invincible, and its fleets may strike terror into nations on the opposite sides of the globe at the same hour. Vast in its extent, and enriched with all the prodigality of Nature, it may possess every capacity and opportunity of being great and of doing good. But, if such a republic be devoid of intelligence, it will only the more closely resemble an obscene giant who has waxed strong in his youth, and grown wanton in his strength; whose brain has been developed only in the region of the appetites and passions, and not in the organs of reason and conscience; and who, therefore, is boastful of his bulk alone, and glories in the weight of his heel, and in the destruction of his arm. Such a republic, with all its noble capacities for beneficence, will rush with the speed of a whirlwind to an ignominious end; and all good men of after-times would be fain to weep over its downfall, did not their scorn and contempt at its folly and its wickedness repress all sorrow for its fate.

As the merits of this subject cannot even be sketched on the present occasion, I will confine myself to a single illustration, showing how an unenlightened people will permit, and sometimes will even require, that their government should injure their own interests.

A universal function of government — one that has pertained to every government that has ever existed, and doubtless will continue to do so while the world stands — is the collection of revenues. The government must be maintained; but it has no power of earning or of creating wealth to defray its own expenses. It must therefore be supported by revenues derived from the people.

In absolute despotisms, arbitrary exactions are made upon all the possessors of wealth, or upon all but a few excepted favorites. Where a pretence for such exactions is wanted, acts which are not crimes are declared to be criminal, so that the ruler may claim a forfeiture, or penalty, for the performance of deeds, which, before any tribunal of conscience or of justice, would be held innocent. *Ex post facto* laws are made; that is, laws which act backwards, and subject an act to punishment after the law, which was not punishable at the time it was done, — which might have been, indeed, not only guiltless, but laudable at the time of its performance.

Now, it must be obvious that such methods of raising revenue must have an almost annihilating effect upon the production of wealth; for no man will earn money beyond his immediate necessities, when the very fact of his acquisition only exposed him to pillage. When the richest men are worst plundered, poverty becomes the privilege. Intelligence, though it had been that of the Prince of Darkness, would have saved nations from this cause of poverty.

Governments less arbitrary have resorted to expedients for self-support scarcely less baneful to the general welfare. Among these are monopolies, — such as that, for instance, by which the Pacha of Egypt required all the cotton grown by his subjects to be sold to him at his own price, that he might resell it at an advanced one; or that by which the French king exercised the privilege of selling all the tobacco consumed in his kingdom, and then sold out the privilege to sell, at an enormous price. Some governments have derived a revenue from the sale of offices, even those which demand, for the fit dis-

charge of their duties, the highest talents and the purest integrity, — such as the judicial; and so have cared every thing for the amount of the bribe, and nothing for the fitness of the incumbent. In all such cases, the most vital and enduring interests of the community have been sacrificed to the incidental benefit of revenue, — a policy vastly more ruinous than that of the incendiary who burns a house that he may steal a shilling.

Even the freest and most enlightened governments have been guilty of similar improvidences and follies. The raising of revenue from licensed lotteries furnishes a signal illustration. For every unit of gain to the public treasury, by the levy of a tax on the sale of lottery-tickets, hundreds of loss are subtracted from the public wealth. For it is obvious, in the first place, that lotteries *create* no wealth. They add nothing to the aggregate of silver and gold belonging to a community, any more than they add to the number of its houses or the extent of its lands. They can do nothing more than to transfer one man's money to another man's pocket. Then they occupy the time of many individuals, who otherwise might be usefully employed in the creation or augmentation of the public wealth. Besides this, the expenses actually incurred by agencies, brokerage, advertisements, apparatus, and so forth, is not inconsiderable. It is also true, that the poorest class of people are usually the purchasers of lottery-tickets, — on the same principle that a man must first be drowning before he will catch at a straw, — and generally with the same result. Thus all the evils of poverty are aggravated by the loss of a part of its pittance. Then adventuring in this traffic substitutes hopes of gain, founded on chance, for the certainties of regular industry. The services of a laborer or an apprentice, of a journeyman mechanic or a clerk, with an undrawn lottery-ticket in his pocket, are hardly worth half-price; for how can any one work for a few shillings a day, while hope is jingling a bag of gold in his ears to be had for nothing? But, while the earnings of a ticket-holder are less, his expenditures are greater; for why should not a man who is

so soon to be rich anticipate a little the receipt of his fortune? It is on the same principle which leads a profligate heir to bind himself by post-obits. Is it said that none but a weak-minded man will be so confident of success as to be less industrious or less frugal after the purchase of a ticket than before, the answer is, that the fact of the purchase proves the weak-mindedness. A tempter of fortune may limit himself either to one or to any prescribed number of trials, and resolve, that, if unsuccessful, he will abide by the decisions of his luck, and never venture again; but such a man does not reflect that he will come out of the experiment a different man from what he was when he went into it. The state of his mind will be altered more than that of his purse; and he has no second uncorrupted will whose energies he can now use to restrain the back-sliding of the first. But suppose a man to meet with the misfortune of being what he calls fortunate; suppose him to draw a prize of fifty thousand dollars; and thus, without any valid consideration, or any moral right, to pick the pockets of five thousand persons of ten dollars each (and this, too, without the dexterity or sleight of hand of a common pickpocket), — yet it is proved by data derived from the widest observation, that the chances are fifty to one, that, while his unjust gains will only injure the losers, they will ruin himself. Take all these evils into consideration, and take into consideration, also, what is far more important than all these evils united, the impositions and the frauds which accompany the whole operation, and which often bear as great a proportion to the fair dealing as the blanks bear to the prizes, — take all these pecuniary, social, and moral mischiefs into account, and how is it possible for any intelligent legislator, for the sake of a little incidental revenue, ever to legalize an institution which destroys wealth by wholesale, and cankers the morals of entire classes of the people?

And yet, until within a few years, there was not a State in this whole Union whose legislature did not stand so low, not only in the scale of morals, but of political economy, as to

authorize lotteries. Sometimes they were granted for a paltry revenue to be paid into the treasury; sometimes to aid in the erection of public works, — to build a bridge, a canal, *or a church.** Just in proportion as intelligence has advanced, petitions for lotteries have been refused, and the sale of lottery-tickets interdicted by law; until now they are driven almost exclusively into the Southern and South-western States. There they await the dawning of that general enlightenment which common schools could so rapidly give, to be banished from the country forever.

On the clearest principles of morality and political economy, the licensing of houses for the sale of intoxicating drinks, of gaming-houses, and houses of ill-fame, for the ignominious purpose of raising a revenue out of the misery and licentiousness of men, stands even on a more unsound and criminal footing than legalizing the pest of lotteries. Yet all this is done, even at the present day, by legislators who would think it an indignity if they were denied an exalted place on the roll of enlightened, patriotic, and Christian men. Great Britain, for a series of years, has derived more than one-fourth part of all her enormous revenue from the various manufactures of malt, and sale of spirituous liquors, though every pound which has gone into the treasury from this source represented some stage in the terrible process by which sanity was turned into madness, or a well man into a sick beast. France, and even some parts of our own country, have exhibited hateful specimens of the other kinds of these incarnations of evil, — these devouring monsters, who have been permitted, for a fee, by the governments which should have protected their people, to stalk through society, and to inflict upon all its interests — body, soul, and estate — direr calamities than death itself.

The multiplication of oaths is another signal illustration of the fact, how prone incompetent legislators ever are to sacrifice the greater interest to the less, the spiritual to the outward, the

* When a church is built by a lottery, can there be any doubt which has the best side of the bargain, the Evil Spirit, or the Good?

enduring to the temporary. Adherence to truth is so necessary among men, that even the lowest instincts of self-interest will visit the falsifier with retribution, though honor and conscience should not. But the utterance of truth, very generally speaking, is considered more in the light of an obligation between man and man than as a due to Heaven; and there are many who would not hesitate to tell a falsehood, who would tremble at the commission of perjury. But governments, for some collateral and incidental benefit, — most generally for the purpose of securing themselves against fraud in the collection of revenues, — impose an oath upon men, not merely where the oath-taker is adversely interested, but where, from the nature of the case, he cannot certainly determine the truth of the statement to which he deposes. This leads to moral laxity, and relaxes laxity itself. Hence, in mercantile communities, there has arisen a class of oaths called "custom-house oaths," — an appellation which indicates that men swear, if not to what they know to be untrue, yet, at least, to what they do not know to be true. Often the oath is administered to persons who are under the strongest temptations to perjury, and where, too, the danger of detection is small. This is PERJURY MADE EASY; for the step is a short one between swearing to a thing as true, with only a general inference or supposition that it is so, and swearing to a known untruth.

Now, can any money compensate government for contaminating public morals? Or in a republic, which is a government of the people by the people, can they afford to barter their own integrity, in order to get a little of their own money, out of their own pockets, into their own public treasury, whence it is so soon to flow back into their own pockets again? Every legislator should be a political economist, and every voter should know at least the leading elements of political economy, and be able to understand their application to the affairs of life; but, surely, that political economy is a delusion and a cheat which does not hold the morals of the community as the primal element in its prosperity; and the prayer, "Lead us not into

temptation," is one which may be as appropriately addressed by a people to its rulers as by a frail and fallible mortal to his Maker.

I have now given a hasty review of a single class of errors — those pertaining to the collection of revenue — into which governments have fallen through a want of intelligence; through a want of such intelligence, it may be added, as any discreet and reflecting man would exercise in the management of his own affairs. And when will rulers be wiser than they have been? Never, until the people, to whom they are responsible, shall permit it and demand it. Never will wisdom preside in the halls of legislation, and its profound utterances be recorded on the pages of the statute-book, until common schools — or some other agency of equal power not yet discovered — shall create a more far-seeing intelligence, and a purer morality, than has ever yet existed among communities of men. Legislators, in the execution of their high guardianship over public interests, will never secure to the State even the greatest amount of wealth while they seek to obtain it at the price of morality. It is only when the virtue of the people is supremely cared for, that they will discover the comprehensive meaning of the Scripture, that godliness is profitable unto all things.

However elevated the moral character of a constituency may be, however well informed in matters of general science or history, yet they must, if citizens of a republic, understand something of the true nature and functions of the government under which they live. That any one, who is to participate in the government of a country when he becomes a man, should receive no instruction respecting the nature and functions of the government he is afterwards to administer, is a political solecism. In all nations, hardly excepting the most rude and barbarous, the future sovereign receives some training which is supposed to fit him for the exercise of the powers and duties of his anticipated station. Where, by force of law, the government devolves upon the heir while yet in a state of legal

infancy, some regency, or other substitute, is appointed to act in his stead until his arrival at mature age; and, in the mean time, he is subjected to such a course of study and discipline as will tend to prepare him, according to the political theory of the time and the place, to assume the reins of authority at the appointed age. If in England, or in the most enlightened European monarchies, it would be a proof of restored barbarism to permit the future sovereign to grow up without any knowledge of his duties, — and who can doubt that it would be such a proof? — then, surely, it would be not less a proof of restored or of never-removed barbarism amongst us to empower any individual to use the elective franchise without preparing him for so momentous a trust. Hence the Constitution of the United States, and of our own State, should be made a study in our public schools. The partition of the powers of government into the three co-ordinate branches, — legislative, judicial, and executive, — with the duties appropriately devolving upon each; the mode of electing or of appointing all officers, with the reasons on which it was founded; and, especially, the duty of every citizen, in a government of laws, to appeal to the courts for redress in all cases of alleged wrong, instead of undertaking to vindicate his own rights by his own arm; and, in a government where the people are the acknowledged sources of power, the duty of changing laws and rulers by an appeal to the ballot, and not by rebellion, — should be taught to all the children until they are fully understood.

Had the obligations of the future citizen been sedulously inculcated upon all the children of this Republic, would the patriot have had to mourn over so many instances where the voter, not being able to accomplish his purpose by voting, has proceeded to accomplish it by violence; where, agreeing with his fellow-citizens to use the machinery of the ballot, he makes a tacit reservation, that, if that machinery does not move according to his pleasure, he will wrest or break it? If the responsibleness and value of the elective franchise were duly appreciated, the day of our state and national elections would

be among the most solemn and religious days in the calendar. Men would approach them, not only with preparation and solicitude, but with the sobriety and solemnity with which discreet and religious-minded men meet the great crises of life. No man would throw away his vote through caprice or wantonness, any more than he would throw away his estate, or sell his family into bondage. No man would cast his vote through malice or revenge, any more than a good surgeon would amputate a limb, or a good navigator sail through perilous straits, under the same criminal passions.

But perhaps it will be objected, that the Constitution is subject to different readings, or that the policy of different administrations has become the subject of party strife; and, therefore, if any thing of constitutional or political law is introduced into our schools, there is danger that teachers will be chosen on account of their affinities to this or that political party, or that teachers will feign affinities which they do not feel in order that they may be chosen; and so each schoolroom will at length become a miniature political club-room, exploding with political resolves, or flaming out with political addresses, prepared by beardless boys in scarcely legible hand-writing and in worse grammar.

With the most limited exercise of discretion, all apprehensions of this kind are wholly groundless. There are different readings of the Constitution, it is true; and there are partisan topics which agitate the country from side to side: but the controverted points, compared with those about which there is no dispute, do not bear the proportion of one to a hundred. And, what is more, no man is qualified, or can be qualified, to discuss the disputable questions, unless previously and thoroughly versed in those questions about which there is no dispute. In the terms and principles common to all, and recognized by all, is to be found the only common medium of language and of idea by which the parties can become intelligible to each other; and there, too, is the only common ground whence the arguments of the disputants can be drawn.

It is obvious, on the other hand, that, if the tempest of political strife were to be let loose upon our common schools, they would be overwhelmed with sudden ruin. Let it be once understood that the schoolroom is a legitimate theatre for party politics, and with what violence will hostile partisans struggle to gain possession of the stage, and to play their parts upon it! Nor will the stage be the only scene of gladiatorial contests. These will rage in all the avenues that lead to it. A preliminary advantage, indispensable to ultimate success, will be the appointment of a teacher of the true faith. As the great majority of the schools in the State are now organized, this can be done only by electing a prudential committee, who will make what he calls political soundness paramount to all other considerations of fitness. Thus, after petty skirmishings among neighbors, the fierce encounter will begin in the district's primary assembly, — in the schoolroom itself. This contest being over, the election of the superintending or town's committee must be determined in the same way; and this will bring together the combustibles of each district, to burn with an intenser and a more devouring flame in the town-meeting. It is very possible, nay, not at all improbable, that the town may be of one political complexion, while a majority of the districts are of the opposite. Who shall moderate the fury of these conflicting elements when they rage against each other? and who shall save the dearest interests of the children from being consumed in the fierce combustion? If parents find that their children are indoctrinated into what they call political heresies, will they not withdraw them from the school? and, if they withdraw them from the school, will they not resist all appropriations to support a school from which they derive no benefit?

But, could the schools themselves survive these dangers for a single year, it would be only to encounter others still more perilous. Why should not the same infection that poisons all the relations of the schoolroom spread itself abroad, and mingle with all questions of external organization and arrange-

ment? Why should not political hostility cause the dismemberment of districts already too small? or, what would work equal injury, prevent the union of districts whose power of usefulness would be doubled by a combination of their resources? What better could be expected than that one set of school-books should be expelled, and another introduced, as they might be supposed, however remotely, to favor one party or the other, or as the authors of the books might belong to one party or the other? And who could rely upon the reports, or even the statistics, of a committee chosen by partisan votes, goaded on by partisan impulses, and responsible to partisan domination, and this, too, without any opportunity of control or check from the minority? Nay, if the schools could survive long enough to meet the crisis, why should not any and every measure be taken, either to maintain an existing political ascendency, or to recover a lost one, in a school-district, or in a town, which has even been taken by unscrupulous politicians to maintain or to recover an ascendency at the polls? Into a district, or into a town, voters may be introduced from abroad to turn the scale. An employer may dismiss the employed for their refusal to submit to his dictation, or make the bread that is given to the poor man's children perform the double office of payment for labor to be performed, and of a bribe for principle to be surrendered. And beyond all this, if the imagination can conceive any thing more deplorable than this, what kind of political doctrines would be administered to the children amid the vicissitudes of party domination, — their alternations of triumph and defeat? This year, under the ascendency of one side, the Constitution declares one thing; and commentaries, glosses, and the authority of distinguished names, all ratify and confirm its decisions. But Victory is a fickle goddess. Next year, the vanquished triumph; and Constitution, gloss, and authority make that sound doctrine which was pestilent error before, and that false which was true. Right and wrong have changed sides. The children must now join in chorus to denounce what they had been taught to reverence before, and to

reverence what they had been taught to denounce. In the mean time, those great principles, which, according to Cicero, are the same at Rome and at Athens, the same now and forever, and which, according to Hooker, have their seat in the bosom of God, become the fittest emblems of chance and change.

Long, however, before this series of calamities would exhaust itself upon our schools, these schools themselves would cease to be. The ploughshare would have turned up their foundations. Their history would have been brought to a close, — a glorious and ascending history, until struck down by the hand of political parricide; then suddenly falling with a double ruin, — with death and with ignominy.

But, to avoid such a catastrophe, shall all teaching relative to the nature of our government be banished from our schools? and shall our children be permitted to grow up in entire ignorance of the political history of their country? In the schools of a republic, shall the children be left without any distinct knowledge of the nature of a republican government, or only with such knowledge as they may pick up from angry political discussions, or from party newspapers, from caucus speeches, or Fourth-of-July orations, — the Apocrypha of Apocrypha?

Surely, between these extremes, there must be a medium not difficult to be found. And is not this the middle course, which all sensible and judicious men, all patriots, and all genuine republicans, must approve? — namely, that those articles in the creed of republicanism which are accepted by all, believed in by all, and which form the common basis of our political faith, shall be taught to all. But when the teacher, in the course of his lessons or lectures on the fundamental law, arrives at a controverted text, he is either to read it without comment or remark; or, at most, he is only to say that the passage is the subject of disputation, and that the schoolroom is neither the tribunal to adjudicate, nor the forum to discuss it.

Such being the rule established by common consent, and such the practice observed with fidelity under it, it will come to be universally understood that political proselytism is no function

of the school, but that indoctrination into matters of controversy between hostile political parties is to be elsewhere sought for, and elsewhere imparted. Thus may all the children of the Commonwealth receive instruction in all the great essentials of political knowledge, — in those elementary ideas without which they will never be able to investigate more recondite and debatable questions; thus will the only practicable method be adopted for discovering new truths, and for discarding, instead of perpetuating, old errors; and thus, too, will that pernicious race of intolerant zealots, whose whole faith may be summed up in two articles, — that they themselves are always infallibly right, and that all dissenters are certainly wrong, —be extinguished, — extinguished, not by violence, nor by proscription, but by the more copious inflowing of the light of truth.

MORAL EDUCATION.

Moral education is a primal necessity of social existence. The unrestrained passions of men are not only homicidal, but suicidal; and a community without a conscience would soon extinguish itself. Even with a natural conscience, how often has evil triumphed over good! From the beginning of time, wrong has followed right, as the shadow the substance. As the relations of men became more complex, and the business of the world more extended, new opportunities and new temptations for wrong-doing have been created. With the endearing relations of parent and child came also the possibility of infanticide and parricide; and the first domestic altar that brothers ever reared was stained with fratricidal blood. Following close upon the obligations to truth came falsehood and perjury, and closer still upon the duty of obedience to the divine law came disobedience. With the existence of private relations between men came fraud; and with the existence of public relations between nations came aggression, war, and slavery. And so, just in proportion as the relations of life became more numerous, and the interests of society more various and manifold, the range of

possible and of actual offences has been continually enlargiug. As for every new substance there may be a new shadow, so for every new law there may be a new transgression. No form of the precious metals has ever been used which dishonest men have not counterfeited, and no kind of artificial currency has ever been legalized which rogues have not forged. The government sees the evils that come from the use of intoxicating drinks, and prohibits their sale; but unprincipled men pander to depraved appetites, and gather a harvest of dishonest profits. Instead of licensing lotteries, and deriving a revenue from the sale of tickets, the State forbids the mischievous traffic; but, while law-abiding men disdain to practise an illicit trade, knavish brokers, by means of the prohibition itself, secure a monopoly of the sales, and pocket the infamous gaiu. The government imposes duties on imported goods: smugglers evade the law, and bring goods into the market clandestinely; or perjurers swear to false invoices, and escape the payment of duty, and thus secure to themselves the double advantage of increased sales, and enhanced profits upon what is sold. Science prepares a new medicine to heal or alleviate the diseases of men; crime adulterates it, or prepares as a substitute some cheap poison that resembles it, and can be sold instead of it. A benefactor of the race discovers an agent which has the marvellous power to suspend consciousness, and take away the susceptibility of pain; a villain uses it to rob men or pollute women. Houses are built; the incendiary burns them, that he may purloin the smallest portion of their goods. The press is invented to spread intelligence; but libellers use it to give wings to slander. And so, throughout the infinitely complex and ramified relations of society, wherever there is a right, there may be a wrong; and wherever a law is made to repress the wrong, it may be evaded by artifice or overborne by violence. In fine, all means and laws designed to repress injustice and crime give occasion to new injustice and crime. For every lock that is made, a false key is made to pick it; and, for every Paradise that is created, there is a Satan who would scale its walls.

Nor does this view of the subject exhibit the scope and multitude of the transgressions that may be committed. To represent the range and compass of possible violations, every law that exists must be multiplied by a high power. When the whole family of mankind consisted of but two persons, there could be only two offenders. But now, when the race has increased to millions and hundreds of millions, the laws may be broken by millions and hundreds of millions, — an increased number of transgressors of an increased number of laws. The multitude, then, of possible violations of law, is terrific to the imagination: even the actual violations are sufficient to make our best civilization look but little better than barbarism.

But the above outline, whose vast circumference may be filled up by the commission of crimes against positive law, embraces not a tithe of possible transgressions. Every law in the statute-book might be obeyed, so as to leave no penalty to be awarded by the courts, or inflicted by executive officers, and yet myriads of private vices, too subtle and intangible for legislative enactments, and too undefinable to be dealt with by the tribunals of justice, might still imbitter all domestic and social relations, and leave nothing in life worth living for. Were the greater plagues of public crime and open violence to be stayed, still the lesser ones might remain; like the plagues of Egypt, they might invade every house, penetrate to every chamber, corrupt the water in the fountains and the bread in the kneading-troughs, and turn the dust into loathsome life, so that the plague of hail and the plague of darkness might seem to be blessings in the comparison. In offences against what are usually called the "minor morals," — against propriety, against decency, against the domestic relations, and against good neighborhood, as they are illustrated and enjoined by the example of Christ, the precepts of the gospel, and the perfect law of love, — here is a vast region where offences may grow, and where they do grow, thick-standing and rankly luxuriant.

Against these social vices in all ages of the world, the admonitions of good men have been directed. The moralist has

exposed their deformity in his didactic page; the satirist has chastised them in his pungent verse; the dramatist has held them up to ridicule on the mimic stage; and, to some extent, the Christian minister has exhibited their gross repugnancy to the character of a disciple of Jesus. Still they continue to exist; and, to say nothing of heathen nations, the moral condition of all Christendom is, in this respect, like the physical condition of one of the nations that compose it, — that extraordinary people, I mean, whose dwellings, whose flocks, whose agriculture, whose merchandise, and who themselves, are below the level of the ocean; and against them, at all times, this ocean rages, and lifts itself up; and whenever or wherever it can find a breach, or make one, it rushes in, and overwhelms men and their possessions in one common inundation. Even so, like a weltering flood, do immoralities and crimes break over all moral barriers, destroying and profaning the securities and the sanctities of life. Now, how best shall this deluge be repelled? What mighty power or combination of powers can prevent its inrushing, or narrow the sweep of its ravages?

The race has existed long enough to try many experiments for the solution of this greatest problem ever submitted to its hands; and the race has experimented, without stint of time or circumscription of space to mar or modify legitimate results. Mankind have tried despotisms, monarchies, and republican forms of government. They have tried the extremes of anarchy and of autocracy. They have tried Draconian codes of law; and, for the lightest offences, have extinguished the life of the offender. They have established theological standards, claiming for them the sanction of divine authority, and the attributes of a perfect and infallible law; and then they have imprisoned, burnt, massacred, not individuals only, but whole communities at a time, for not bowing down to idols which ecclesiastical authority had set up. These and other great systems of measures have been adopted as barriers against error and guilt: they have been extended over empires, prolonged through centuries, and administered with terrible en-

ergy; and yet the great ocean of vice and crime overleaps every embankment, pours down upon our heads, saps the foundations under our feet, and sweeps away the securities of social order, of property, liberty, and life.

At length, these experiments have been so numerous, and all of them have terminated so disastrously, that a body of men has risen up in later times, powerful in influence, and not inconsiderable in numbers, who, if I may use a mercantile phrase, would abandon the world as a total loss; who mock at the idea of its having a benevolent or even an intelligent Author or Governor; and who, therefore, would give over the race to the dominion of chance, or to that of their own licentious passions, whose rule would be more fatal than chance.

But to all doubters, disbelievers, or despairers in human progress, it may still be said, there is one experiment which has never yet been tried. It is an experiment, which, even before its inception, offers the highest authority for its ultimate success. Its formula is intelligible to all; and it is as legible as though written in starry letters on an azure sky. It is expressed in these few and simple words: "*Train up a child in the way he should go; and, when he is old, he will not depart from it.*" This declaration is positive. If the conditions are complied with, it makes no provision for a failure. Though pertaining to morals, yet, if the terms of the direction are observed, there is no more reason to doubt the result than there would be in an optical or a chemical experiment.

But this experiment has never yet been tried. Education has never yet been brought to bear with one-hundredth part of its potential force upon the natures of children, and, through them, upon the character of men and of the race. In all the attempts to reform mankind which have hitherto been made, whether by changing the frame of government, by aggravating or softening the severity of the penal code, or by substituting a government-created for a God-created religion, — in all these attempts, the infantile and youthful mind, its amenability to influences, and the enduring and self-operating character of

the influences it receives, have been almost wholly unrecognized. Here, then, is a new agency, whose powers are but just beginning to be understood, and whose mighty energies hitherto have been but feebly invoked; and yet, from our experience, limited and imperfect as it is, we do know, that, far beyond any other earthly instrumentality, it is comprehensive and decisive.

Reformatory efforts hitherto made have been mainly expended upon the oaken-fibred hardihood and incorrigibleness of adult offenders, and not upon the flexibleness and ductility of youthful tendencies. Rulers have forgotten, that though a giant's arm cannot bend a tree of a century's growth, yet the finger of an infant could have given direction to its germ. When a man has invested fifty thousand dollars in the business of importing ardent spirits into the country, it often does little more than to enrage him to point out the different results between such an investment and the investment of the same sum in whale-ships, where, besides its own permanent value, it will soon add fifty thousand dollars more to the actual wealth of the community. Show the distiller how he changes the life-sustaining fruits of the earth into a physical and moral poison, and what a deluge of destruction he is sending forth over society, and his blood will boil hardly less fiercely than his accursed caldrons: but who will be rash enough to say of any child in the land; who will be rash enough to say of any man now engaged in the business of promoting and spreading intemperance, and visiting another generation with all its calamities, — who will dare say of any of them that the nature and consequences of this direful occupation might not have been so vividly depicted to the imagination, and so clearly explained to the conscience, during the years of childhood, that any child would sooner think of getting a living by counterfeiting money than by engaging in the traffic? Would any child, on whose heart the horrors and atrocities of the slave-trade had made their natural impression before his arrival at the age of fourteen years, ever connect himself with slavery afterwards? Were a

child taught the dignity, the healthfulness, and the advantages of voluntary labor, and the meanness of living upon the unrequited services of the weak and defenceless, could he ever bear to live a life of pampered indolence secured to him by a hundred lives, each as precious and as sacred in the sight of Heaven as his own, of unpaid toil and irredeemable debasement? Did genius pour out its heart as fervently to depict the calamities of war as it has done to blazon forth what is called military glory, would not children be led to abhor all unnecessary wars as much more than they abhor murder as the destruction of an army is greater than that of a single murderer? If the schools were earnestly to teach children that office and honor are not synonymous terms, and that the only value of any office consists in its opening a wider sphere for useful exertion, should we find so many men renouncing usefulness and forfeiting honor for the acquisition of office? If wealth were not forever talked of before children as among the chief prizes of life, should we see such throngs making haste to be rich, with all the attendant consequences of fraud and dishonor? Indeed, so decisive is the effect of early training upon adult habits and character, that numbers of the most able and experienced teachers — those who have had the best opportunities to become acquainted with the errors and the excellences of children, their waywardness, and their docility — have unanimously declared it to be their belief, that if all the children in the community, from the age of four years to that of sixteen, could be brought within the reformatory and elevating influences of good schools, the dark host of private vices and public crimes which now imbitter domestic peace, and stain the civilization of the age, might, in ninety-nine cases in every hundred, be banished from the world. When Christ taught his disciples to pray, "Thy kingdom come, thy will be done *on earth* as it is done in heaven," did he teach them to pray for what shall never come to pass? And, if this consummation is ever to be realized, is it to be by some mighty, sudden, instantaneous

revolution effected by a miracle? or is it to be produced gradually by that Providence which uses human agents as its instruments?

Were we to hear that some far-off land had been discovered, over which the tempest of war had never swept; where institutions of learning and religion were reverenced, and their ministers held in the foremost rank of honor; where falsehood, detraction, and perjury were never uttered; where neither intemperance, nor the guilty knowledge how to prepare its means, nor the guilty agents to diffuse them, were ever known; where all the obligations growing out of domestic relations were sacredly kept; where office always sought the wisest and best men for incumbents, and never failed to find them; where witnesses were true, and jurors just (for we can hardly conceive of a state of society upon earth so perfect as to exclude all differences of opinion about rights); in fine, where all men were honest in their dealings, and exemplary in their lives, with the exception of here and there an individual, who, from the rareness of his appearance, would be regarded almost a monster, — were we to hear of such a realm, who that loves peace, and the happiness that comes from security and order, would not wish to escape from the turmoil and the violence, the rancor and the mean ambitions, of our present sphere, and go there to dwell and to die? And yet it is the opinion of our most intelligent, dispassionate, and experienced teachers, that we can, in the course of two or three generations, and through the instrumentality of good teachers and good schools, superinduce, substantially, such a state of society upon the present one, and this, too, without any miracle, without any extraordinary sacrifices or costly effort, but only by working our existing common-school system with such a degree of vigor as can easily be put forth, and at such an expense as even the poorest community can easily bear. If the leaders of society, — those whose law-giving eloquence determines what statutes shall be enacted by the legislature, or those who speak for the common heart in self-con-

stituted assemblies, or those who shape popular opinion through the public press or in the private intercourse of life, — if these are not yet prepared to have faith in the reformatory power of an early and wise training for the young, the fact only shows and measures the extent of the work which teachers and educationists have yet to perform. If men decline to co-operate with us because uninspired by our living faith, then the arguments, the labors, and the results which will create this faith are a preliminary step in our noble work.

Is any high-minded, exemplary, and conscientious man disposed to believe that this substantial extirpation of social vices and crimes (according to the testimony of the witnesses above referred to) is a Utopian idea, is more than we have any reason to expect while human nature remains as it is, let me use the *ad hominem* argument to refute him. Let me refer him to himself, and ask him why the same influences which have saved him from gaming, intemperance, dissoluteness, falsehood, dishonesty, violence, and their kindred offences, and have made him a man of sobriety, frugality, and probity, — why the same influences which have saved him from ruin, might not, if brought to bear upon others, save them also. So far as human instrumentalities are concerned, we have abundant means for surrounding every child in the State with preservative and moral influences as extensive and as efficient as those under which the present industrious, worthy, and virtuous members of the community were reared. And as to all those things in regard to which we are directly dependent upon the divine favor, have we not the promise, explicit and unconditional, that the men SHALL NOT depart from the way in which they should go, if the children are trained up in it? It has been overlooked that this promise is not restricted to parents, but seems to be addressed indiscriminately to all, whether parents, communities, states, or mankind.

RELIGIOUS EDUCATION.

But it will be said that this grand result in practical morals is a consummation of blessedness that can never be attained without religion, and that no community will ever be religious without a religious education. Both these propositions I regard as eternal and immutable truths. Devoid of religious principles and religious affections, the race can never fall so low but that it may sink still lower; animated and sanctified by them, it can never rise so high but that it may ascend still higher. And is it not at least as presumptuous to expect that mankind will attain to the knowledge of truth, without being instructed in truth, and without that general expansion and development of faculty which will enable them to recognize and comprehend truth in any other department of human interest as in the department of religion? No creature of God of whom we have any knowledge has such a range of moral oscillation as a human being. He may despise privileges, and turn a deaf ear to warnings and instructions such as evil spirits may never have known, and therefore be more guilty than they; or, ascending through temptation and conflict along the radiant pathway of duty, he may reach the sublimest heights of happiness, and may there experience the joys of a contrast such as ever-perfect beings can never feel. And can it be that our nature in this respect is taken out of the law that governs it in every other respect, — the law, namely, that the teachings which supply it with new views, and the training that leads it to act in conformity with those views, are ineffective and nugatory?

Indeed, the whole frame and constitution of the human soul show, that, if man be not a religious being, he is among the most deformed and monstrous of all possible existences. His propensities and passions need the fear of God as a restraint from evil; and his sentiments and affections need the love of God as a condition and preliminary to every thing worthy of the name of happiness. Without a capability or susceptibility, therefore, of knowing and reverencing his Maker and Preserver, his whole

nature is a contradiction and a solecism: it is a moral absurdity, as strictly so as a triangle with but two sides, or a circle without a circumference, is a mathematical absurdity. The man, indeed, of whatever denomination or kindred or tongue he may be, who believes that the human race, or any nation, or any individual in it, can attain to happiness, or avoid misery, without religious principle and religious affections, must be ignorant of the capacities of the human soul, and of the highest attributes in the nature of man. We know, from the very structure and functions of our physical organization, that all the delights of the appetites and of the grosser instincts are evanescent and perishing. All bodily pleasures over-indulged become pains. Abstemiousness is the stern condition of prolonged enjoyment, — a condition that balks desire at the very moment when it is most craving. Did the fields teem, and the forests bend, and the streams flow, with the most exquisite delicacies, how small the proportion of our time in which we could luxuriate in their sweets without satiety and disgust! Unchastened by temperance, the richest earthly banquets stimulate, only to end in loathing. Perpetual self-restraint on the one side, or intolerable pains on the other, is the law of all our animal desires; and it may well be questioned which are the sharper sufferings, the fiercest pangs of hunger and of thirst, or the agonizing diseases that form the fearful retinue of epicurism and bacchanalian indulgence. Were the pleasures of sense the only pleasures we could enjoy, immortality might well be scoffed at as worthless, and annihilation welcomed; for if another Eden were created around us, filled with all that could gratify the appetite or regale the sense, and were the whole range and command of its embowering shades and clustering fruits bestowed upon us, still, with our present natures, we should feel intellectual longings which not all the objects of sight and of sense could appease; and luxuries would sate the palate, and beauties pall upon the eye, in the absence of objects to quicken and stimulate the sterner energies of the mind.

The delights of the intellect are of a far nobler order than

those of the senses; but even these have no power to fill up the capacities of an immortal mind. The strongest intellect tires. It cannot sustain an ever-upward wing. Even in minds of Olympian vastness and vigor, there must be seasons for relaxation and repose, — intervals when the wearied faculties, mounted upon the topmast of all their achievements, must stop in their ascending career to review the distance they have traversed, and to replenish their energies for an onward flight. And although, in the far-off cycles of eternity, the stature of the intellect should become lofty as an archangel's; although its powers of comprehension should become so vast, and its intuitions so penetrating, that it could learn the history of a planet in a day, and master at a single lesson all the sciences that belong to a system of stars, — still, I repeat, that, with our present nature, we should be conscious of faculties unoccupied, and restless, yea, tormented with a sense of privation and loss, like lungs in a vacuum gasping vainly for breath, or like the eye in darkness straining to catch some glimmering of light. Without sympathy, without spiritual companionship with other beings, without some Being, all-glorious in his perfections, whom the spirit could commune with and adore, it would be a mourner and a wanderer amid all the splendors of the universe. Through the lone realms of immensity would it fly, calling for love as a mother calls for her departed first-born; but its voice would return to it in echoes of mockery. Nay, though the intellect of man should become as effulgent as the stars amid which he might walk, yet sympathetic and devout affections alone can fertilize the desolations of the heart. Love is as necessary to the human heart as knowledge is to the mind; and infinite knowledge can never supply the place of infinite good. The universe, grand, glorious, and beautiful as it is, can be truly enjoyed only through the worship as well as the knowledge of the great Being that created it. Among people where there is no true knowledge of God, the errors, superstitions, and sufferings of a false religion always rush in to fill the vacuum.

There is not a faculty nor a susceptibility in the nature of

man, from the lightning-like intuitions that make him akin to the cherubim, or the fire and fervor of affection that assimilate him to seraphic beings, down to the lowest appetites and desires by which he holds brotherhood with beast and reptile and worm, — there is not one of them all that will ever be governed by its proper law, or enjoy a full measure of the gratification it was adapted to feel, without a knowledge of the true God, without a sense of acting in harmony with his will, and without spontaneous effusions of gratitude for his goodness. Convictions and sentiments such as these can alone supply the vacuity in the soul of man, and fill with significance and loveliness what would otherwise be a blank and hollow universe.

How limited and meagre, too, would be the knowledge which should know all things else, but still be ignorant of the self-existent Author of all! What is the exquisite beauty of flowers, of foliage, or of plumage, if we know nothing of the great Limner who has painted them, and blended their colors with such marvellous skill? So the profundity of all science is shallowness, if we know nothing of the eternal Mind that projected all sciences, and made their laws so exact and harmonious, that all the objects in an immensity can move onward throughout an eternity without deviation or error. Even the visible architecture of the heavens, majestic and refulgent as it is, dwindles and glooms into littleness and darkness in the presence of the great Builder, who "of old laid the foundation of the earth," and "meted out heaven with a span." Among all the objects of knowledge, the Author of knowledge is infinitely the greatest; and the microscopic animalcule, which, by a life of perseverance, has circumnavigated a drop of water, or the tiny insect which has toiled and climbed until it has at last reached the highest peak of a grain of sand, knows proportionately more of the height and depth and compass of planetary spaces than the philosopher who has circuited all other knowledge, but is still ignorant of God. In the acquisition of whatever art, or in the pursuit of whatever science, there is a painful sense of incompleteness and imperfection while we

remain untaught in any great department known to belong to it. And so, in the development and culture of the human soul, we are conscious not merely of the want of symmetry, but of gross disfigurement and mutilation, when the noblest and most enduring part of an appropriate development and culture is wanting. In merely an artistical point of view, to be presented with the torso of Hercules, or with the truncated body of Minerva, when we were expecting to behold the fulness of their majestic proportions, would be less painful and shocking than a system of human culture from which religious culture should be omitted.

So, too, if the subject be viewed in relation to all the purer and loftier affections and susceptibilities of the human soul, the results are the same. If, in surveying the highest states of perfection which the character of man has ever yet reached upon earth, we select from among the whole circle of our personal or historical acquaintances those who are adorned with the purest quality and the greatest number of excellences as the objects of our most joyful admiration and love, why should not the soul be lifted into sublimer ecstasies, and into raptures proportionately more exalted and enduring, if it could be raised to the contemplation of Him whose "name alone is excellent"? If we delight in exhibitions of power, why should we pass heedlessly by the All-powerful? If human hearts are touched with deeds of mercy, there is One whose tender mercies are over all his works. If we reverence wisdom, there is such perfect wisdom on high, that that of angels becomes "folly" in its presence. If we love the sentiment of love, has not the apostle told us that God is love? There are many endearing objects upon earth from which the heart of man may be sundered; but he only is bereaved of all things who is bereaved of his Father in heaven.

I here place the argument in favor of a religious education for the young upon the most broad and general grounds, purposely leaving it to every individual to add for himself those auxiliary arguments which may result from his own peculiar

views of religious truth. But such is the force of the conviction to which my own mind is brought by these general considerations, that I could not avoid regarding the man who should oppose the religious education of the young as an insane man; and, were it proposed to debate the question between us, I should desire to restore him to his reason before entering upon the discussion. If, suddenly summoned to eternity, I were able to give but one parting word of advice to my own children, or to the children of others; if I were sinking beneath the wave, and had time to utter but one articulate breath; or were wasting away upon the death-bed, and had strength to make but one exhortation more, — that dying legacy should be, "Remember thy Creator in the days of thy youth."

I can, then, confess myself second to no one in the depth and sincerity of my convictions and desires respecting the necessity and universality, both on abstract and on practical grounds, of a religious education for the young; and, if I had stronger words at command in which to embody these views, I would not fail to use them. But the question still remains, How shall so momentous an object be pursued? In the measures we adopt to give a religious education to others, shall we ourselves abide by the dictates of religion? or shall we do, as has almost universally been done ever since the unhallowed union between Church and State under Constantine, — shall we seek to educate the community religiously through the use of the most irreligious means?

On this subject I propose to speak with freedom and plainness, and more at length than I should feel required to do but for the peculiar circumstances in which I have been placed. It is matter of notoriety, that the views of the Board of Education, — and my own, perhaps, still more than those of the Board, — on the subject of religious instruction in our public schools, have been subjected to animadversion. Grave charges have been made against us, that our purpose was to exclude religion, and to exclude that, too, which is the common exponent of religion, — the Bible, — from the common schools of the

State; or, at least, to derogate from its authority, and destroy its influence in them. Whatever prevalence a suspicion of the truth of these imputations may have heretofore had, I have reason to believe that further inquiry and examination have done much to disabuse the too credulous recipients of so groundless a charge. Still, amongst a people so commendably sensitive on the subject of religion as are the people of Massachusetts, any suspicion of irreligious tendencies will greatly prejudice any cause, and, so far as any cause may otherwise have the power of doing good, will greatly impair that power.

It is known, too, that our noble system of free schools for the whole people is strenuously opposed by a few persons in our own State, and by no inconsiderable numbers in some of the other states of this Union; and that a rival system of "parochial" or "sectarian schools" is now urged upon the public by a numerous, a powerful, and a well-organized body of men. It has pleased the advocates of this rival system, in various public addresses, in reports, and through periodicals devoted to their cause, to denounce our system as irreligious and anti-Christian. They do not trouble themselves to describe what our system is, but adopt a more summary way to forestall public opinion against it by using general epithets of reproach, and signals of alarm.

In this age of the world, it seems to me that no student of history, or observer of mankind, can be hostile to the precepts and the doctrines of the Christian religion, or opposed to any institutions which expound and exemplify them; and no man who thinks, as I cannot but think, respecting the enduring elements of character, whether public or private, can be willing to have his name mentioned while he is living, or remembered when he is dead, as opposed to religious instruction and Bible instruction for the young. In making this final Report, therefore, I desire to vindicate my conduct from the charges that have been made against it; and, so far as the Board has been implicated in these charges, to leave my testimony on record for their exculpation. Indeed, on this point, the Board and

myself must be justified or condemned together; for I do not believe they would have enabled me, by their annual re-elections, to carry forward any plan for excluding either the Bible or religious instruction from the schools; and, had the Board required me to execute such a purpose, I certainly should have given them the earliest opportunity to appoint my successor. I desire, also, to vindicate the system with which I have been so long and so intimately connected, not only from the aspersion, but from the suspicion, of being an irreligious or anti-Christian or an un-Christian system. I know full well, that it is unlike the systems which prevail in Great Britain, and in many of the Continental nations of Europe, where the Established Church controls the education of the young in order to keep itself established. But this is presumptive evidence in its favor, rather than against it.

All the schemes ever devised by governments to secure the prevalence and permanence of religion among the people, however variant in form they may have been, are substantially resolvable into two systems. One of these systems holds the regulation and control of the religious belief of the people to be one of the functions of government, like the command of the army or the navy, or the establishment of courts, or the collection of revenues. According to the other system, religious belief is a matter of individual and parental concern; and, while the government furnishes all practicable facilities for the independent formation of that belief, it exercises no authority to prescribe, or coercion to enforce it. The former is the system, which, with very few exceptions, has prevailed throughout Christendom for fifteen hundred years. Our own government is almost a solitary example among the nations of the earth, where freedom of opinion, and the inviolability of conscience, have been even theoretically recognized by the law.

The argument in behalf of a government-established religion, at the time when it was first used, was not without its plausibility; but the principle, once admitted, drew after it a train of the most appalling consequences. If religion is absolutely es-

sential to the stability of the State as well as to the present and future happiness of the subject, why, it was naturally asked, should not the government enforce it? And, if government is to enforce religion, it follows, as a necessary consequence, that it must define it; for how can it enforce a duty, which, being undefined, is uncertain? And again: if government begins to define religion, it must define what it is not, as well as what it is; and, while it upholds whatever is included in the definition, it must suppress and abolish whatever is excluded from it. The definition, too, must keep pace with speculation, and must take cognizance of all outward forms and observances; for if speculation is allowed to run riot, and ceremonies and observances to spring up unrestrained, religion will soon elude control, emerge into new forms, and exercise, if it does not arrogate, a substantial independence. Both in regard to matters of form and of substance, all recusancy must be subdued, either by the deprivation of civil rights, or by positive inflictions; for the laws of man, not possessing, like the laws of God, a self-executing power, must be accompanied by some effective sanction, or they will not be obeyed. If a light penalty proves inadequate, a heavier one must follow, — the loss of civil privileges by disfranchisement, or of religious hopes by excommunication. If the non-conformist feels himself, by the aid of a higher power, to be secure against threats of future perdition, the civil magistrate has terrible resources at command in this life, — imprisonment, scourging, the rack, the fagot, death. Should it ever be said that these are excessive punishments for exercising freedom of thought, and for allowing the heart to pour forth those sentiments of adoration to God with which it believes God himself has inspired it, the answer is always ready, that nothing is so terrible as the heresy that draws after it the endless wrath of the Omnipotent; and, therefore, that Smithfield fires, and inquisitorial tortures, and *auto-da-fés*, and St. Bartholomews, are cheap offerings at the shrine of truth: nay, compared with the awful and endless consequences of a false faith, they are of less moment than the slightest puncture of a

nerve. And assuming the truth of the theory, and the right of the government to secure faith by force, it surely would be better, infinitely better, that every hill-top should be lighted with the fires of Smithfield, and every day in the calendar should be a St. Bartholomew's, than that errors so fatal should go unabolished.

In the council-hall of the Inquisition at Avignon, there still is, or lately was, to be seen, a picture of the Good Samaritan painted upon the wall. The deed of mercy commemorated by this picture was supposed to be the appropriate emblem of the inquisitor's work. The humanity of pouring oil and wine into the wounds of the bleeding wayfarer who had fallen among thieves; the kindness of dismounting from his own beast, and setting the half-dead victim of violence upon it; and the generosity of purchasing comfort and restoration for him at an inn, — were held to be copied and imitated, upon an ampler and a nobler scale, by the arrest of the heretic, by the violence that tore him from home and friends, and by the excruciating tortures that at last wrenched soul and body asunder. The priests who sentenced, and the familiars that turned the wheel or lighted the fagot, or, with red-hot pincers, tore the living flesh from the quivering limbs, were but imitators of the Good Samaritan, binding up moral wounds, and seeking to take a lost traveller to a place of recovery and eternal repose. So when the news of the Massacre of St. Bartholomew's — on which occasion thirty thousand men, women, and children were butchered at the stroke of a signal-bell — reached Rome, the pope and his cardinals ordained a thanksgiving, that all true believers might rejoice together at so glorious an event, and that God might be honored for the pious hearts that designed, and the benevolent hands that executed, so Christian a deed. And, admitting their premises, surely they were right. Could communities, or even individuals, be rescued from endless perdition at the price of a massacre or an *auto-da-fé*, the men who would wield the sword, or kindle the flame, would be only nobler Samaritans; and the picture upon

the Inquisition walls at Avignon would be but an inadequate emblem of their soul-saving beneficence.

But, in all the persecutions and oppressions ever committed in the name of religion, one point has been unwarrantably assumed; namely, *that the faith of their authors was certainly and infallibly the true faith.* With the fewest exceptions, the advocates of all the myriad conflicting creeds that have ever been promulgated have held substantially the same language: "*Our* faith we know to be true. For its truth, we have the evidence of our reason and our conscience; we have the Word of God in our hands, and we have the Spirit of God in our hearts, testifying to its truth." * The answer to this claim is almost too obvious to be mentioned. The advocates of hundreds and thousands of hostile creeds have placed themselves upon the same ground. Each has claimed the same proof from reason and conscience, the same external revelation from God, and the same inward light of his Spirit. But if truth be *one*, and hence necessarily harmonious; if God be its author; and if the voice of God be not more dissonant than the tongues of Babel, — then, at least, all but one of the different forms of faith ever promulgated by human authority, so far as these forms conflict with each other, cannot have emanated from the Fountain of all truth. These faiths must have been more or less erroneous. The believers in them must have been more or less mistaken. Who, on an impartial survey of the whole, and a recollection of the confidence with which each one has been claimed to be infallibly true, shall dare to affirm that any one of them all is a perfect transcript of the perfect law as it exists in the Divine Mind, *and that that one is his?*

But here arises a practical distinction, which the world has lost sight of. It is this: after seeking all possible light from within, from without, and from above, each man's belief is his

* Or, as I once heard the same sentiment expressed in the pulpit, from the lips of an eminent divine, "I am right; and I know I am right; and I know I know it."

own standard of truth; *but it is not the standard for any other man.* The believer is bound to live by his belief under all circumstances, in the face of all perils, and at the cost of any sacrifice. But his standard of truth is the standard for himself alone; *never for his neighbor.* That neighbor must have his own standard, which to him must be supreme. And the fact that each man is bound to follow his own best light and guidance is an express negation of any other man's right, and of any government's right, of forcible interference. Here is the dividing-line. On one side lie personal freedom and the recognition of freedom in others; on the other side are intolerance, oppression, and all the wrongs and woes of persecution for conscience' sake. The hierarchs of the world have generally reversed this rule of duty. They have been more rigid in demanding that others should live according to their faith than in living in accordance with it themselves.

Did the history of mankind show that there has been the most of virtue and piety in those nations where religion has been most rigorously enforced by law, the advocates of ecclesiastical domination would have a powerful argument in favor of their measures of coercion; but the united and universal voice of history, observation, and experience, gives the argument to the other side. Nor is this surprising. Weak and fallible as human reason is, it was too much to expect that any mere man, even though aided by the light of a written revelation, would ever fathom the whole counsels of the Omnipotent and the Eternal. But the limitations and short-sightedness of men's reason did not constitute the only obstacle to their discovery of truth. All the passions and perversities of human nature conspired to prevent so glorious an achievement. The easily-acquired but awful power possessed by those who were acknowledged to be the chosen expounders of the divine will tempted men to set up a false claim to be the depositaries of God's purposes towards men, and the selected medium of his communication with them; and to this temptation erring mortals were fain to yield. Those who were supposed able to

determine the destiny of the soul in the next world came easily to control opinion, conduct, and fortune in this. Hence they established themselves as a third power, — a power between the creature and the Creator, — not to facilitate the direct communion between man and his Maker, but to supersede it. They claimed to carry on the intercourse between heaven and earth as merchants carry on commerce between distant nations, where the parties to the interchange never meet each other. The consequence soon was, that this celestial commerce degenerated into the basest and most mercenary traffic. The favors of heaven were bought and sold like goods in the market-place. Robbery purchased pardon and impunity by bribing the judge with a portion of the wealth it had plundered. The assassin bought permission to murder, and the incendiary to burn. A price-current of crime was established, in which sins were so graduated as to meet the pecuniary ability of both rich and poor offenders. Licenses to violate the laws of God and man became luxuries, for which customers paid according to their several ability. Gold was the representative of all virtues as well as of all values. Under such a system, men lost their conscience, and women their virtue; for the right to commit all enormities was purchasable by money, and pardonable by grace, — save only the guilt of heresy; and the worst of all heresies consisted in men's worshipping the God of their fathers according to the dictates of their consciences.

Those religious exercises which consist in a communion of the soul with its Father in heaven have been beautifully compared to telegraphic communications between distant friends; where, silent as thought, and swift as the lightning, each makes known to the other his joys and his desires, his affection and his fidelity, while the busy world around may know nought of their sacred communings. But, as soon as hierarchies obtained control over men, they changed the channel of these communications between heaven and earth. An ecclesiastical bureau was established; and it was decreed that all the telegraphic wires should centre in that, so that all the communications

between man and his Maker should be subject to the inspection of its chiefs, and carried on through their agency alone. Thus, whether the soul had gratitude or repentance to offer to its God, or light or forgiveness to receive from on high, the whole intercourse, in both directions, must go through the government office, and there be subject to take such form, to be added to or subtracted from, as the ministers or managers in possession of power might deém to be expedient. Considering the nature of man, one may well suppose that many of the most precious of the messages were never forwarded; that others were perverted, or forged ones put in their place; and that, in some instances at least, the reception of fees was the main inducement to keep the machinery in operation.

Among the infinite errors and enormities resulting from systems of religion devised by man, and enforced by the terrors of human government, have been those dreadful re-actions which have abjured all religion, spurned its obligations, and voted the Deity into non-existence. This extreme is, if possible, more fatal than that by which it was produced. Between these extremes, philanthropic and godly men have sought to find a medium, which should avoid both the evils of ecclesiastical tyranny and the greater evils of atheism. And this medium has at length been supposed to be found. It is promulgated in the great principle, that government should do all that it can to facilitate the acquisition of religious truth, but shall leave the decision of the question, what religious truth is, to the arbitrament, without human appeal, of each man's reason and conscience: in other words, that government shall never, by the infliction of pains and penalties, or by the privation of rights or immunities, call such decision either into pre-judgment or into review. The formula in which the constitution of Massachusetts expresses it is in these words: "All religious sects and denominations demeaning themselves peaceably and as good citizens shall be equally under the protection of law; and no subordination of one sect or denomination to another shall ever be established by law."

The great truth recognized and expressed in these few words of our constitution is one which it has cost centuries of struggle and of suffering, and the shedding of rivers of blood, to attain; and he who would relinquish or forfeit it, virtually impetrates upon his fellow-men other centuries of suffering and the shedding of other rivers of blood. Nor are we as yet entirely removed from all danger of relapse. The universal interference of government in matters of religion, for so many centuries, has hardened the public mind to its usurpations. Men have become tolerant of intolerance; and, among many nations of Christendom, the common idea of religious freedom is satisfied by an exemption from fine and imprisonment for religious belief. They have not yet reached the conception of equal privileges and franchises for all. Doubtless the time will come when any interference, either by positive infliction or by legal disability, with another man's conscience in religious concernments, so long as he molests no one by the exercise of his faith, will be regarded as the crowning and supereminent act of guilt which one human being can perpetrate against another. But this time is far from having yet arrived, and nations otherwise equally enlightened are at very different distances from this moral goal. The oppressed, on succeeding to power, are prone to become oppressors in their turn, and to forget, as victors, the lessons, which, as victims, they had learned.

The Colonial, Provincial, and State history of Massachusetts shows by what slow degrees the rigor of our own laws was relaxed, as the day-star of religious freedom slowly arose after the long, black midnight of the past. It was not, indeed, until a very recent period, that all vestige of legal penalty or coercion was obliterated from our statute-book, and all sects and denominations were placed upon a footing of absolute equality in the eye of the law. Until the ninth day of April, 1821, no person in Massachusetts was eligible to the office of governor, lieutenant-governor, or councillor, or to that of senator, or representative in the General Court, unless he would make oath to a belief in the particular form of religion adopted and sanc-

tioned by the State. And until the eleventh day of November, 1833, every citizen was taxable, by the constitution and laws of the State, for the support of the *Protestant* religion, whether he were a Protestant, a Catholic, or a believer in any other faith. Nor was it until the tenth day of March, 1827 (St. 1826, ch. 143, § 7), that it was made unlawful to use the common schools of the State as the means of proselyting children to a belief in the doctrines of particular sects, whether their parents believed in those doctrines or not.

All know the energetic tendency of men's minds to continue in a course to which long habit has accustomed them. The same law is as true in regard to institutions administered by bodies of men as in regard to individual minds. The doctrine of momentum, or head-way, belongs to metaphysics as much as to mechanics. A statute may be enacted, and may even be executed by the courts, long before it is ratified and enforced by public opinion. Within the last few years, how many examples of this truth has the cause of temperance furnished! And such was the case in regard to the law of 1827, prohibiting sectarian instruction in our public schools. It was not easy for committees at once to withdraw or to exclude the books, nor for teachers to renounce the habits, by which this kind of instruction had been given. Hence, more than ten years subsequent to the passage of that law, at the time when I made my first educational and official circuits over the State, I found books in the schools as strictly and exclusively *doctrinal* as any on the shelves of a theological library. I heard teachers giving oral instruction as strictly and purely *doctrinal* as any ever heard from the pulpit or from the professor's chair. And more than this: I have now in my possession printed directions, given by committee-men to teachers, enjoining upon them the use of a catechism in school, which is wholly devoted to an exposition of the doctrines of one of the denominations amongst us. These directions bear date a dozen years subsequent to the prohibitory law above referred to. I purposely forbear to intimate what doctrine or what denomination

was "*favored*," in the language of the law, by these means, because I desire to have this statement as impersonal as it can be.

In the first place, then, I believed these proceedings not only to be wholly unwarranted by law, but to be in plain contravention of law. And, in the next place, the legislature had made it the express duty of the Secretary, "diligently to apply himself to the object of collecting information of the condition of the public schools [throughout the State], of the fulfilment of the duties of their office by all members of the school-committees of all the towns, and the circumstances of the several school-districts in regard to all the subjects of teachers, pupils, books, apparatus, and methods of education," and so forth. I believed then, as now, that religious instruction in our schools, to the extent which the constitution and laws of the State allowed and prescribed, was indispensable to their highest welfare, and essential to the vitality of moral education. Then as now, also, I believed that sectarian books and sectarian instruction, if their encroachments were not resisted, would prove the overthrow of the schools. While, on the one hand, therefore, I deplored, in language as earnest and solemn as I was capable of commanding, the insufficiency of moral and religious instruction given in the schools; on the other hand, instead of detailing what I believed to be infractions of the law in regard to sectarian instruction, I endeavored to set forth what was supposed to be the true meaning and intent of the law. Such a general statement of legal limitations and prohibitions, instead of a specific arraignment of teachers or of committees for disregarding them, I judged to be the milder and more eligible course. Less I could not do, and discharge the duty which the law had expressly enjoined upon me. More I deemed it unadvisable to do, lest transgressors should take offence at what they might deem to be an unnecessary personal exposure. And, further, I had confidence, that when the law itself, and the reasons of equity and public policy on which it was founded,

should be better understood, all violations of it would cease. Every word of my early Reports having any reference to this subject was read in the presence of the Board, on which sat able lawyers and distinguished clergymen of different denominations; and no word of exception was ever taken to the views there presented, either on the ground that they were contrary to law, or had any sinister or objectionable tendency.

No person, then, in the whole community, could have been more surprised or grieved than myself at finding my views in regard to the extent and the limitation of religious instruction in our public schools attributed to a hostility to religion itself, or a hostility to the Scriptures, which are the "lively oracles" of the Christian's faith. As the Board was implicated with me in these charges (they never having dissented from my views, and continuing to re-elect me annually to the office of Secretary), it is well known to its earlier members that I urged the propriety of their meeting these charges with a public and explicit denial of their truth. In so grave a matter, I did not think that a refutation of the calumny would derogate from their dignity, but only evince the sensitiveness of their moral feelings, and the firmness of their moral principles. Such was the course pursued by the Board of Commissioners of Education in Ireland, composed of some of the most pious and elevated dignitaries in both communions, and at whose head was that most able and venerable prelate, Archbishop Whately. When their conduct was assailed, and their motives impugned, because they refused to turn the national schools into engines for proselyting from one sect to another, they met the charges from year to year in their Annual Reports, and finally discomfited and put to shame their bigoted assailants.

To my suggestion in regard to vindicatory measures, the reply was, that, as the charges were groundless, they probably would be temporary; and that a formal reply to the accusations might bestow an undeserved importance upon the accusers. Were it not that the opinion of the Board, at that time,

did not coincide with my own, I should still think that an early, temperate, but decided refutation, by the Board itself, of the charges against them, and against the system administered by them or under their auspices, would have been greatly preventive of evil, and fruitful of good. The pre-occupancy of the public mind with error on so important a subject is an unspeakable calamity; and errors that derive their support from religious views are among the most invincible. But different counsels prevailed; and for several years, in certain quarters, suspicions continued rife. I was made to see, and deeply to feel, their disastrous and alienating influence as I travelled about the State; sometimes withdrawing the hand of needed assistance, and sometimes, when conduct extorted approval, impeaching the motives that prompted it. For no cause, not dearer to me than life itself, could I ever have persevered, amid the trials and anxieties, and against the obstacles, that beset my path. But I felt that there is a profound gratification in standing by a good cause in the hour of its adversity. I believed there must be a deeper pleasure in following truth to the scaffold than in shouting in the retinue where error triumphs. I felt, too, a religious confidence that truth would ultimately prevail; and that it was my duty to labor in the spirit of a genuine disciple, who toils on with equal diligence and alacrity, whether his cause is to be crowned with success in his own lifetime, or only at the end of a thousand years. And, as the complement of all other motives, I felt that a true education would be among the most efficient of means to prevent the re-appearance, in another generation, of such an aggressive and unscrupulous opposition as the Board and myself were suffering under in this.

After years of endurance, after suffering under misconstructions of conduct, and the imputation of motives whose edge is sharper than a knife, it was at my suggestion, and by making use of materials which I had laboriously collected, that the Board made its Eighth Annual Report, — a document said to be the ablest argument in favor of the use of the Bible in schools

anywhere to be found. This Report had my full concurrence. Since its appearance, I have always referred to it as explanatory of the views of the Board, and as setting forth the law of a wise commonwealth and the policy of a Christian people. Officially and unofficially, publicly and privately, in theory and in practice, my course has always been in conformity with its doctrines. And I avail myself of this, the last opportunity which I may ever have, to say, in regard to all affirmations or intimations that I have ever attempted to exclude religious instruction from school, or to exclude the Bible from school, or to impair the force of that volume, that they are now, and always have been, without substance or semblance of truth.

But it may still be said, and it is said, that however sincere, or however religiously disposed, the advocates of our school-system may be, still the character of the system is not to be determined by the number nor by the sincerity of its defenders, but by its own inherent attributes; and that, if judged by these attributes, it is, in fact and in truth, an irreligious, an un-Christian, and an anti-Christian system. Having devoted the best part of my life to the promotion of this system, and believing it to be the only system which ought to prevail, or can permanently prevail, in any free country, I am not content to see it suffer, unrelieved, beneath the weight of imputations so grievous; nor is it right that any hostile system should be built up by so gross a misrepresentation of ours. That our public schools are not theological seminaries, is admitted. That they are debarred by law from inculcating the peculiar and distinctive doctrines of any one religious denomination amongst us, is claimed; and that they are also prohibited from ever teaching that what they do teach is the whole of religion, or all that is essential to religion or to salvation, is equally certain. But our system earnestly inculcates all Christian morals; it founds its morals on the basis of religion; it welcomes the religion of the Bible; and, in receiving the Bible, it allows it to do what it is allowed to do in no other system, —

to speak for itself. But here it stops, not because it claims to have compassed all truth, but because it disclaims to act as an umpire between hostile religious opinions.

The very terms "public school" and "common school" bear upon their face that they are schools which the children of the entire community may attend. Every man not on the pauper-list is taxed for their support; but he is not taxed to support them as special religious institutions: if he were, it would satisfy at once the largest definition of a religious establishment. But he is taxed to support them as a *preventive* means against dishonesty, against fraud, and against violence, on the same principle that he is taxed to support criminal courts as a *punitive* means against the same offences. He is taxed to support schools, on the same principle that he is taxed to support paupers, — because a child without education is poorer and more wretched than a man without bread. He is taxed to support schools, on the same principle that he would be taxed to defend the nation against foreign invasion, or against rapine committed by a foreign foe, — because the general prevalence of ignorance, superstition, and vice, will breed Goth and Vandal at home more fatal to the public well-being than any Goth or Vandal from abroad. And, finally, he is taxed to support schools, because they are the most effective means of developing and training those powers and faculties in a child, by which, when he becomes a man, he may understand what his highest interests and his highest duties are, and may be in fact, and not in name only, a free agent. The elements of a political education are not bestowed upon any school child for the purpose of making him vote with this or that political party when he becomes of age, but for the purpose of enabling him to choose for himself with which party he will vote. So the religious education which a child receives at school is not imparted to him for the purpose of making him join this or that denomination when he arrives at years of discretion, but for the purpose of enabling him to judge for himself, according to the dictates of his own reason and conscience, what his religious obligations

are, and whither they lead. But if a man is taxed to support a school where religious doctrines are inculcated which he believes to be false, and which he believes that God condemns, then he is excluded from the school by the divine law, at the same time that he is compelled to support it by the human law. This is a double wrong. It is politically wrong, because, if such a man educates his children at all, he must educate them elsewhere, and thus pay two taxes, while some of his neighbors pay less than their due proportion of one; and it is religiously wrong, because he is constrained by human power to promote what he believes the divine power forbids. The principle involved in such a course is pregnant with all tyrannical consequences. It is broad enough to sustain any claim of ecclesiastical domination ever made in the darkest ages of the world. Every religious persecution since the time of Constantine may find its warrant in it, and can be legitimately defended upon it. If a man's estate may be taken from him to pay for teaching a creed which he believes to be false, his children can be taken from him to be taught the same creed; and he, too, may be punished to any extent for not voluntarily surrendering both his estate and his offspring. If his children can be compulsorily taken, and taught to believe a creed which the parent disbelieves, then the parent can be compulsorily taken, and made to subscribe the same creed. And, in regard to the extent of the penalties which may be invoked to compel conformity, there is no stopping-place between taking a penny and inflicting perdition. It is only necessary to call a man's reason and conscience and religious faith by the name of recusancy or contumacy or heresy, and so to inscribe them on the statute-book, and then the non-conformist or dissenter may be subdued by steel or cord or fire; by anathema and excommunication in this life, and the terrors of endless perdition in the next. Surely that system cannot be an irreligious, an anti-Christian, or an un-Christian one, whose first and cardinal principle it is to recognize and protect the highest and dearest of all human interests and of all human rights.

Again: it seems almost too clear for exposition, that our system, *in one of its most essential features*, is not only not an irreligious one, but that it is more strictly religious than any other which has ever yet been adopted. Every intelligent man understands what is meant by the term "jurisdiction." It is the rightful authority which one person, or one body of men, exercises over another person or persons. Every intelligent man understands that there are some things which are within the jurisdiction of government, and other things which are not within it. As Americans, we understand that there is a line dividing the jurisdiction of the State governments from the jurisdiction of the Federal government, and that it is a violation of the constitutions of both for either to invade the legitimate sphere of action which belongs to the other. We all understand, that neither any State in this Union, nor the Union itself, has any right of interference between the British sovereign and a British subject, or between the French government and a citizen of France. Let this doctrine be applied to the relations which our fellow-citizens bear to the rulers who have authority over them. Primarily, religious rights embrace the relations between the creature and the Creator, just as political rights embrace the relations between subject and sovereign, or between a free citizen and the government of his choice, and just as parental rights embrace the relation between parent and child. Rights, therefore, which are strictly religious, lie out of and beyond the jurisdiction of civil governments. They belong exclusively to the jurisdiction of the divine government. If, then, the State of Massachusetts has no right of forcible interference between an Englishman or a Frenchman, and the English or French government, still less, far less, has it any right of forcible interference between the soul of man and the King and Lord to whom that soul owes undivided and supreme allegiance. Civil society may exist, or it may cease to exist. Civil government may continue for centuries in the hands of the same dynasty, or it may change hands, by revolution, with every new moon. The man outcast and outlawed to-day, and

to whom, therefore, we owe no obedience, may be rightfully installed in office to-morrow, and may then require submission to his legitimate authority. The civil governor may resign or be deposed; the framework of the government may be changed, or its laws altered; so that the duty of allegiance to a temporal sovereign may have a succession of new objects, or a succession of new definitions. But the relation of man to his Maker never changes. Its object and its obligations are immutable. The jurisdiction which God exercises over the religious obligations which his rational and accountable offspring owe to him excludes human jurisdiction. And hence it is that religious rights are inalienable rights. Hence, also, it is, that it is an infinitely greater offence to invade the special and exclusive jurisdiction which the Creator claims over the consciences and hearts of men than it would be to invade the jurisdiction which any foreign nation rightfully possesses over its own subjects or citizens. The latter would be only an offence against international law; the former is treason against the majesty of Heaven. The one violates secular and temporal rights only; the other violates sacred and eternal ones. When the British government passed its various statutes of *præmunire*, as they were called, — statutes to prevent the Roman pontiff from interfering between the British sovereign and the British subject, — it was itself constantly enacting and enforcing laws which interfered between the Sovereign of the universe and his subjects upon earth, far more directly and aggressively than any edict of the Roman see ever interfered with any allegiance due from a British subject to the self-styled defender of the faith.

It was in consequence of laws that invaded the direct and exclusive jurisdiction which our Father in heaven exercises over his children upon earth, that the Pilgrims fled from their native land to that which is the land of our nativity. They sought a residence so remote and so inaccessible, in the hope that the prerogatives of the Divine Magistrate might no longer be set at nought by the usurpations of the civil power. Was it

not an irreligious and an impious act on the part of the British government to pursue our ancestors with such cruel penalties and privations as to drive them into banishment? Was it not a religious and a pious act in the Pilgrim Fathers to seek a place of refuge where the arm of earthly power could neither restrain them from worshipping God in the manner which they believed to be most acceptable to him, nor command their worship in a manner believed to be unacceptable? And if it was irreligious in the British goverument to violate freedom of conscience in the case of our forefathers two centuries ago, then it is more flagrantly irreligious to repeat the oppression in this more enlightened age of the world. If it was a religious act in our forefathers to escape from ecclesiastical tyranny, then it must be in the strictest conformity to religion for us to abstain from all religious oppression over others, and to oppose it wherever it is threatened. And this abstinence from religious oppression, this acknowledgment of the rights of others, this explicit recognition and avowal of the supreme and exclusive jurisdiction of Heaven, and this denial of the right of any earthly power to encroach upon that jurisdiction, is precisely what the Massachusetts school-system purports to do in theory, and what it does actually in practice. Hence I infer that our system is not an irreligious one, but is in the strictest accordance with religion and its obligations.

It is still easier to prove that the Massachusetts school-system is not anti-Christian nor un-Christian. The Bible is the acknowledged expositor of Christianity. In strictness, Christianity has no other authoritative expounder. This Bible is in our common schools by common consent. Twelve years ago, it was not in all the schools. Contrary to the genius of our government, if not contrary to the express letter of the law, it had been used for sectarian purposes, — to prove one sect to be right, and others to be wrong. Hence it had been excluded from the schools of some towns by an express vote. But since the law, and the reasons on which it is founded, have been more fully explained and better understood, and since sectarian

instruction has, to a great extent, ceased to be given, the Bible has been restored. I am not aware of the existence of a single town in the State in whose schools it is not now introduced, either by a direct vote of the school-committee, or by such general desire and acquiescence as supersede the necessity of a vote. In all my intercourse for twelve years, whether personal or by letter, with all the school-officers in the State, and with tens of thousands of individuals in it, I have never heard an objection made to the use of the Bible in school, except in one or two instances; and, in those cases, the objection was put upon the ground that daily familiarity with the book in school would tend to impair a reverence for it.

If the Bible, then, is the exponent of Christianity; if the Bible contains the communications, precepts, and doctrines which make up the religious system called and known as Christianity; if the Bible makes known those truths, which, according to the faith of Christians, are able to make men wise unto salvation; and if this Bible is in the schools, — how can it be said that Christianity is excluded from the schools? or how can it be said that the school-system which adopts and uses the Bible is an anti-Christian or an un-Christian system? If that which is the acknowledged exponent and basis of Christianity is in the schools, by what tergiversation in language, or paralogism in logic, can Christianity be said to be shut out from the schools? If the Old Testament were in the schools, could a Jew complain that Judaism was excluded from them? If the Koran were read regularly and reverently in the schools, could a Mahometan say that Mahometanism was excluded? Or, if the Mormon Bible were in the schools, could it be said that Mormonism was excluded from them?

Is it not, indeed, too plain to require the formality of a syllogism, that if any man's creed is to be found in the Bible, and the Bible is in the schools, then that man's creed is in the schools? This seems even plainer than the proposition, that two and two make four; that is, we can conceive of a creature so low down in the scale of intelligence, that he could not see

what sum would be produced by adding two and two together, who still could not fail to see, that, if a certain system called Christianity were contained in and inseparable from a certain book called the Bible, then, wherever the Bible might go, there the system of Christianity must be. If a vase of purest alabaster, filled with myrrh and frankincense and precious ointments, were in the school, would not their perfumes be there also? And would the beautiful vase, and the sweet aroma of spice and unguént, be any more truly there, if some concocter of odors, such as Nature never made, should insist upon saturating the air with the products of his own distillations, which, though pleasant to *his* idiosyncrasy, would be nauseous to everybody else? But if a man is conscious or suspicious that his creed is not in the Bible, but resolves that it shall be in the schools at any rate, then it is easy to see that he has a motive either to exclude the Bible from school, or to introduce some other book, or some oral interpreter in company with it, to misconstrue and override it. If the Bible is in the schools, we can see a reason why a Jew, who disbelieves in the mission of our Saviour, or a Mahometan, who believes in that of the Prophet, should desire, by oral instruction or catechism or otherwise, to foist in his own views, and thereby smother all conflicting views; but even they would not dare to say that the schools where the Bible was found were either anti-Christian or un-Christian. So far from this, if they were candid, they would acknowledge that the system of Christianity was in the schools, and that they wished to neutralize and discard it by hostile means.

And further: our law explicitly and solemnly enjoins it upon all teachers, without any exception, "to exert their best endeavors to impress on the minds of children and youth committed to their care and instruction the principles of piety, justice, and a sacred regard to truth, love to their country, humanity, and universal benevolence, sobriety, industry, and frugality, chastity, moderation, and temperance, and those other virtues which are the ornament of human society, and

the basis upon which a republican constitution is founded." Are not these virtues and graces part and parcel of Christianity? In other words, can there be Christianity without them? While these virtues and these duties towards God and man are inculcated in our schools, any one who says that the schools are anti-Christian or un-Christian expressly affirms that his own system of Christianity does not embrace any one of this radiant catalogue; that it rejects them all; that it embraces their opposites.

And further still: our system makes it the express duty of all the "resident ministers of the gospel" to bring all the children within the moral and Christian inculcations above enumerated; so that he who avers that our system is an anti-Christian or an un-Christian one avers that it is both anti-Christian and un-Christian for a "minister OF THE GOSPEL" to promote, or labor to diffuse, the moral attributes and excellences which the statute so earnestly enjoins.

So far, the argument has been of an affirmative character. Its scope and purpose show, or at least tend to show, *by direct proof*, that the school-system of Massachusetts is not an anti-Christian nor an un-Christian system. But there is still another mode of proof. The truth of a proposition may be established by showing the falsity or absurdity of all conflicting propositions. So far as this method can be applied to moral questions, its aid may safely be invoked here.

What are the other courses which the State of Massachusetts might adopt or sanction in relation to the education of its youth? They are these four: —

1. It might establish schools, but expressly exclude all religious instruction from them, making them merely schools for secular instruction.

2. It might adopt a course directly the reverse of this. It might define and prescribe a system of religion for the schools, and appoint the teachers and officers, whose duty it should be to carry out that system.

3. It might establish schools by law, and empower each

religious sect, whenever and wherever it could get a majority, to determine what religious faith should be taught in them. And,

4. It might expressly disclaim and refuse all interference with the education of the young, and abandon the whole work to the hazards of private enterprise, or to parental will, ability, or caprice.

1. A system of schools from which all religious instruction should be excluded might properly be called un-Christian, or rather non-Christian, in the same sense in which it could be called non-Jewish or non-Mahometan; that is, as having no connection with either. I do not suppose a man can be found in Massachusetts who would declare such a system to be his first choice.

2. Were the State to establish schools, and prescribe a system of religion to be taught in them, and appoint the teachers and officers to superintend it, could there be any better definition or exemplification of an ecclesiastical establishment? Such a system would create at once the most formidable and terrible hierarchy ever established upon earth. It would plunge society back into the dark ages at one precipitation. The people would be compelled to worship the image which the government, like another Nebuchadnezzar, might set up; and, for any refusal, the fiery furnace, seven times heated, would be their fate. And worse than this. The sacerdotal tyranny of the dark ages, and of more ancient as well as of more modern times, addressed its commands to *men*. Against *men* it fulminated its anathemas. On *men* its lightnings fell. But *men* had free agency. They could sometimes escape. They could always resist. They were capable of thought. They had powers of endurance. They could be upheld by a sense of duty here, and by visions of transcending rewards and glories hereafter. They could proclaim truth in the gaspings of death, — on the scaffold, in the fire, in the interludes of the rack, — and leave it as a legacy and a testimony to others. But *children* have no such resources to ward off tyranny, or to

endure its terrors. They are incapable of the same comprehensive survey of truth, of the same invincible resolve, of being inspired with an all-sustaining courage and endurance from the realities of another life. They would die under imprisonment. Affrighted at the sight of the stake, or of any of the dread machinery of torture, they would surrender their souls to be distorted into any deformity, or mutilated into any hideousness. Before the process of starvation had gone on for a day, they would swallow any belief, from Atheism to Thuggery.

For any human government, then, to attempt to coerce and predetermine the religious opinions of children by law, and contrary to the will of their parents, is unspeakably more criminal than the usurpation of such control over the opinions of men. The latter is treason against truth; but the former is sacrilege. As the worst of all crimes against chastity are those which debauch the infant victim before she knows what chastity is, so the worst of all crimes against religious truth are those which forcibly close up the avenues and bar the doors that lead to the forum of reason and conscience. The spirit of ecclesiastical domination in modern times, finding that the principles of men are too strong for it, is attempting the seduction of children. Fearing the opinions that may be developed by mature reflection, it anticipates and forestalls those opinions, and seeks to imprint upon the ignorance and receptiveness of childhood the convictions which it could never fasten upon the minds of men in their maturity. As an instance of this, the "Factories Bill," so called, which, in the year 1843, was submitted by Sir James Graham to the British Parliament, may be cited. Among other things, this bill provided that schools should be established in manufacturing districts, under the auspices of the nation, and partly at its expense. These schools were to be placed under the immediate superintendence and visitation of officers appointed by the government. No teacher was to be eligible, unless approved by a bishop or archbishop. Any parent who hired out his child to work in a factory for half a day, unless he should go to this sectarian or

government school the other half of the day, was to be fined; and, for non-payment of the fine, imprisonment was the legal consequence. So any overseer or factory proprietor, who should employ a child for half a day who did not attend school the other half, was also subject to a fine; and, of course, to imprisonment, if the fine were not paid. It did not at all alter the principle, that in a few excepted cases, owing to the peculiar nature of the work, the children were allowed to prosecute it for a whole day, or for two or three days in succession; because, just so long as they were permitted to work, just so long were they required to go to the school after the work. Nor, in the great majority of cases, was it any mitigation of the plan, that, if the parents would provide a separate school for their children at their own expense, they might send to it; because not one in ten of the operatives had either time or knowledge to found such a school, or pecuniary ability to pay its expenses if it were founded. The direct object and effect, therefore, of the proposed law, were to compel children to attend the government school, and to be taught the government religion, under the penalty of starvation or the poorhouse. Children were debarred from a morsel of bread, unless they took it saturated with the government theology.

Now, to the moral sentiments of every lover of truth, of every lover of freedom for the human soul, is there not a meanness, is there not an infamy, in such a law, compared with which the bloody statutes of Elizabeth and Mary were magnanimous and honorable? To bring the awful forces of government to bear upon and to crush such lofty and indomitable souls as those of Latimer and Cranmer, of Ridley and Rogers, one would suppose to be diabolical enough to satisfy the worst spirits in the worst regions of the universe; but for a government to doom its children to starvation unless they will say its catechism, and to imprison the parent, and compel him to hear the wailings of his own famishing offspring, — compel him to see them perish, physically by starvation, or morally by ignorance, unless he will consent that they shall be taught such

religious doctrines as he believes will be a peril and a destruction to their immortal souls, — is it not the essence of all tyrannies, of all crimes, and of all baseness, concreted into one?

Such a system as this stands in the strongest possible contrast to the Massachusetts system. Will those who call our system un-Christian and anti-Christian adopt and practise this system as Christian and religious?

3. As a third method, the government might establish schools by law, and empower each religious sect, whenever and wherever it could get a majority, to determine what religious faith should be taught in them.

Under such a system, each sect would demand that its own faith should be inculcated in all the schools, and this on the clear and simple ground that such faith is the only true one. Each differing faith believed in by all the other sects, must, of course, be excluded from the schools; and this on the equally clear and simple ground that there can be but one true faith: and which that is has already been determined, and is no longer an open question. Under such a system, it will not suffice to have the Bible in the schools to speak for itself. Each sect will rise up, and virtually say, "Although the Bible from Genesis to Revelation is in the schools, yet its true meaning and doctrines are not there: Christianity is not there, unless our commentary, our creed, or our catechism, is there also. A revelation from God is not sufficient. Our commentary or our teacher must go with it to reveal what the revelation means. Our book or our teacher must be superadded to the Bible, as an appendix or an erratum is subjoined at the end of a volume to supply oversights and deficiencies, and to rectify the errors of the text. It is not sufficient that the Holy Ghost has spoken by the mouth of David; it is not sufficient that God has spoken by the mouth of all his holy prophets which have been since the world began; it is not sufficient that you have the words of one who spoke as never man spake: all this leaves you in fatal ignorance and error, unless you have our

'*addenda*' and '*corrigenda*,' — our things to be supplied, and things to be corrected. Nay, we affirm, that, without our interpretation and explanation of the faith which was once delivered unto the saints, all that the Holy Ghost and God and Christ have promulgated, and taught to men, still leaves your system an un-Christian and an anti-Christian system. To accept a revelation directly from Jehovah is not enough. His revelation must pass through our hands; his infinite Mind must be measured and squared by our minds: we have sat in council over his law, his promises, and his threatenings, and have decided, definitively, unappealably, and forever, upon the only true interpretation of them all. Your schools may be like the noble Bereans, searching the Scriptures daily; but, unless the result of those searchings have our countersign and indorsement, those schools are un-Christian and anti-Christian."

Now, it is almost too obvious to be mentioned, that such a claim as the above reduces society at once to this dilemma: if one religious sect is authorized to advance it for itself, then all other sects are equally authorized to do the same thing for themselves. The right being equal among all the sects, and each sect being equally certain and equally determined, what shall be done? Will not each sect, acting under religious impulses, — which are the strongest impulses that ever animate the breast of man, — will not each sect do its utmost to establish its supremacy in all the schools? Will not the heats and animosities engendered in families and among neighbors burst forth with a devouring fire in the primary or district school-meetings? and, when the inflammable materials of all the district-meetings are gathered together in the town-meeting, what can quell or quench the flames till the zealots themselves are consumed in the conflagration they have kindled? Why would not all those machinations and oppressions be resorted to, in order to obtain the ascendency, if religious proselytism should be legalized in the schools, which would be resorted to, as I have endeavored, in a preceding part of this Report, to explain, if political proselytism were permitted in the schools? Suppose,

at last, that different sects should obtain predominance in different schools, — just as is done by different religions in the different nations in Europe; so that, in one school, one system of doctrines should be taught to the children under the sanctions of law as eternal truth; and, in the neighboring schools, other and opposite systems should also be taught as eternal truth. Under such circumstances, perhaps it is not too much to suppose, that although some of the weaker sects might be crushed out of existence at once, yet that all the leading denominations, with their divisions and subdivisions, would have their representative schools. Into these, their respective catechisms or articles of faith would be introduced. And though the Bible itself might accompany them, yet, if we may judge from the history of all the religious struggles by which the world has been afflicted, the Bible would become the incident, and the catechism or articles the principal. And if these various catechisms or articles do declare, as is averred by each party, what the Bible means, and what the Christian religion is, then what a piebald, heterogeneous, and self-contradictory system does Christianity become! Suppose these schools to be brought nearer together, within hearing distance of each other, how discordant are the sounds they utter! Bring them under the same roof, remove partition, or other architectural barrier, so that they may occupy the same apartment, so that the classes may sit side by side; and does the spectacle which they now exhibit illustrate the one indivisible, all-glorious system of Christianity? or is it the return of Babel? Would such a system as this be called Christian by those who denounce our system as anti-Christian?

Is there not, on the contrary, an unspeakable value in the fact, that, under the Massachusetts system, the Bible is allowed to speak for itself? Under a system opposite to ours, this right of speaking for itself would never be vouchsafed to it. And how narrow is the distance between those who would never allow the Bible to be read by the people at all, and those who will allow it to be read only in the presence of a government

interpreter! If government and teachers really believe the Bible to be the word of God, — as strictly and literally given by his inspiration as the tables of the law which Moses brought down from the mount were written by his finger, — then they cannot deny, that, when the Bible is read, God speaks, just as literally and truly as an orator or a poet speaks when his oration or his poem is rehearsed. With this belief, it is no figure of speech to say, when the lids of the Bible are opened in school that its oracles may be uttered, that the lips of Jehovah are opened that he may commune with all his children, of whatever faith, who may be there assembled. Is that a time and an occasion for a worm of the dust, a creature of yesterday, to rush in and close the book, and silence the Eternal One, that he may substitute some form of faith of his own, — some form, either received from tradition, or reasoned out or guessed out by his fallible faculties, — and impose it upon the children as the plainer and better word of God? Or when the allotted hour for religious instruction comes, or the desire arises in the teacher's mind that the children of the school should hold communion with their heavenly Father, suppose that Father, instead of the medium of the Bible, should send an angel from his throne to make known to them his commands and his benedictions by living lips and in celestial words. Would that be a time for the chiefs of twenty different sects to rush in with their twenty different catechisms, and thrust the heavenly messenger aside, and struggle to see which could out-vociferate the rest in proclaiming what the visitant from on high was about to declare?

I hold it, then, to be one of the excellences, one of the moral beauties, of the Massachusetts system, that there is one place in the land where the children of all the different denominations are brought together for instruction, where the Bible is allowed to speak for itself; one place where the children can kneel at a common altar, and feel that they have a common Father, and where the services of religion tend to create brothers, and not Ishmaelites. If this be so, then it does vio-

lence to truth to call our system anti-Christian or un-Christian.

Thus far, under this head, I have supposed that the different sects, in their contests for supremacy, would keep the peace. But every page in the history of polemic struggles shows such a supposition to be delusive. In the contests for victory, success would lead to haughtiness, and defeat to revenge. Affinities and repulsions would gather men into bodies: these bodies would become battalions, and would set themselves in hostile array against each other. Weakness of argument would re-enforce itself by strength of arm; and the hostile parties would appeal from the tribunal of reason to the arbitrament of war. But after cities had been burned, and men slaughtered by thousands, and every diabolical passion in the human breast satiated, and the combatants were forced, from mere exhaustion, to rest upon their arms, it would be found, on a re-examination of the controverted grounds, that not a rule of interpretation had been altered, not the tense of a single verb in any disputed text had been changed, not a Hebrew point nor a Greek article had been added or taken away, but that every subject of dispute remained as unsettled and uncertain as before. Is any system, which, by the law of the human passions, leads to such results, either Christian or religious?

4. One other system, if it may be so called, is supposable; and this exhausts the number of those which stand in direct conflict with ours. It is this: Government might expressly disclaim and refuse all interference with the education of the young, abandoning the whole work to the hazards of private enterprise, or to parental will, ability, or caprice.

The first effect of this course would be the abandonment of a large portion of the children of every community to hopeless and inevitable ignorance. Even with all the aids, incitements, and bounties now bestowed upon education by the most enlightened States in this Union, there exists a perilous and a growing body of ignorance, animated by the soul of vice. Were government systems to be abolished, and all government

aids to be withdrawn, the number of American children, who, in the next generation, would be doomed to all the wants and woes that can come in the train of ignorance and error, would be counted by millions. This abandoned portion of the community would be left, without any of the restraints of education, to work out the infinite possibilities of human depravity. In the more favored parts of the country, the rich might educate their own children; although it is well known, even now, that, throughout extensive regions of the South and West, the best education which wealth can procure is meagre and stinted, and alloyed with much error. The "parochial" or "sectarian" system might effect something in populous places; but what could it do in rural districts, where so vast a proportion of all the inhabitants of this country reside? In speaking of the difficulties of establishing schools at the West, Miss Beecher gives an account of a single village which she found there, consisting of only four hundred inhabitants, where there were *fourteen* different denominations. "Of the most numerous portions of these," she says, "each was jealous lest another should start a church first, and draw in the rest. The result was, neither church nor Sunday school of any kind was in existence." Of another place she says, "I found two of the most influential citizens arrayed against each other, and supported by contending partisans, so that whatever school one portion patronized the other would oppose. The result was, no school could be raised large enough to support any teacher." And again: "In another large town, I was informed by one of the clergymen that no less than twenty different teachers opened schools and gave them up in about six months."

In a population of four hundred, there would be about one hundred children who *ought* to attend school; although this proportion, on an average of the whole country, is nearly threefold the number of actual attendants. One hundred children would furnish the materials for a good school, but, divided between fourteen different schools, would give only seven children and one-seventh of a child to each school. How impossi-

ble to sustain schools on such a basis! The more numerous sects, it is true, would have a larger proportion; but just so much less would be the proportion of the smaller sects, and doubtless there would be some who would be fully represented by the above-mentioned fraction of one-seventh of a child. But let us take the case of Massachusetts, where the population has a density of five times the average of the other States in the Union, and let us see how insane and suicidal would be such a course of policy even with us. Leaving out all the *cities*, there are three hundred and five *towns*, in Massachusetts; and these comprise most of the rural and sparsely-populated portion of the State. These three hundred and five towns have an average of eleven schools (wanting a very small fraction) for each. Two hundred and twenty-six of these three hundred and five towns have a population, according to the last census, of less than twenty-two hundred each. If there are twenty-two hundred inhabitants and eleven schools in a town, each school represents an average of two hundred inhabitants. Including every child who was found in *all* our public schools last year, for any part either of the summer or winter terms, they would make a mean average for those terms of only forty-eight to a school. Now, suppose these forty-eight scholars to be divided, not between "*fourteen*," but only between *four* different denominations, there would be but *twelve* to a school. Connect this result with the fact that Massachusetts has a population five times as dense as the average of the residue of the Union, and it will be seen, by intuition, that only in a few favored localities could the system of "sectarian" schools be maintained. This obstacle might be partially overcome by a union of two or more sects, between whom the repellency resulting from some punctilios in matters of form or ceremonial observance would not overcome the argument from availability; but this union, having been purchased by the sacrifice of a portion of what each holds to be absolute truth, why, when any one of the allies should become sufficiently powerful to stand alone, would it not dissolve the alliance, set up for itself, and abandon its confederates to their fate?

In making the above computation, which gives an average of forty-eight scholars to each school, it will be observed that *all* the schools in the State are included, — the numerously-attended schools of the cities as well as the small ones of the country. And although the number of districts in the two hundred and twenty-six towns whose population is less than twenty-two hundred each may be somewhat less than in the remaining seventy-nine towns, yet the fact unquestionably is, that an allowance of forty-eight scholars to a school is much too large an average for the schools in these two hundred and twenty-six, of the three hundred and five towns in the State. Of course, twelve scholars to a school would be much too large an average, if the schools were divided only between four different sects. Nor has any mention been made of the large numbers who connect themselves with no religious sect, and who, therefore, if united at all, would be united on the principle of opposition to sect. Surely the very statement of the case supersedes argument in regard to the possibility of maintaining schools for any considerable portion of the children of the country on such a basis.

The calamities necessarily resulting from so partial and limited a system as the one now under consideration would inflict retributive loss and weakness upon all classes in the community; but upon the children of the poor, the ignorant, and the unfortunate, would the blow fall with terrible severity. And what class of children ought we most assiduously to care for? Christ came to save that which would otherwise be lost. All good men, and all governments, so far as they imitate the example of Christ, strive to succor the distressed, and to reclaim the guilty; in an *intellectual* and in a *moral* sense, to feed the hungry, to clothe the naked, to visit the sick and the imprisoned; amid the priceless wealth of character, to find the lost piece of silver; and, amid the wanderings from the fold of truth, to recover the lambs. Before Heaven, it is now, to-day, the first duty of every government in Christendom to bring forward those unfortunate classes of the people, who, in

the march of civilization, have been left in the rear. Though the van of society should stand still for a century, the rear ought to be brought up. The exterminating decree of Herod was parental and beneficent compared with the cruel sway of those rulers who dig the pit-falls of temptation along the pathway of children, and suffer them to fall, unwarned and unassisted, into the abysses of ruin. What, then, shall be said of that opposition to our system, which, should it prevail, would doom to remediless ignorance and vice a great majority of all the children in this land? Is such a system, as contradistinguished from our free system, Christian and religious?

It is a very surprising fact, but one which is authenticated by a report, made in the month of July last, by a committee of the Boston primary-schools, that, of the *ten thousand one hundred and sixty-two* children belonging to said schools, *five thousand one hundred and fifty-four* were of foreign parentage. Let sectarianism be introduced into the Boston schools, or rather let it be understood that the schools are to be carried on for the avowed purpose of building up any one of the New-England denominations, and what a vast proportion of these *five thousand one hundred and fifty-four* children would be immediately withdrawn from the schools! Their parents would as soon permit them to go to a lazar-house as to such schools; and this, too, from the sincerest of motives. The same thing would prove relatively true in regard to no inconsiderable number of the less populous cities, and of the most populous towns, in the State. Now, what would be the condition of such children at the end of twenty years? and what the condition of the communities which had thus cruelly closed the school-house-doors upon them? Would not these communities be morally responsible for all the degradation, the miseries, the vices, and the crimes consequent upon such expulsion from the school? And would such a result be one of the fruits of a Christian and a religious system?

But there would be another inseparable accompaniment of such a system. In Massachusetts, the average compensation

paid to male teachers is very much larger than that which is paid in any other State in the Union. It is nearly double what is given in most of the States ; and yet, even with us, the great body of ambitious and aspiring young men pass by the profession of teaching, and betake themselves to some other employment, known to be more lucrative, and falsely supposed to be more honorable. How degrading, then, must be the effect upon the general character and competency of teachers as a profession, when, on the abolition of the public schools, and the substitution of private and sectarian schools in their stead, the wages of teachers, for the poorer classes, shall be reduced to a pittance, and the collection of even this pittance shall be precarious! What will be the social rank and standing of teachers, when their customary income encourages no previous preparation for their work, doles out only a niggardly subsistence even while they are engaged in the service, and leaves no surplus for the probable wants of sickness, or the certain ones of age? And among whom shall the teacher seek his associates, when he is shunned by the learned for his want of culture, and ridiculed for his poverty by the devotees of wealth? Even in England, where the population is so dense that hardly a spot can be selected as a centre, which will not embrace, within a circumference of convenient distance, a sufficient number of children for a school, — even there, the voluntary and sectarian system leaves at least two-thirds of the agricultural and manufacturing classes in a state of the most deplorable ignorance; supplying them with teachers, so far as it supplies them with teachers at all, who fulfil the double office of perpetuating errors in school, and degrading the character of the profession out of it.

There is another fact of fearful significance, which no one who has any regard for the common interests of society can be pardoned for forgetting. It is known to all, that, in many parts of the Union, the population is so sparse, and can command so little of ready means for paying salaries, that no *resident* clergyman of any denomination is to be found throughout

wide districts of country; and many of those who do devote themselves to the spiritual welfare of their fellow-men are most scantily provided for. If unmarried, they can barely live; if they have a family, there is, oftentimes, a real scantiness of the comforts and necessaries of life. They have neither books to peruse; nor leisure to read, even if they had books. They may be a pious, but they cannot be a learned clergy. At least in one respect, they are compelled to imitate St. Paul; for as he wrought at his own "craft" for a subsistence, so must they. And now, if existing means are too scanty to give a respectable support even to the ministry, how disastrous must be the effect of dividing these scanty means between the institution of the gospel and the institution of the school! Will not the vineyard of the Lord be overgrown with weeds, will not its hedges be broken down, and the wild beasts of the forest make their lair therein, if the servants who are set to tend and to dress it are so few in number, and so miserably provided for? Is not this another criterion by which to determine whether our present system is not as Christian and as religious as that which would supplant it?

I know of but one argument, having the semblance of plausibility, that can be urged against this feature of our system. It may be said, that if questions of doctrinal religion are left to be decided by men for themselves, or by parents for their children, numerous and grievous errors will be mingled with the instruction. Doubtless the fact is so. If truth be one, and if many contradictory dogmas are taught as truth, then it is mathematically certain that all the alleged truths but one is a falsity. But, though the statement is correct, the inference which is drawn from it in favor of a government standard of faith is not legitimate; for all the religious errors which are believed in by the free mind of man, or which are taught by free parents to their children, are tolerable and covetable, compared with those which the patronage and the seductions of government can suborn men to adopt, and which the terrors of government can compel them to perpetuate. The errors of free minds are

so numerous and so various, that they prevent any monster-error from acquiring the ascendency, and therefore truth has a chance to struggle forward amid the strifes of the combatants; but if the monster-error can usurp the throne of the civil power, fortify itself by prescription, defend its infallibility with all the forces of the State, sanctify its enormities under sacred names, and plead the express command of God for all its atrocities, — against such an antagonist, Truth must struggle for centuries, bleed at every pore, be wounded in every vital part, and can triumph at last, only after thousands and tens of thousands of her holiest disciples shall have fallen in the conflict.

If, then, a government would recognize and protect the rights of religious freedom, it must abstain from subjugating the capacities of its children to any legal standard of religious faith with as great fidelity as it abstains from controlling the opinions of men. It must meet the unquestionable fact, that the old spirit of religious domination is adopting new measures to accomplish its work, — measures which, if successful, will be as fatal to the liberties of mankind as those which were practised in by-gone days of violence and terror. These new measures are aimed at children instead of men. They propose to supersede the necessity of subduing free thought *in the mind of the adult*, by forestalling the development of any capacity of free thought *in the mind of the child*. They expect to find it easier to subdue the free agency of children by binding them in fetters of bigotry than to subdue the free agency of men by binding them in fetters of iron. For this purpose, some are attempting to deprive children of their right to labor, and, of course, of their daily bread, unless they will attend a government school, and receive its sectarian instruction. Some are attempting to withhold all means even of secular education from the poor, and thus punish them with ignorance, unless, with the secular knowledge which they desire, they will accept theological knowledge which they condemn. Others still are striving to break down all free public-school systems where they exist, and to prevent their establishment where they do

not exist, in the hope, that, on the downfall of these, their system will succeed. The sovereign antidote against these machinations is free schools for all, and the right of every parent to determine the religious education of his children.

This topic invites far more extended exposition; but this must suffice. In bidding an official farewell to a system with which I have been so long connected, to which I have devoted my means, my strength, my health, twelve years of time, and, doubtless, twice that number of years from what might otherwise have been my term of life, I have felt bound to submit these brief views in its defence. In justice to my own name and memory; in justice to the Board of which I was originally a member, and from which I have always sought counsel and guidance; and in justice to thousands of the most wise, upright, and religious-minded men in Massachusetts, who have been my fellow-laborers in advancing the great cause of popular education, under the auspices of this system, — I have felt bound to vindicate it from the aspersions cast upon it, and to show its consonance with the eternal principles of equity and justice. I have felt bound to show, that so far from its being an irreligious, an anti-Christian, or an un-Christian system, it is a system which recognizes religious obligations in their fullest extent; that it is a system which invokes a religious spirit, and can never be fitly administered without such a spirit; that it inculcates the great commands upon which hang all the law and the prophets; that it welcomes the Bible, and therefore welcomes all the doctrines which the Bible really contains; and that it listens to these doctrines so reverently, that, for the time being, it will not suffer any rash mortal to thrust in his interpolations of their meaning, or overlay the text with any of the "many inventions" which the heart of man has sought out. It is a system, however, which leaves open all other means of instruction, — the pulpits, the Sunday schools, the Bible classes, the catechisms, of all denominations, — to be employed according to the preferences of individual parents. It is a system which restrains itself from teaching

that what it does teach is all that needs to be taught, or that should be taught; but leaves this to be decided by each man for himself, according to the light of his reason and conscience, and on his responsibility to that Great Being, who, in holding him to an account for the things done in the body, will hold him to the strictest account for the manner in which he has "trained up" his children.

Such, then, in a religious point of view, is the Massachusetts system of common schools. Reverently it recognizes and affirms the sovereign rights of the Creator, sedulously and sacredly it guards the religious rights of the creature; while it seeks to remove all hinderances, and to supply all furtherances, to a filial and paternal communion between man and his Maker. In a social and political sense, it is a *free* school-system. It knows no distinction of rich and poor, of bond and free, or between those, who, in the imperfect light of this world, are seeking, through different avenues, to reach the gate of heaven. Without money and without price, it throws open its doors, and spreads the table of its bounty, for all the children of the State. Like the sun, it shines not only upon the good, but upon the evil, that they may become good; and, like the rain, its blessings descend not only upon the just, but upon the unjust, that their injustice may depart from them, and be known no more.

To the great founders of this system we look back with filial reverence and love. Amid the barrenness of the land, and in utter destitution of wealth, they coined the rude comforts, and even the necessaries, of life, into means for its generous support. Though, as laborers by day, they subdued the wilderness, and, as sentinels by night, they guarded the camp, yet they found time for the vigilant administration and oversight of the schools in the day of their infancy and weakness. But for this single institution, into which they transfused so much of their means and of their strength, and of which they have made us the inheritors, how different would our lot and our life have been! Upon us its accumulated blessings have

descended. It has saved us from innumerable pains and perils that would otherwise have been our fate, — from the physical wretchedness that is impotent to work out its own relief, from the darkness of the intellect whose wanderings after light so often plunge it into deeper gloom, and from the moral debasement whose pleasures are vices and crimes. It has surrounded us with a profusion of comforts and blessings of which the most poetic imagination would never otherwise have conceived. It has found, not mythologic goddesses, but gigantic and tireless laborers, in every stream; not evil and vindictive spirits, but beneficent and helping ones, in all the elements; and, by a profounder alchemy than the schoolmen ever dreamed of, it transmutes quarries and ice-fields into gold. It has given cunning to the hand of the mechanic, keenness to the artisan's eye, and made a sterile soil grow grateful beneath the skill of the husbandman. Hence the absence of poverty among our native population; hence a competency for the whole people, the means for mental and moral improvement, and for giving embellishment and dignity to life, such as the world has never known before, and such as nowhere else can be found upon the face of the earth.

How divinely wise were our Pilgrim Fathers when they foresaw, that, if they could give knowledge and virtue to their children, they gave them all things! Wonder and admiration seize us as we reflect upon the vastness of the results which their wisdom wrought out from the scantiest of resources. They have taught us the great lesson, how the fiercest elements obey, and how the most obdurate and intractable of Nature's substances bend and melt before the power of knowledge, and the fervors of a saintly heroism. Their deeds have taught us, not only that the race is not to the swift, nor the battle to the strong, but they have taught us that the swiftness which shall win the honors of the goal, and the strength that shall triumph in the strife, are to be found in the soul, and not in the limbs, of man. But though, to this untitled yet noblest ancestry, we are bound to pay the homage of our gratitude, and to accept

their benefactions with a filial love, yet neither the complacency of enjoyment, nor that of retrospection, is the frame of mind that best befits us. *We have our futurity as they had theirs*, — a futurity rapidly hastening upon us, — a futurity now fluid, — ready, as clay in the hands of the potter, to be moulded into every form of beauty and excellence; but so soon as it reaches our hands, so soon as it receives the impress of our plastic touch, whether this touch be for good or for evil, it is to be struck into the adamant of the unchanging and unchangeable past. Into whose form and likeness shall we fashion this flowing futurity, — of Mammon, of Moloch, or of Jesus? Clear, and more clear, out of the dimness of coming time, emerge to the vision of faith the myriad hosts of the generations that shall succeed us. These generations are to stand in our places, to be called by our names, and to accept the heritage of joy or of woe which we shall bequeath them. Shall they look back upon us with veneration for our wisdom and beneficent forecast, or with shame at our selfishness and degeneracy? Our ancestors were noble examples to us; shall we be ignoble examples to our posterity? They gave from their penury, and shall we withhold from our abundance? Let us not dishonor our lineage. Let us remember that generosity is not to be measured by the largeness of the sum which a man may give, but by the smallness of the sum which remains to him after his gift. Let us remember that the fortunes of our children, and of their descendants, hang upon our fidelity, just as our fortunes were suspended upon the fidelity of our fathers. Deeds survive the doers. In the highest and most philosophic sense, the asserted brevity of human life is a fiction. The act remains, though the hand that wrought it may have perished. And when our spirits shall have gone to their account, and the dust of our bodies shall be blown about by the winds, or mingled with the waves, the force which our life shall have impressed upon the machinery of things will continue its momentum, and work out its destiny upon the character and happiness of our descendants.

But not the fortunes of our children alone, or of our children's children, are dependent upon us. The influences of our conduct extend outward in space as well as onward in time. We are part of a mighty nation, which has just embarked upon the grandest experiment ever yet attempted upon earth, — the experiment of the capacity of mankind for the wise and righteous government of themselves. Fearful are the issues which hang upon the trial, but few and simple the conditions that predestine its result. The firmament, though pillared upon rottenness, shall be upheld, and the light of day shall continue to revisit the earth, though the sun be blotted out, sooner than a republic shall stand which has not knowledge and virtue for its foundations. Yet are we not braving the results of this experiment, in impious defiance of the conditions on which Heaven has decreed that the trial shall turn? Within a brief period of time, our population has spread itself westward from the Atlantic, through more than twenty degrees of longitude. It has erected thirty States, and given to each a republican frame of government. Yet, in more than one-half of these States, no provision worthy of the name is made for replenishing the common mind with knowledge, or for training the common heart to virtue. Surely, to the people of these States, a different mental and moral culture must come speedily, or it will come too late; and the sower who would scatter the elements of knowledge and virtue amongst them must press forward with gigantic strides, and cast his seed with a gigantic arm.

Nor is this all. Beyond our western frontier, another and a wider realm spreads out, as yet unorganized into governments, and uninhabited by civilized man. The western is still broader than the eastern expanse. It stretches through thirty degrees of longitude, — one-twelfth part of the circumference of the globe. Half the population of Continental Europe might be transplanted to it, find subsistence on it, and leave room to spare. It is now a waste more dreary than desolation itself; for it is filled only with savage life. Yet soon will every rood of its surface be explored by the centrifugal force of

the Saxon soul; and whatever of vegetable wealth is spread upon it, or of mineral wealth is garnered beneath it, will be appropriated by the vehemenee of Saxon enterprise. Shall this new empire, wider than that of the Ptolemies, and almost as extensive as that of the Cæsars, be reelaimed to humanity, to a Christian life, and a Christian history? or shall it be a receptacle where the avariee, the profligaey, and the licentiousness of a corrupt civilization shall cast its criminals and breed its monsters? If it is ever to be saved from sueh a perdition, the mother States of this Union, those States where the institutions of learning and religion are now honored and cherished, must send out their hallowing influenees to redeem it. And if, in the benignant providence of God, the tree of Paradise is ever to be planted and to flourish in this new realm; if its branches are to spread, and its leaves to be scattered for the healing of the people, — will not the heart of every true son of Massaehusetts palpitate with desire — not a low and vainglorious ambition, but such a high and holy aspiration as angels might feel — that her name may be engraved upon its youthful trunk, there to deepen and expand with its immortal growth?

THE END.

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