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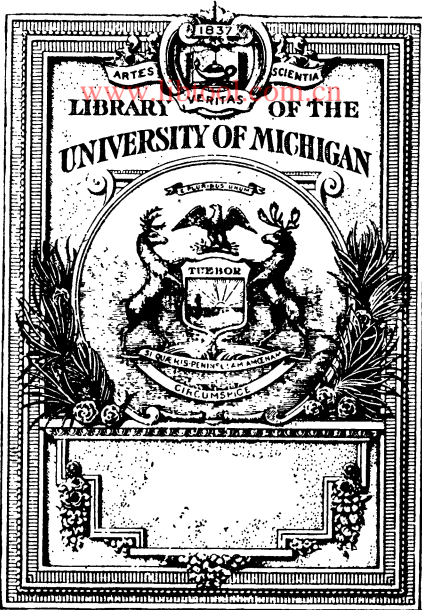
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THE
EDUCATION
OF
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AMERICAN GIRLS.

CONSIDERED IN A SERIES OF
ESSAYS.

EDITED BY
ANNA C. BRACKETT.

"The time has arrived, when like huntsmen, we should surround the cover, and look sharp that justice does not slip away and pass out of sight and get lost; for there can be no doubt that we are in the right direction. Only try and get a sight of her, and if you come within view first, let me know."—PLATO REP. BOOK IV.



NEW YORK:
G. P. PUTNAM'S SONS,
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TO THE

SCHOOL-GIRLS AND COLLEGE-GIRLS

OF

AMERICA,

BECAUSE WE BELIEVE THAT THEIR IDEALS ARE HIGH AND THAT
THEY HAVE STRENGTH TO MAKE THEM REAL,

This Book is Dedicated

BY THE

WOMEN WHO, IN THE INTERVALS SNATCHED FROM DAILY LABOR,

HAVE WRITTEN IT FOR THEIR SAKES.

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PREFACE.

THE Table of Contents sufficiently indicates the purpose and aim of this book. The essays are the thoughts of American women, of wide and varied experience, both professional and otherwise; no one writer being responsible for the work of another. The connecting link is the common interest. Some of the names need no introduction. The author of Essay IV. has had an unusually long and varied experience in the education and care of Western girls, in schools and colleges. The author of the essay on English Girls is a graduate of Antioch, has taught for many years in different sections of this country, and has had unusual opportunities, for several years, of observing English methods and results.

The essays on the first four institutions, whose names they bear, come with the official sanction of the presiding officers of those institutions, who vouch for the correctness of the statements. Of these, VII. is by a member of the present Senior Class of the University, who has instituted very exact personal inquiries among the women-students. The author of VIII. is the librarian of Mt. Holyoke Seminary. The writer of the report from

Oberlin is a graduate—a teacher of wide experience, and has been for three or four years the Principal of the Ladies' Department of the college. The resident physician at Vassar is too well known as such, to need any introduction.

There are many other institutions whose statistics would be equally valuable, such, for instance, as the Northwestern University of Illinois, which has not only opened its doors to girl-students, but has placed women on the Board of Trustees, and in the Faculty.

From Antioch, which we desired to have fully represented, we have been disappointed in obtaining statistics, which may, however, hereafter be embodied in a second edition. In place thereof, we give the brief statement of facts found under the name of the institution, supplied by a friend.

With reference to my own part of the volume, if the words on "Physical Education" far outnumber those on the "Culture of the Intellect," and the "Culture of the Will," it can only be said that the American nation are far more liable to overlook the former than the latter two, and that the number of pages covered is by no means to be taken as an index of the relative importance of the divisions in themselves. Of the imperfection of all three, no one can be more conscious than their author. The subject is too large for any such partial treatment.

To friends, medical, clerical, and unprofessional, who

have kindly given me the benefit of their criticism on different parts of the introductory essay, my thanks are due. Especially do I recognize my obligation to Dr. W. Gill Wylie, of this city, whose line of study and practice has made his criticism of great value.

I cannot refrain from adding that I am fully aware of the one-sided nature of the training acquired in the profession of teaching. Civilization, implying, as it does, division of labor, necessarily renders all persons more or less one-sided. In the teaching profession, the voluntary holding of the mind for many hours of each day in the position required for the work of educating uneducated minds, the constant effort to state facts clearly, distinctly, and freed from unnecessary details, almost universally induce a straightforwardness of speech, which savors, to others who are not immature, of brusqueness and positiveness, if it may not deserve the harsher names of asperity and arrogance. It is not these in essence, though it appear to be so, and thus teachers often give offense and excite opposition when these results are farthest from their intention. In the case of these essays, this professional tendency may also have been aggravated by the circumstances under which they have been written, the only hours available for the purpose having been the last three evening hours of days whose freshness was claimed by actual teaching, and the morning hours of a short vacation.

I do not offer these explanations as an apology, simply

as an explanation. No apology has the power to make good a failure in courtesy. If passages failing in this be discovered, it will be cause for gratitude and not for offense if they are pointed out.

The spirit which has prompted the severe labor has been that which seeks for the Truth, and endeavors to express it, in hopes that more perfect statements may be elicited.

With these words, I submit the result to the intelligent women of America, asking only that the screen of the honest purpose may be interposed between the reader and any glaring faults of manner or expression.

ANNA C. BRACKETT.

117 East 36th street, New York City,
January, 1874.

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“Die Weltgeschichte ist der Fortschritt in das Bewusstseyn der Freiheit.”—HEGEL.

THE EDUCATION
OF
AMERICAN GIRLS.

“Who educates a woman, educates a race.”

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THE
EDUCATION OF AMERICAN
GIRLS.

THERE seems to be at present no subject more capable of exciting and holding attention among thoughtful people in America, than the question of the Education of Girls. We may answer it as we will, we may refuse to answer it, but it will not be postponed, and it will be heard; and until it is answered on more rational grounds than that of previous custom, or of preconceived opinion, it may be expected to present itself at every turn, to crop out of every stratum of civilized thought. Nor is woman to blame if the question of her education occupies so much attention. The demands made are not hers—the continual agitation is not primarily of her creating. It is simply the tendency of the age, of which it is only the index. It would be as much out of place to blame the weights of a clock for the moving of the hands, while, acted upon by an unseen, but constant force, they descend slowly but steadily towards the earth.

That this is true, is attested by the widely-spread discussion and the contemporaneous attempts at reform in widely-separated countries. While the women in America are striving for a more complete development of their powers, the English women are, in their own way, and quite independently, forcing their right at least to be examined if not to be taught, and the Russian women are

asserting that the one object toward which they will bend all their efforts of reform is "the securing of a solid education from the foundation up." When the water in the Scotch lakes rises and falls, as the quay in Lisbon sinks, we know that the cause of both must lie far below, and be independent of either locality.

The agitation of itself is wearisome, but its existence proves that it must be quieted, and it can be so quieted only by a rational solution, for every irrational decision, being from its nature self-contradictory, has for its chief mission to destroy itself. As long as it continues, we may be sure that the true solution has not been attained, and for our hope we may remember that we

"have seen all winter long the thorn
First show itself intractable and fierce,
And after, bear the rose upon its top."

We, however, are chiefly concerned with the education of our own girls, of girls in America. Born and bred in a continent separated by miles of ocean from the traditions of Europe, they may not unnaturally be expected to be of a peculiar type. They live under peculiar conditions of descent, of climate, of government, and are hence very different from their European sisters. No testimony is more concurrent than that of observant foreigners on this point. More nervous, more sensitive, more rapidly developed in thinking power, they scarcely need to be stimulated so much as restrained; while, born of mixed races, and reared in this grand meeting-ground of all nations, they gain at home, in some degree, that breadth which can be attained in other countries only by travel. Our girls are more frank in their manners, but we nowhere find girls so capable of teaching intrusion

and impertinence their proper places, and they combine the French nerve and force with the Teutonic simplicity and truthfulness. Less accustomed to leading-strings, they walk more firmly on their own feet, and, breathing in the universal spirit of free inquiry, they are less in danger of becoming unreasonable and capricious.

Such is the material, physical and mental, which we have to fashion into womanhood by means of education. But is it not manifest in the outset, that no system based on European life can be adequate to the solution of such a problem? Our American girls, if treated as it is perfectly correct to treat French or German girls, are thwarted and perverted into something which has all the faults of the German and French girl, without her excellencies. Our girls will not blindly obey what seem to them arbitrary rules, and we can rule them only by winning their conviction. In other words, they will rule themselves, and it therefore behooves us to see that they are so educated that they shall do this wisely. They are not continually under the eye of a guardian. They are left to themselves to a degree which would be deemed in other countries impracticable and dangerous. We cannot follow them everywhere, and therefore, more than in any other country must we educate them, so that they will follow and rule themselves. But no platform of premise and conclusion, however logical and exact, is broad enough to place under an uneducated mind. Nothing deserving the name of conviction can have a place in such. Prejudices, notions, prescriptive rules, may exist there, but these are not sufficient as guides of conduct.

Education, of course, signifies, as a glance at the etymology of the word shows us, a development—an unfolding of innate capacities. In its process it is the gradual

transition from a state of entire dependence, as at birth, to a state of independence, as in adult life. Being a general term, it includes all the faculties of the human being, those of his mortal, and of his immortal part. It is a training, as well of the continually changing body, which he only borrows for temporary use from material nature, and whose final separation is its destruction, as of the changeless essence in which consists his identity, and which, from its very nature, is necessarily immortal. The education of a girl is properly said to be finished when the pupil has attained a completely fashioned will, which will know how to control and direct her among the exigencies of life, mental power to judge and care for herself in every way, and a perfectly developed body. However true it may be, that life itself, by means of daily exigencies, will shape the Will into habits, will develop to some extent the intelligence, and that the forces of nature will fashion the body into maturity; we apply the term Education only to the voluntary training of one human being who is undeveloped, by another who is developed, and it is in this sense alone that the process can concern us. For convenience, then, the subject will be considered under three main heads, corresponding to the triple statement made above.

Especially is it desirable to place all that one may have to say of the education of girls in America on some proved, rational basis, for in no country is the work of education carried on in so purely empirical a way. We are deeply impressed with its necessity; we are eager in our efforts, but we are always in the condition of one "whom too great eagerness bewilders." We are ready to drift in any direction on the subject. We adopt every new idea that presents itself. We recognize our errors

in one direction, and in our efforts to prevent those we fall into quite as dangerous ones on the other side. More than in any other country, then, it were well for us to follow in the paths already laid out by the thinkers of Germany. I shall, therefore, make no apology for using as guide the main divisions of the great philosophers of that nation, who alone, in modern times, have made for Education a place among the sciences. Truth is of no country, but belongs to whoever can comprehend it.

Nor do I apologize for speaking of what may be called small things nor for dealing with minor details. "When the fame of Heraclitus was celebrated throughout Greece, there were certain persons that had a curiosity to see so great a man. They came, and as it happened, found him warming himself in a kitchen. The meanness of the place occasioned them to stop, upon which the philosopher thus accosted them: 'Enter,' said he, 'boldly, for here too there are gods!'" Following so ancient and wise an authority, I also say to myself in speaking of these things which seem small and mean: Enter boldly, for here too there are gods; nay, perchance we shall thereby enter the very temple of the goddess Hygeia herself.

PHYSICAL EDUCATION,

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OR,

THE CULTURE OF THE BODY.

“Hæc ante exitium primis dant signa diebus.”—VIRGIL.

“Now my belief is—and this is a matter upon which I should like to have your opinion, but my own belief is—not that the good body improves the soul, but that the good soul improves the body. What do you say?”—PLATO, REP. BOOK III.

IF we could literally translate the German word *Fertigkeiten* into Readinesses, and use it as a good English word, we should then have a term under which to group many arts of which a fully educated woman should have some knowledge—I mean cooking, sewing, sweeping, dusting, etc. When a woman is mistress of these, she is called *capable*, that good old word, heard oftener in New England than elsewhere, which carries with it a sweet savor of comfort and rest. Some knowledge of these should undoubtedly constitute a part of the education of our girls; but the “how much” is a quantity which varies very materially as the years go by. For instance, the art of knitting stockings was considered in the days of our grandmothers one to which much time must be devoted, and those of us who were born in New England doubtless well recollect the time when, to the music of the tall old kitchen clock, we slowly, laboriously and yet triumphantly, “bound off” our first heel, or “narrowed off” our first toe.

But weaving machines can do this work now with far greater precision ; and while stockings are so good and so cheap, is it worth while for our girls to spend long hours in the slow process of looping stitches into each other? Would not the same time be better spent in the open air and the sunshine, than in-doors, with cramped fingers and bent back over the knitting-needles?

Of Sewing, nearly the same might be said, since the invention of machines for the purpose. Sewing is a fine art, and those of us who can boast of being neat seamstresses do confess to a certain degree of pride in the boast. But the satisfaction arises from the well-doing, and not from the fact that it is Sewing well done; for anything well and thoroughly done, even if it be only boot-blackening on a street corner, or throwing paper torpedoes in a theatre orchestra to imitate the crack of a whip in the "Postilion Galop," gives to its doer the same sense of self-satisfaction. It would be folly now, as it may have been in old times, for our girls to spend their hours and try their eyes over back-stitching for collars, etc., when any one out of a hundred cheap machines can do it not only in less time but far better, and the money which could be saved in many ways, by wisdom in housekeeping and caring for the health of children, would buy a machine for every family. This matter of stitching being done for us, then, we may say that the other varieties of sewing required are very few: "sewing over-and-over," or "top-stitching" as the Irish call it, hemming, button sewing, button-hole making, and gathering. Indeed, hemming, including felling, might be also omitted, as, with a very few exceptions, hems and fells are also handed over to the rapid machine; and "over-casting" is but a variety of "top-stitching." There

are then only four things which a girl really needs to be taught to do, so far as the mere manual facility goes—"to sew over-and-over;" to put on a button; to gather, including "stroking" or "laying," and to make a button-hole. Does it not seem as if an intelligent girl of fourteen or fifteen could be taught these in twelve lessons of one hour each? Only practice can give rapidity and perfection; but at the age mentioned, the girl's hand has been pretty thoroughly educated to obey her will, and but very little time is needed to turn the acquired control into this peculiar activity, while, with the untrained muscles of the little child, much more time is required and much fretfulness engendered, born of the confined position and the almost insuperable difficulty of the achievement.

Above the mere manual labor, however, there comes another work which always has to be done for the child, and is therefore of no educational value for her: I mean the "fitting" and "basting." They cannot be intrusted to the child, for the simple reason that they involve not merely manual dexterity, but also an exercise of the judgment, which in the child has not yet become sufficiently developed. But when the girl has lived fourteen years, we will say, and has been trained in other ways into habits of neatness and order, she has also acquired judgment enough for the purpose, and needs only a few words of direction. The sewing of bands to gathers, the covering of cord, the cording of neck or belt, the arrangement of two edges for felling, the putting on of bindings, belong, so to speak, to the syntax of the art of sewing, and come under this division, which must, perforce, be left till maturer years than those of childhood. There is still a sphere above this, the three cor-

responding exactly to apprenticeship, journeymanship and mastership, in learning a trade. The third and last sphere is that of "cutting," and this demands simply and only, judgment and caution. There are a few general statements which must be given, as, for instance, "the right way of the cloth," in which the parts of the garment should be cut, etc.; but these being once learned—and a lesson of one hour would be a large allowance for this purpose—the good cutter is the one who has the most exact eye for measurement—trained already in school by drawing, writing, etc.—the best power of calculation—trained by arithmetic, algebra, etc.—and the best observation and judgment—trained by every study she has pursued under a good teacher.

As to sewing, considered as a physical exercise, it may almost be pronounced bad in its very nature; considered as a mental exercise, in its higher spheres, it is excellent, because it calls for the activity of thought; but after the cutting and fitting are done, it is undoubtedly bad, leaving the mind free to wander wherever it will. The constant, mechanical drawing through of the needle, like the listening to a very dull address, seems to induce a kind of morbid intellectual acuteness, or nervousness. If the inner thought is entirely serene and happy, this may do no harm; but if it is not, if there is any internal annoyance or grief, the mind turns it over and over, till, like a snow-ball, it grows to a mountainous mass, and too heavy to be borne with patience. I think many women will testify, from a woman's experience, that there are times when an afternoon spent in sewing gives some idea of incipient insanity. This lengthy discussion of the woman's art of sewing can only be excused on the ground that it touches the question of

physical and mental health. As a means of support, the needle can hardly be spoken of now.

As to Cooking, the same in substance might be said. It is perhaps a little more mechanical in its nature, though of that I am not positive, but if a girl is educated into a full development of what is known as common sense, she can turn that common sense in this direction as well as in any other, if the necessity arises. The parts of cooking which call for judgment—such, for instance, as whether cake is stiff enough or not, whether the oven is hot enough, safely to intrust the mixture to its care, whether the bread is sufficiently risen—require the same kind of trained senses as that by which the workman in the manufacture of steel decides as to the precise color and shade at which he must withdraw it for use. To quote from an English woman: * “Cookery is not a branch of general education for women or for men, but for technical instruction for those who are to follow the profession of cookery; and those who attempt to make it a branch of study for women generally, will be but helping to waste time and money, and adding to that sort of amateur tinkering in domestic work which is one of the principal causes of the inefficiency of our domestic servants. * * * The intellectual and moral habits necessary to form a good cook and housekeeper are thoughtfulness, method, delicacy and accuracy of perception, good judgment, and the power of readily adapting means to ends, which, with Americans, is termed ‘faculty,’ and with Englishmen bears the homelier name of ‘handiness.’ Morally, they are conscientiousness, command of temper, industry and perseverance; and

* Mrs. E. M. King, *Contemporary Review*, Dec., 1873, in an article on “Coöperative Housekeeping.”

these are the very qualities a good school education must develop and cultivate. The object of such an education is not to put into the pupils so much History, Geography, French or Science, but, through these studies, to draw out their intelligence, train them to observe facts correctly, and draw accurate inferences from their observation, which constitutes good judgment, and teach them to think, and to apply thought easily to new forms of knowledge. Morally, the discipline of a good school tends directly to form the habits I mentioned above. The pupils are trained to steady industry and perseverance, to scorn dishonest work, and to control temper. The girls who leave school so trained, though they may know nothing of cooking or housekeeping, will become infinitely better cooks and housekeepers, as soon as they have a motive for doing so, than the uneducated woman, who has learned only the technical rules of her craft."

Every girl ought certainly also to know how to drive a nail, to put in and take out a screw, and to do various other things of the same kind, as well as to sweep and to dust ; but of all these "readinesses," if I may be permitted the word, the same thing may be said. I have spoken of them under Physical education, as their most appropriate place.

Passing now to the more definite consideration of Physical education, it will be convenient to consider this division of the subject under three heads, as I have to speak of

1. Repair,
2. Exercise.
3. Sexual Education.

REPAIR.

All parts of the body are, of course, as long as life exists, in a state of continual wear, old cells being constantly broken down, and new ones substituted in their places. When the Apostle exclaimed, "I die daily," he uttered an important physiological as well as a spiritual truth; though, if he had said, "I die every instant," he would have expressed it more exactly. It is only by continual death that we live at all. But continual death calls for continual creation, the continual destruction for continual repair, and this is rendered possible by means of food and sleep. Clothing, too, properly belongs under this division; for, were it not for this, the heat of the body would often be carried off faster than it could be generated, and the destructive process would outstrip the reconstructive. Moreover, the clothing too frequently interferes with the normal functions of the most important repairing organs, and its consideration, therefore, must constitute the third branch of our inquiry. The division *Repair*, then, will embrace a consideration of

- a. Food,
- b. Sleep,
- c. Clothing.

Food.—The kind and quantity of food must obviously vary with age, temperament, and the season. But three general rules may be laid down as of prime importance: the meals should be regular in their occurrence; they should be sufficiently near together to prevent great hunger, and absolutely nothing should be taken between them. An exception may, however, be safely made to this last rule, with regard to young children, in this wise, making a rule which I have known as established in

families. "If the children are hungry enough to eat dry bread, they can have as much as they want at any time; if they are not, they are far better off without anything." These are the plainest rules of Physiology, and yet how few of the girls around us are made to follow them! Nothing is more sure to produce a disordered digestion, than the habit of irregular eating or drinking. If possible, the growing girl should have her dinner in the middle of the day. The exigencies of city life make this arrangement in some cases inconvenient, and yet inconvenience is less often than is popularly supposed synonymous with impracticability. If this cannot be done, and luncheons must be carried to school, the filling of the lunch-basket should never be left, except under exact directions, to the kind-hearted servant, or to the girl herself; and she should under no circumstances be allowed to buy her luncheon each day of the baker, or the confectioner, a usual practice twenty years ago of the girls in Boston private schools.

There are children and young girls who are said to have cravings for certain kinds of food, not particularly nutritious, but in ninety-nine per cent. of these cases the cause of the morbid appetite can be found in the want of proper direction in childhood. The fact is, that *the formation of a healthy appetite is properly a subject of education.* The physical taste of the little girl needs rational direction as well as her mental taste, though mothers too often do not recognize the fact. It would seem almost like an insult to the intelligence of my readers, to say, that warm bread of whatever kind, pastry, confectionery, nuts, and raisins, should form no part of a girl's diet; did we not every day, not only in restaurants and hotels, but at private tables, see our girls fed upon these articles.

The German child, in the steady German climate, may drink perhaps with impunity, beer, wine, tea and coffee; but to our American girls, with their nervous systems stung into undue activity by the extremes of our climate, and the often unavoidable conditions of American society, these should all be unknown drinks. The time will come soon enough, when the demands of adult life will create a necessity for these indispensable accompaniments of civilization; but before the time when the girl enters upon the active duties of a woman, they only stimulate to debilitate.

It cannot be too often repeated, that the appetite and the taste for certain kinds of food are, to a greater degree than is usually acknowledged, merely the results of education; and the mother who sees her daughter pale and sickly, and falling gradually under the dominion of dyspepsia, in any of its multitudinous forms or results, and who seeks the physician's aid, has too often only her own neglect to blame, when the medicines fail to cure. From the food is manufactured the blood; from the blood all parts of the living tissue of every organ; not only bone and muscle cells, but nerve cells are built up from it, and if the blood be not of the best quality, either from the fact that the food was not of proper material or properly digested, not only the digestive organs, but the whole system, will be weak. Moreover, those organs which await for their perfect development a later time than the others will be most apt to suffer from the result of long-established habits, and it is as true of the human body as of a chain, that no matter where the strain comes, it will break at its weakest part. The truth of what is here stated may be illustrated by the teeth, which are formed at different periods of life. Many

have a perfect set of what are known as first teeth ; but in too many children in our American homes, the second teeth make their first appearance in a state of incipient decay, while it has become almost proverbial, that the wisdom teeth are of no use, except to the dentist. Mothers have only to consult easily procured books to learn the kinds of food most easily digestible, and most nourishing. That they do not do so, results from the seeming general belief, that this matter of eating will take care of itself, and that it does not come within the province of education. The whole matter lies in the hands of women. The physician can do but little, because he can know but little. It is the intelligent women of America who must realize the evil, and must right the wrong, if we would see our girls what we most earnestly desire them to be—perfectly healthy and well developed.

Again, the cure of many diseases, especially those which are prevalent in the summer months, belong more to the women of the household than to the physician. They alone can check the evil at its commencement. Every educated woman ought to know, for instance, that cracked wheat and hominy, oat-meal, corn-bread, and Graham bread, should not, as a general rule, be made the staple of diet in case of what is popularly known as “summer complaint” ; and yet, how few girls seem to have any idea, when they are thus sick, that it is a matter of the least consequence what they eat, or that they ought not to make their breakfast of Boston brown bread ; and by how few of our girls is it considered a matter of any moment that the opposite trouble exists for days. Ought they not to be educated to know that they can devise no surer way of poisoning the whole system, and then of straining all the contiguous organs,

than by wilful neglect in this direction? When some facts are obvious, and some are latent, the blame, if trouble exists, is not unnaturally laid on the visible facts. It is evident to the physician that the girl has attended school. It is not so evident that, since her earliest childhood, she has been fed on improper food, at irregular hours, and that the processes by which the poisonous dead matter is removed from the system, have been irregularly carried on. His questions put on these topics are put in a general way, and answered in the same, with, perhaps, a worse than foolish mock-modesty to prompt the reply. He does the best that he can, but he cannot help stumbling, if he is required to walk in the dark. This false shame of which I speak, on this matter, seems to be a folly peculiarly American, and I am quite sure that it is not so common now as it was twenty years ago, though there are still many American women who would choose to run the risk of making themselves sick rather than to tread the folly out under a pure womanly scorn. This is also a matter which belongs to education.

One great trouble with our American girls, and one which can be remedied by us, though we cannot remedy the climate, is not that their brains are over-worked, but that their bodies generally, including brain, are under-fed. I do not mean that they do not eat enough in bulk, though that is often the case, but that they do not take in enough of the chemical elements which they must have to build up the system. Their food is not sufficiently nutritious, and the energy of the digestive organs is wasted in working upon material which, if it does not irritate and inflame, is at least of no economic value, and is simply rejected by the system; or, worse

still, in default of better, it is absorbed, and the whole blood becomes poisoned. Sometimes our girls do not eat often enough. For instance, a girl who, after tea, has been obliged to employ her brain in unusually hard work, might probably be helped by eating some nourishing food before sleep. If she do not, the result will not infrequently be that she will awake tired and languid; she will sit idly at the breakfast table, play with her knife and fork, and feel only disgust at the food provided. She may soon suffer from, if she does not complain of, back-ache and other attendant troubles, the simple result of weakness. It is only Micawber's old statement over again: "Annual income, twenty pounds, annual expenditure, twenty pounds, ought, and six; result—Misery."

After a long course of this kind, the physician is summoned, and the girl is forbidden to study. But it seldom occurs to any one that if $5-8=-3$, the two may be made equal just as easily by adding the three to the five as by subtracting it from the eight, *i. e.*, although we, as a nation, are supposed to be, at least, more conversant with arithmetic than with any branch of school study, though we do know that $8>5$, we do not see that $5+3=8$, and so we try to cancel the offending -3 by diminishing the 8. But would not the other process be quite as rational? Physical life is only a simple balance of forces, the expenditure and nourishment corresponding exactly to demand and supply in the Science of Political Economy.* They tend continually to level themselves. Have we not the right to

* *Principles of Political Economy*, Mill. American Ed., D. Appleton & Co., Vol. I., p. 551.

decide in which way the leveling shall be effected—the equation be formed? This is a simple solution of the difficulty. I suggest that this experiment be tried: let the girl study her extra time in the evening, if she desires, only being cautious that she do not infringe upon her sleep hours; then give her a supper of bread and butter and cold meat, and send her to bed. If her digestive organs are in good state, she will very possibly sleep a sound and dreamless sleep, and rise refreshed in the morning, with a good appetite for her breakfast. By this simple hygienic remedy, aching backs may not only be prevented, they may be gradually cured. I am stating actual facts. If the evening be spent in conversation, or mere lounging over books, the supper will not be needed, and will prove, if taken, only a burden; but if, as has already been said, it be spent in actual brain-work, the tremendous and unusual strain on the whole nervous system, occasioned by the destruction of nerve-cells, must be made good, or those organs most intimately connected with the nervous system and the sources of life, will be sure to suffer. It must, however, be repeated here, if we would secure the good results desired, that the supper must be of *nourishing*, not of stimulating food.

Even the destruction, through exercise, of the inferior muscle-cells demands food before sleeping. It is no merely fashionable custom which calls the dancers at an evening entertainment to the loaded supper-table, as those of my readers who have attended the so-called cold-water Sociables will bear me witness. It may be seriously questioned whether the regulation which forbade any refreshment except cold water was not, like many other unthinking, economical plans, really no economy at all. Instead of one pantry's furnishing food

to the famished dancers, this was furnished for each one at home, from her own mother's private stores, and as the members of the Sociables met at each other's houses in order, the total result of expenditure to each family, at the close of the winter, was probably the same as it would have been, had each family furnished, on one evening, a moderate entertainment of the same sort to the bankrupt systems. Fashion is often wiser than we think her, especially when at parties for the "German" she prescribes a cup of beef-tea as the regulation refreshment.

A long, rapid walk in the evening, as we all know, will produce the same effect. We return, and remark that we are hungry, merely meaning that we have received polite official notice that our physical bank account has been overdrawn. If we do not pay any attention to this notification, we shall surely in time be passed from adversary to judge, and from judge to officer, and finally be cast literally into a prison from which, unlike some of our city prisons, we shall not escape till we have paid the uttermost farthing. Then we shall be likely to receive from the kindly friend whom we summon to visit us, wise and good advice, on the extravagance of spending so much. But might not the advice be possibly quite as useful if delivered in this wise: "Why don't you earn more, and make larger deposits." The force of weakness compels us to stop spending our muscle cells; the kind friend, as far as is possible, puts a stop to the expenditure of nerve cells, and draws on the funds derived from the Cinchona forests of South America and the iron mountains of Missouri, to make new deposits on our account; and when the matter is thus doubly settled for us by nature and science, we go on our way re-

joicing, only to repeat the same insane folly. But it is not good for one's credit to overdraw too frequently her bank account; and there may come a time when suspension means bankruptcy, and when all the kindness and skill of all our friends can be no longer of any avail. Is it not our own fault, and shall we not so educate our girls that they shall not fall into it, since they comprehend its unreason?

We are undoubtedly creatures of habit; but we oftener apply the word to our mental and moral than to our physical nature, and wrongly. When regular and constant demands are made upon any organ of the body, the body, as it were, falls into the habit of laying in enough force in that particular department for that particular purpose, as the scientific steward at Vassar lays in for each day so many pounds of beef or mutton, because he can rely with certainty on its consumption. If in any case the demand is, for any reason, slackened, there is a surplus of energy which must find a vent, or render its possessor very uncomfortable. Need mothers be reminded of how very troublesome the little girl becomes in a short school vacation, or during the first days of a long one? Or need teachers be told that it is only a loss of time in the end, to assign at the commencement of the September term lessons of the same length as those which were learned with no difficulty in June? There is a decided inertia in the bodily functions, and time is required for a sudden change. Inconvenience in such a case will be sure to arise, unless the surplus force be instantly directed into other and unobjectionable channels.

If the reverse takes place, and the demand be suddenly increased, the result is weakness, debility, and finally

disease; though precisely the same amount of work might have been done, not only with safety but with positive advantage, provided the increase of the demand had been gradual.

Is there any country in the world equal to America in the irregularity and spasmodic nature of the demands which society makes upon its women? Are there any girls in the world so ready to rush headlong into all kinds of exercise, mental or physical, which may be recommended to them, as our American girls? It is a pity that, to balance our greater amount of fiery energy in the matter of education, we have not a sounder philosophy.

Once more, physical life is only a balance of forces, as spiritual life is a series of choices, and the question is not simply how much intellectual or brain work we are doing. This question cannot justly be considered apart from the other inquiry, of how much appropriate material we are supplying for the use of the brain. We cannot judge whether the amount of force expended be healthful or unhealthful till we know how much force has been and can be generated. There is undoubtedly a limit to this last factor in our problem, but if we do not exceed this limit in our expenditure, it seems unquestionable, that the more brain work we do, the better will it be for the entire system, and the stronger will be our health, this being only our power actively to resist the destructive forces of nature.

The nervous system, at the head of which stands the brain, is undoubtedly the regent of the monarchy of the body, whose sovereign is the thinking spirit; and all the organs in a well-regulated body should be worked in the interest of the organ of thought, as servants for a wise and watchful master. It seems sometimes as if we were

in danger of forgetting that though "the eye cannot say unto the hand, I have no need of thee, nor again, the head to the feet, I have no need of you," there will come a time when the thinking spirit, grown to full stature, shall say to all of them, "I have no need any longer of any of you."

The consideration of the subject of Ventilation properly comes under this division, for pure air is as much food for the body, as meat or bread. This whole matter, however, seems to be practically not well understood, if we may judge from the results so far, and no extended discussion of the means will be in place here. It is sufficient simply to indicate its immense importance. But that bad air is likely to be a more active cause of disease in America than elsewhere seems true, for in no other country are furnaces and closed fire-places in so general use. Moreover, the women and girls who spend most of their lives in the house, will be expected to show the evil effects more than the men and boys, who do not. The practical suggestions on this point are apparent to every one.

One more thing which the body, to be healthy, demands for food is Sun-light, that invaluable medicine for all forms of nervous disease, which Americans, more than any other people, curtain carefully out for fear of fading carpets and furniture. But what are French moquettes, brocade, or satin, compared with rosy cheeks, clear complexions, and steady nerves? If we would only draw up the shades, open the shutters, and loop the heavy curtains out of the way, or, better still, take them down altogether, might we not look for a marked improvement in systems affected by nervous diseases? This want of sun-light may be expected also, of course, most to affect

those who remain within doors, and who, even in walking, shade themselves with veils and sun-shades from the life-giving rays of the sun.

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Sleep.—To many of the organs of the body there have been allotted seasons of comparative quiet and repose, even during the day. If the rules for food be observed, the stomach, for instance, has, as stomach, its vacations from labor, by means of which it is enabled to prepare for, and perform, its regularly recurring work with vigor. Even with organs where this is not the case, the action is slackened very materially at times, as in the case of the heart and lungs during sleep. They must continue to work, though more slowly, and the part of the nervous system which carries on their involuntary and mechanical action, has also then a partial relief. But the only rest for the thinking brain is to be found in normal sleep. From the instant when, in the morning, we become conscious of the external world, to the instant late at night, or, it may be, early in the morning, when we pass through the gates of sleep, out from companionship, into an utter solitude, it never rests from its work. Whether, by volition, we summon all our intellectual power to the closest attention, and turn, as it were, the whole energy of our being into one thought-channel, till the organs of sense become simply outside appendages which disturb the internal self with no imported knowledge, or whether, lying idly, as we say, on the sofa, we let our thoughts wander as they will, thought still goes on. Coming and going more rapidly than the shortest pendulum can swing, interweaving more subtly than the threads of the most complicated lace under the fingers of the skillful worker; “trains of thought” pass and re-pass through our minds, following,

as we mechanically express it, the Laws of Association. Only in losing consciousness, do we cease to destroy the brain cells; it is only in sleep that the brain can rest.

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But it must be remembered that the matter which is thus destroyed, is, as Maudsley* so finely shows, the very finest result of the creative life-process, the most precious essence. It is like the oil of roses, to produce one drop of which, unnumbered roses must be crushed. The force required to produce a nerve cell is said to be immeasurably greater than that demanded for a cell of muscle, of bone, or of cartilage. In the nerve cells, lies not only the directive force of the whole complicated machinery, but the material with which the creative intelligence must work. Let us also remember that our waking hours far outnumber those spent in sleep, and we shall begin to realize the immense importance of sleep, even to the fully developed organism. But when we add to the mere labor of repairing the daily waste, the task of construction, which has to be performed during the years of growth, we shall only deepen the impression. I believe that every school-girl under eighteen years of age, and many over that age, should have at least nine hours of uninterrupted sleep in pure air, and the younger ones need even more.

Much, at least doubtful, advice, has been given on the subject of early rising. That the system which has, perhaps, taken no food since six in the evening, should be ready for any amount of labor in the morning before breakfast, does not seem a rational conclusion, and I believe that many nervous diseases must be charged to the

* *Body and Mind*, 2d Ed., p. 300.

idea, that there is virtue in early rising, this implying, generally, either work before breakfast, or, at best, a shortening of the hours of sleep. It should, however, be remembered that in some cases, the greater amount of sunlight obtained by rising with the sun, may, and probably does, compensate for lack of other food. But when early rising means, as it often does, rising long before the day begins, this cannot be said, and sooner or later, the over demand upon the system will make itself felt when it is too late to remedy the evil.

The habit of *regular* sleep is also one which should be formed by education. The child who is accustomed to go to bed at a regular hour, will also generally form the habit of falling asleep regularly.

If parties for children and young people could be made fashionable under the name of *matinées*, they might not have bad results; but as they are at present carried on, they are an unmitigated evil, and one that is sapping to a fearful degree the nervous force of our girls. What mother would give her little girl a cup of arsenic, no matter how tearfully or earnestly she might plead? The very idea of education lies in the directing of the capricious and irrational instincts, the blind and ignorant forces, into their proper channels, by the rational and enlightened will of the educator. But if, instead of this, the unformed will is made the guide, the very reverse of education is taking place. It makes no difference to the physical forces, however, whether the hours lost from sleep be lost at a party or at a lecture, a sermon, or tableaux for the benefit of foreign missions. Nature makes no distinctions of motive. "An eye for an eye and a tooth for a tooth," is her motto. If one opposes himself to her laws, the offender, not she, goes

down; and as Sancho Panza very wisely remarks, "Whether the stone hit the jug, or the jug the stone, it is bad for the jug."

It is remarked by all foreigners, that in America the children rule the house. This is simply saying that we are, as a general rule, an uneducated people; which is undoubtedly true. When we learn the immense importance of sleep to the health of our girls, and when we know that our rational convictions should lead them, and not their irrational desires, us, we shall hear less about their breaking down in health as they grow toward maturity. We shall see fewer pale faces and angular forms; though they will probably never, while they live in this climate, acquire the ruddy glow of the Englishwoman or the German, or the rounded outlines of the nations of Southern Europe.

Clothing.—With the external form of the dress as to cut, trimming, or color, this essay has nothing to do. Unless a dress be cut so low in the neck that it becomes an unhealthful exposure after taking off warmer clothing, it in no wise concerns this branch of the subject. I wish to speak only of the under-clothing habitually worn by our girls, and its mode of adjustment; these being, as I believe, the causes of much exhaustion and disease.

If technical terms, uncomprehended by any class of readers, be used, it is simply for the sake of brevity; and because, as Kant says, "completeness must not be sacrificed to popularity," the attainment of which would be "a didactic triumph, attained only by omitting everything complicated, and saying only what exists already in the consciousness of every one."

¶ The two rules for clothing evidently are given when we say, first, that it should be sufficiently warm to prevent the heat generated by the body from being too rapidly lost; and second, that it should be sufficiently loose to allow unimpeded muscular action, whether voluntary or involuntary. But it is very rare to find either of these rules observed by girls, and it is also rare to find mothers who are aware that their daughters are daily violating them.

First, as to the warmth: Every girl who is to be reared in this climate of extremes and sudden changes should wear shirt and drawers of wool next her body, and woolen stockings, during at least eight months of the year.* The merino underclothing, so generally worn, is preferable to cotton or linen, but all-wool flannel is far better; and if trouble is anticipated from shrinking and fulling, the use of red flannel will prevent this entirely. I am not speaking of becomingness and grace; I am speaking of health and conservation of force. Each organism can generate but a certain amount of vital force, and if a large proportion of this has to be expended in keeping up the even temperature of the body, a smaller part than otherwise will go to the carrying on of the other functions. But relieve the system from the continual drafts made upon it, resulting from insufficient clothing, and it will be able to assume duties to which before it found itself inadequate. Some exceptions must be made to this statement in the case of those to whose skins flannel proves an irritant—but they are comparatively few; and even in these cases the flannel could be worn outside, if not inside, of the cotton or

* Referring to New York, Boston, or places on same isotherm.

linen underclothing. The mother who will see to it that from her earliest years the girl is protected, over all parts of her body, by flannel underclothing, may simply prevent evils which, afterwards, she and the most skilful physician combined will find themselves unable to overcome. But the facts are, that, from the earliest days of life, when the dimpled neck and arms must be admired by visitors, through the days of childhood, when, dressed during the coldest weather of winter in linen and white cambric or piqué, with her body unprotected from the chill, the little girl is led slowly and properly up Fifth Avenue, to the nights when, heated by dancing, she exposes bare neck, shoulders and arms to draughts of cool air, she is, as a general rule, never warmly enough dressed for our climate. I repeat, then, that for proper protection a girl should always be, during at least eight months of our year, clothed, body, arms, legs, and feet, in wool; and pass to the second thought on the subject—*i. e.*, clothing with regard to the mechanical effects of pressure.

We have been continually told that our girls ought not to wear corsets. It has been well said by some woman, that if a man could succeed in fashioning a woman exactly as, according to his theories, she ought to be fashioned, he would not admire her after the work was done; and though the remark was made only with regard to intellectual education, it can be well applied to this subject of corsets. If now, at this present moment, all women were to satisfy this demand, and leave off their corsets, the very men who entreated them to do so, would at once entreat them to resume them. The truth is, that it is not the corsets in themselves that are injurious; they become so only when they are so tightly

drawn that they prevent free inspiration, or when, by their great pressure, they force the yielding ribs from their normal curve, compress the lungs, and displace the organs of the abdomen, crowding them into the pelvis, and thus displacing or bending out of shape the organs therein contained. Let the girls keep on their corsets, but instead of the unyielding cotton, linen, or silk braid, let these be laced by round silk elastic cord. They will then give support where it is needed, and yet will yield freely to the expansion of the chest, returning again as the air is expelled, and so preventing discomfort. This is a very simple expedient, and yet perfectly successful, and the girl who has tried it for three days will discard the inelastic braid forever. I say elastic cord, and not ribbon, because the elastic ribbon is too strong, and does not sufficiently yield.

Girls do not know that they dress too tightly. They will repel indignantly the idea that they "lace;" and yet, if they be asked to take a full inhalation, it becomes perfectly evident that the outside resistance is a very positive element. To prove this, it is only necessary for them to put on their corsets laced as above described, and then try to button the dress. It will, in nine hundred and ninety-nine cases out of a thousand, be found, I think, that the dress, which before came together without the slightest difficulty, will no longer meet. There is necessary no other proof that an unnatural pressure has been habitually used, although, from the very fact that it has been so long habitual, the girls are entirely unconscious of it. The Chinese women, I suppose, are not conscious of their compressed feet, and the two cases are exactly parallel. No dressmaker knows the meaning of the words "loosely fitting." She

is not to be blamed. She looks at her work with an artistic eye, as a Parisian glove-fitter looks at his, and wrinkles are the one thing which she spends her life in striving to avoid; and, as a general thing, she is not a student of Wordsworth to the extent of assuming as her motto,

“ Nor shall she fail to see,
Even in the motions of the storm,
Grace that shall mould the maiden's form
By silent sympathy.”

It is not enough to say to the dressmaker, “ Make it perfectly easy and comfortable,” and then trust to her judgment that it will be all right. The only test for a girl's clothing, as to tightness, should be, “ Can you take a good, full breath, and not feel your clothes?” If so, they are loose enough; if not, let them out, and keep on letting them out till you can. Nor is there the slightest need that this kind of dressing involve “ dowdiness,” or “ slouchiness,” a characteristic abhorrent to every true woman. Every woman expresses her character in her dress; and where “ slouchiness ” exists, it means something more than comfortable dressing. It means a lack of neatness and order, a want in the ideas of suitability. It is sure to manifest itself in other ways, and will not be prevented by dresses never so tightly fitting.

The next thing to be considered is the place of proper support for the voluminous clothing below the waist. This gives a certain definite weight in pounds and ounces larger than is generally supposed, and as a result of the law of gravitation, it would all fall if the tendency were not counteracted by a corresponding pressure. This pressure is almost universally being sustained by our girls at the hips, and it comes just where the trunk has

no longer, except in the spinal column, any bony support, depending alone on the yielding muscles.

It is idle to assert that the corsets support the dependent weight. In the old times, when corsets had shoulderstraps, this assertion might have had a shadow of truth, but now, when they never have them, their weight must simply be added to the total amount of weight of skirts, to find the number of pounds of downward pressure. They serve only as a kind of fender to prevent the tightly tied skirts from cutting into the muscle, and therefore, conducing to prevent discomfort, only serve to delude the girl into the belief that they hold up her skirts. This weight, evidently, should be borne by the shoulders, where the firmly-jointed skeleton, upheld from below, offers a firm and safe support. But give a girl shoulderstraps, and she finds the pressure over so small an area on the shoulders unbearable, and besides, the process of dressing becomes then a matter of almost as much complication as the harnessing of a horse, when some inexperienced person has done the unharnessing. Suspenders, though answering the purpose perfectly for men, will not answer for women, and even when made especially for them, are found inconvenient. The girl should wear, over her corsets, an under-waist, fitted precisely like the waist-lining of a dress as to seams and "biasses," or "darts." It should be made of strong shirting, neatly corded at neck and "arm-scyes," and finished around the waist by a binding of the width of an ordinary belt, set up over the waist so as to have three thicknesses of cloth for buttons. To these buttons, four or more in number, the skirts should be hung. The weight comes then on the shoulders, and is evenly distributed there, so that it is not felt. This statement, of course, implies, that the waists are sufficiently

large. Moreover, which is only an incidental matter, the waist answers as a corset-cover, and as a dress-protector at the same time, and in the winter, when dresses cannot be washed, it becomes a matter of necessity to have something to answer the latter purpose. In the summer, when low linings are desirable, these waists can, of course, be made low in the neck. The shoulder-support then becomes narrower, but on the other hand, the weight of the clothing to be supported is very much less than in the winter, so that no inconvenience will be found. These waists themselves can then, if desired, take the place of linings for thin summer dresses, and if this be done, another incidental advantage will be the greater ease and nicety with which muslins and calicoes can be "done up." It should be borne in mind, that within twenty years the weight of the dress-skirt has been also laid upon the hips. Before that time, our dress-waists and skirts were made in one. Of late years they have almost never been so made; that is to say, the shoulders have had, so to speak, absolutely nothing to do, and the hips and waist, everything. In any case, skirts should be furnished with buttons, not strings. It is too easy to draw a string a little tighter than it should be drawn.

Another fashion which our girls have adopted of late years, should be spoken of. As if they had gone to work to discover the only way in which pressure could be increased, they have discarded the old fashion of gartering the stockings, and have buttoned these up by bands of strong elastic ribbon, to a band placed around the waist. This arrangement, it seems to me, exhausts all the possibilities of dragging pressure around the waist, and in this view, it may be looked upon as a negatively encouraging feature. They have, certainly, in respect to

the support of clothing, done their very worst. They are trying to the full their powers of endurance, and any change must be for the better.

I was not to speak of external dress, but the skirt of the outside dress, by the present fashion, must be taken into consideration ; and of its probable weight any skilful person, who has any idea of the weight of bugles and dry-goods, may make an estimate for himself, though his estimate will probably fall far short of the truth.*

If our girls are to walk the same streets with their brothers, is there any reason why the soles of their shoes should not be of equal thickness? And yet no man would think of wearing, at any time, except for house slippers, soles as thin as those which many of our girls habitually wear. Boston is much more satisfactory than New York in this particular, if the contents of the merchant's shelves are a safe index of the desires of his customers. This is a matter which has been often spoken of, and yet one which mothers and daughters seem practically to ignore. Girls should be educated to wear clothing suitable to the time and place, and then their "habituated instincts" will lead them to demand and wear shoes of proper thickness.

* I have never seen the actual figures given on this subject, and in the interest of positive science, therefore, subjoin the following, which any one can easily verify for herself. The following articles, viz., merino and cotton drawers, flannel skirt, a light Balmoral, a short, light hoop, corsets, and dress-skirts, over and under, weighed 9lbs. 4oz. Avoirdupois. It must be also remembered that this pressure is not regularly exerted, but on account of the swinging and swaying motion of the skirts, is applied now in one direction, now in another. The dress weighed was not of the heaviest material, but of fine old-fashioned merino, or what is known this year as *Drap d'été*.

Enough. It cannot be too often repeated that a girl may call for anxiety, and often break in health at the time when she develops into a woman, not because of the special demand for strength made at that time, but because the demands on the general system for strength have been, for twelve or fifteen years, greater than the system could supply. It is not the last straw that breaks the camel's back, but it is all the straws. The mother who has educated her daughter into a healthy appetite for food, as to quality and quantity; who has educated her into a healthy appetite for sleep; who has, through constant watchfulness over her clothing, assured herself that no undue demands were made upon the strength of sustaining muscles, and the constructive and repairing power of the general vital force, has no need of hours of anxiety as to the girl's health, and will find no critical periods in her life, for the hours of anxiety have already been represented by minutes of wise and rational supervision in all the previous years, and need not be spent over again.

EXERCISE.

Bodily exercise is in one sense a means of repair, inasmuch as it quickens the circulation and respiration, and makes the whole organism more active. The old maxim that Exercise strengthens every power must not be overlooked, as the arm of the rower or the wrist of the confirmed croquet-player will testify. But it must also be remembered, and this is a matter of prime importance, that it is only *judicious* exercise which gives strength; and by *judicious* exercise is meant that in which the parts exercised are not too steadily on the strain, and that which is

regular. For instance, continual standing in one spot is not judicious exercise for either man or woman, because the muscles whose contraction is required to maintain the body in an upright position, are kept for too long a time in a state of action; the continual tension prevents the free passage of the blood, and the uniformity of the circulation is destroyed. Continual standing, in the teaching profession at least, has broken down many a man as well as many a woman. With women, and especially with growing women, the danger is greater, resulting, of course, from the greater breadth of the pelvis and the less physical strength; and any woman who persists in it, simply exhibits an amount of recklessness which can be cured only by her own experience, and never by the advice of others.* If she had been better educated, she would know better and act more wisely. Secondly, exercise which is irregular or is used spasmodically, is not judicious. If, for instance, our girls had from their earliest childhood and during many months of the year, been accustomed to skating, no harm would probably result from it. But when, as was the case some twenty years ago, a sudden fashion sprang up for

* Lest this should seem to imply that women should not be employed as bookkeepers, I would call attention to the fact that it presents practically no obstacle whatever to their employment. For instance, one of the largest wholesale and retail firms in St. Louis has for years employed a woman bookkeeper, and she has never been expected to stand. Low instead of high desks are in their counting-room, and low chairs are also found there. The books, bills, etc., are convenient to her hand, and no difficulty whatever is experienced. It may, perhaps, be a pertinent question to ask, in what consists the advantage of a high stool and a high desk over a low chair and a low desk, and whether it takes any more time to rise from a chair, than to swing down from a stool.

this exercise, and girls in all parts of the Northern States insisted upon learning to skate, with untrained muscles, and to skate for hours together during the freezing intervals of our uncertain climate, an immense amount of harm was actually done, the results of which multitudes of women in Boston and New York are to-day enduring.

There are, it is to be presumed, forms of exercise which are not judicious from their very nature; but I find myself at a loss to name any one which girls desire, or in which they indulge, that would properly fall under this class, unless it be sewing and washing. Whenever our girls have been injured by physical exercise of muscle or nerve, it has been, probably, because the exercise taken has been injudicious in one of the senses above defined. Even with regard to the stair-climbing, which our modern houses make a necessity, the harm generally comes from the fact that too many flights are ascended at once, or that the lifting of the weight of the body through the twenty, or forty, or sixty feet is too rapidly performed. But long flights of stairs are a necessity where land is so dear that, though a man may buy an unlimited extension up and down, he can usually afford to purchase little on a horizontal plane, and thus, to our city-bred girls, at least, the necessity of climbing stairs exists from their earliest attempts at walking, so that stair-climbing may, by my second limitation, come under the head of judicious exercise. It were, however, well to inquire whether there are not different sets of muscles called into requisition in this universal exercise by different individuals, and whether children should not be so educated in climbing, that they may lift the unavoidable weight rather by straightening the knee than by making

undue demands, as many do, on other muscles not so well placed to bear it. It seems to me that there is a great difference in this respect in different persons. It were also well that architects should remember that shallow steps may be, and, indeed, generally are, much more fatiguing than steps of the usual height, for the very reason that an *unusual* demand is made, a greater number of volitions or impulses required, for a given height. A greater width in the step, also, makes the effort more difficult—partly for the same reason, and partly because a greater and unusual effort has to be made to throw the body forward at the same time that it is lifted up.

To Dancing, in itself, no objection can be made. Freed from its almost inevitable accompaniments of late hours, thin dresses, and irregular food, it is undoubtedly beneficial. But when we are better educated, so that we shall appreciate the absolute necessity of a strict and rational regimen of food, sleep, and clothing for the individual while yet immature, this matter will be righted, and only then. There is one additional objection to be urged, however, against parties for young people, which is not generally spoken of, though we all know practically that one of the first preparations for an entertainment of this kind consists in sending at least almost all the chairs and sofas out of the rooms which are to be used, and the dancing may not do as much harm as the enforced standing. The woman who has to stand behind the counter, or behind the bookkeeper's desk, or at her loom in the factory, may, perhaps, accustom herself in a measure to the daily strain; but the girl to whom it is an irregular exercise, and who, besides, is probably over-excited as to her nerves, cannot

fail to suffer, though the blame is not, as a general rule, laid where it belongs.

There is another exercise which has come into vogue within twenty years, a game against which it is reckoned heresy to speak slightly—I mean Croquet—which certainly involves an amount of standing vastly disproportioned to the amount of exercise which it gives. This, together with the fact that it is likely to be played during only a few months of the year, and often on damp ground, and for an unreasonable length of time, may, perhaps, furnish an apology for wounding so large a number of feelings as one must wound who has the heart to venture a caution concerning it. It seems to be peculiarly well described by saying that it is “the game which tires without exercising.” To Skating I have already referred for the purpose of illustration. It is gravely to be doubted whether, in our changeable climate, where, moreover, it can be practiced during only a very few months in the year, it does not do more harm than good. Horseback riding, rowing, and bowling are very valuable, provided that they be judiciously used.

But there is one exercise to which no doubt attaches, one which can be regular, and hence judicious. This is Walking; and the fact that so few of our girls and women really enjoy it, that so few are capable of walking four or five miles without fatigue, and that they come in, after a walk of one mile, jaded and tired, instead of invigorated, points to a grave error of omission in their education. The walk of the little girl should be so regular a thing, so much a part of the day's routine, that she would as soon think of dispensing with her morning bath as of passing a day without

it.* Healthy children of three years old, who are educated to walk regularly, can, as I know by actual careful observation, walk two miles at once without fatigue, coming in at the close, brighter and more active than when they set out. This matter of walking is a matter which, as well as sleep, food and clothing, belongs to education; and if the girl does not enjoy walking—nay, if she does not demand it with as sharp an appetite as she has for her food and sleep, it is generally because she has not been properly and rationally educated.

If it is said that it is “not natural” for some to like to walk, the only proper answer to the objection would be that the question whether a thing is natural or not is not at all pertinent, and involves an entire misunderstanding of education itself. The very essence of civilization, of morality, and of religion, consists in the overruling and directing of the merely natural. By nature, man is not man at all. Only in so far as by force of spirit he overcomes, rules, and directs the nature in him, can he lay any claim to manhood. Education, physical, intellectual, moral or religious, is in its process only this directing of what is natural for us. Its material is the natural man; its result is the spiritual man; its process is the rationally-directed transition from the former to the latter. Between the helpless infant, aimlessly stretching out its

* In a most valuable and instructive article on the Comparative Health of American and English Women, soon to appear in *Scribner's Monthly*, Miss Mary E. Beedy, an American woman who has had unusually large opportunities for knowing English girls, states that this is exactly the feeling with which the English girl and woman regard their daily walk. I call especial attention to this forthcoming article because it abounds in accurately observed and skilfully generalized facts; and because it is most suggestive on the whole subject of the health of women, and the causes of its failure.

feeble arms, and the well-trained and fully-developed man; between the mind of the savage who roams the forest, and the mind of Bacon or Shakespeare; between the brute who strikes down his wife as he would knock over a stick of wood in his way, and the physician who stands at his post, tenderly and wisely caring for the fever-stricken patients in the Memphis hospitals, laying down his life for strangers; between the man who follows the caprice of this or that moment, as a desire for present pleasure may suggest, and the noblest Christian who daily sacrifices his own to the Divine will, there is but one difference—that of Education. The natural part of any one of us is, in any significant sense, simply the uneducated part. If a certain course of action is once recognized as rational, it is unnecessary to state that it is “not natural,” and the formation of rational *habits* of body, as of mind, these habits which constitute our second and better nature, is the very work with which education is concerned.

There is room, however, for misunderstanding here, and this I must pause to guard against; I must not be interpreted as saying that all natural feelings or actions are to be crushed out by a cold, reasoning logic. But it must be remembered that every virtue has its negative representative, and that this negative phase is simply and only the same virtue, but in an uneducated state, and not at all another and different thing; as, for instance, license is not different in its essence from self-control—it is only uneducated self-control. Obstinacy is merely uneducated firmness, and the worst forms of barbarous superstition are but the outcome of uneducated reverence. The lawlessness and bravado of our American children and youth, so severely commented upon by foreigners, are simply

an index of the uneducated state of the greatest amount of directive force that the world has ever seen. A fatal error is committed in education when this central truth is overlooked, as when one treats these manifestations as in themselves wrong, instead of recognizing their value, and bending the energies in their proper direction. If a missionary should begin his work by destroying in the mind of the savage all reverence for his own and only gods, he would have sawed off the branch on which he himself hoped to stand, and it were wise for him to make his escape from the country as soon as possible.

SEXUAL EDUCATION.

Up to the period of life at which the sexes diverge, that is, up to the time when the boy becomes a man and the girl a woman, the physical system pursues the even tenor of development, broken only by the two marked advances of the cutting of the first and second teeth. But now, the strength of the general system is supposed, in the counsels of the Creator, to have attained sufficient strength and firmness to be fully capable of assuming a new duty. In both sexes, organs up to this time quiescent, that is, as to any functional action, take on rapidly an independent life, assert their own character, and take up their peculiar work. Heretofore, all the physical development of the child has been for self alone; the gradual growth of each organism has pointed to nothing outside; each has been in a manner isolated. But now we have a foreshadowing of a nobler meaning to human life, for man is not to be alone, an isolated individual; he attains his highest significance only in relation to

others.* I say it is supposed that by thirteen or fourteen years of steady *educated* growth, the system in both sexes has acquired strength enough to assume this last duty; and if this www.ibibool.com.cn educated growth in both sexes, it does do so. I am considering, however, only the girls, and all that is said hereafter must be understood as applying specially to them. It makes its first trial of its newly acquired power, and, in a well-trained organism, such as we are thankful to know are yet found in our own country, it does do so with as little effort, with as little outer disturbance of the general system as is manifested when the first new tooth cuts through the gum of the seven year old little girl. If it is asserted that such cases are rare, I can only answer that such is not the testimony of other women of large acquaintance, whom I have consulted; and that even if they were, the sufficient answer to the statement would be that cases of girls who have been physically thoroughly educated, are equally rare. No impression can be given to American women which will tend more directly towards producing the opposite result in our girls, than one which should lead them to believe thoroughly that this last period of development is necessarily a period of great physical or mental disturbance. American women

* "The change of character at this period is not by any means limited to the appearance of the sexual feelings and their sympathetic ideas; but when traced to its ultimate reach, will be found to extend to the highest feelings of mankind—social, moral, and even religious. In its lowest sphere, as a mere animal instinct, it is clear that the sexual appetite forces the most selfish person out of the little circle of self-feeling into a wider feeling of family sympathy, and a rudimentary moral feeling."—Maudsley, *Body and Mind*, 2d Edition, p. 31.

have common sense enough to know that they must submit to the inevitable, but they have also common sense enough to fight against, and to conquer, what is not inevitable, provided it is not desirable; and if what I have said above could become the conviction of every American woman as thoroughly as it is that of some of them, we should in thirteen more years be able to prove it by innumerable cases. Every woman who knows it and acts upon the knowledge in educating her daughter, thereby becomes a benefactor to her country and her race.

We all know that many a baby cuts all its first teeth without any trouble, noticeable nervous excitement, or derangement of any of the bodily functions. We know, also, that large numbers are sick; that large numbers die, showing, that where the organism is weak, it is unable to carry on the new and sudden process without over-action, since we have only a limited quantity of vital force. Over-action in one part, is inevitably under-action in another, and either is but another name for, and not the cause of, disease.* We know that a larger proportion of children cut their second teeth without any disturbance, and this result was to be expected; for the terrible, and yet most merciful hand of death, seven years before, had thinned the ranks by transplanting the weakest to a clime where the burden of the body is not a hindrance, and had left us only the strongest for the second trial. We know also, however, that many children do suffer from nervous irritability, and from weakness in other directions at this time. If it is the digestive or respiratory organs that manifest the strain, the child

* Maudsley : *Body and Mind*, Am. Ed., p. 304 *et seq.*

is tenderly cared for ; if the over-action is in the nervous system, we “ wonder what possesses the child,” and she, probably, is sent out of the room, or punished in some other way, in word or act.

When the third and last especial and exceptional work takes place, we may expect the same results, and we find them. Up to seven years of age, however, the little girl's life has been comparatively a healthful one, at least as far as sleep is concerned. As far as clothing affects freedom of motion, she has also, probably, not suffered, though when she has walked in our chilly winter and damp spring air, she has had interposed between her body and the climatic influences only a defence of one thickness of cotton, while her brother has been carefully guarded by thickly woven woolen garments. But from seven to fourteen, the deteriorating causes in the average American family increase rapidly in intensity, in fact, much faster than the increase of the growing strength. The food remains nearly the same, though even this is not always the case, for the times at which it is taken often become somewhat more irregular, and its material more varied and innutritious ; her hours of sleep are considerably curtailed, from different causes ; her clothing, while not increasing in warmth and thickness, is drawn closer, and, in addition to this, the brain is set definitely to work in actual study. Is it not manifest, that while the demands upon the vital force have been increased, the supply of material has been decreased ? If this have been the case, she arrives at the period when the third and last demand is to be made on her growing power, with not force enough to assume the additional work, and in consequence she shows signs of disease. And then, forgetting all the previous want of education,

we either tacitly assume that God treats his children as Pharaoh treated the Israelites in his unreasonable demands, or, holding to our faith in him, we seize upon the first cause that presents itself to our startled vision. Because the education of the body has had for a long time, in our thought, an importance secondary to the education of the mind, we very naturally seize upon the latter as the cause of the evil, and remove the girl from school. One is here almost tempted to wish that the mind might be proved only a "mode of matter," if, by that means, the body might be raised up to the level of our mental horizon, and within the circle of our rational sympathy, for if we knew that matter and mind were the same, the matter of which our bodies are composed might then secure a chance for respectful and rational attention.

But there are here other considerations of immense importance which must not be overlooked, and it is to these that any rational treatment of the subject must turn its main attention. Besides laying the foundation of trouble at this time, in a neglect of proper physical education for thirteen years back, we have also taken pains to lay it in too great an attention to mental education for exactly the same number of years. It must not be forgotten that the little girl, as she looks out for the first time through her intelligence-lighted eyes, by taking notice of anything, while she lies in her mother's arms, looks out upon a vast and complicated world of civilization, of which she is entirely ignorant, and that, from the very fact that she is "the heir of all the ages," she has to make acquaintance with her inheritance. To the baby, the light, all sounds, its cradle, the room, its own moving fingers, its mother's face, are vast regions of unexplored knowledge. There is absolutely nothing, however small,

which is common or customary, and, as she grows older, to the three year old child even, a walk down one of our avenues, or the examination of a bureau drawer, is as exciting as a journey in a fairy palace. In fact, the whole world around her is merely one vast fairy palace, in which miracles are continually occurring, quite as astonishing and exciting as the appearance of the Genius at the rubbing of the wonderful lamp. And her world grows every day fuller and wider and more enchanting, just as the hazy cloud of the milky way unfolds and reveals itself to us under more and more powerful telescopes into stardust, into myriads of distinct shining points, into stars and suns ; and, under the telescopes of reasoning science, into worlds separated by distances so great, that "the imagination sinks exhausted," and very properly. Now, if any one will recall the sensation with which she first looked through a powerful telescope at this sight, she will then understand the state in which the brain of the little girl lives, as a continual atmosphere, and she will have no need to ask herself whether it is needful or allowable to add much cause for activity to that brain, for, at least, the first seven years of its life.

If mothers could only go to walk themselves with their little girls more often, instead of sending their ignorant nurses, they would comprehend this more fully. The fact that they do not "want to be bothered" with the child, only shows that they are dimly conscious of the truth, though their action testifies that they do not appreciate its significance. It is not necessary to speak only of city life here, for a walk along a country road keeps the little three year old girl in a state of continual high excitement. Is there not the wonderful thistle-down to be blown away, and the flight of each silken-winged

seed to be watched with anxious eyes? Are there not clusters of purple and white asters in unexpected places? Are not the steep and dangerous rocky precipices by the side of the way to be daringly scaled and slid down? Do not the geese live in this pasture, and the sheep and the one solitary pig in that? The raspberry vines droop their rosy fruit into her hand, the tall, big, golden-rods snap their stalks so unexpectedly when she bends them, while she finds herself unable to gather the slender grasses. Then there are such charming nooks for hiding, among the ferns and hazel-bushes, and the bits of mica glistening all along the road are each of a different size and shape, and must be carefully collected. The toad startles her as it leaps out of the road, the grasshoppers strike her face, and wonderful people drive by in wonderful machines, drawn by vast and wonderful animals. The amount of knowledge which an intelligent child will accumulate during seven weeks' stay in a quiet country town, alone can measure the amount of brain activity which has been carried on for that time; and yet we drive and force this activity from her earliest years, when we ought only to direct it. We exhibit her in her babyhood to crowds of admiring and exciting friends, we overwhelm her with an unreasonable number and variety of exciting toys, we tease her to repeat her little sayings for the amusement of grown people, and lastly, we send her to school to be still more excited, and to have vast additional fields of knowledge of a different kind open to her. The fact is, that no child is ready to go to school till she has had time enough allowed for the dazzling and exciting illumination which pervades the atmosphere of childhood, to

“die away

And fade into the light of common day.”

We send children to school—or rather we begin voluntarily to teach them, too early by several years, and the only result is that the brain is “too early over-strained, and in consequence of such precocious and excessive action, the foundation for a morbid excitation of the whole nervous system is laid in earliest childhood.” As far as the home-life fosters this over-activity, that is, before the time of school life, I think it will be readily acknowledged that this showing-off process is applied with greater force to girls than to boys. The boy is left more to his own devices, but the girl must be made to contribute more to the general amusement of the family, and she must learn “to make herself useful.” It is true that to be of service to others, in a rational sense, should be her ruling motive of action, but one may, perhaps, question whether such early expectation, in such ways, be not, at least, “penny wise and pound foolish.” To this cause may be attributed a great part of the failure in the health at the last special time of development.

As to the mental progress made, John Stuart Mill may, as he says, have entered life “a quarter of a century in advance of his contemporaries,” but was he a quarter of a century ahead of others of his own age when he left it? The question is at least suggestive of the truth.

But, with the development of the organs which are so indissolubly associated with the deepest feelings and with the mental powers, there is also a corresponding mental development. Not only does “the blood rush more vigorously, the muscular strength become more easily roused into activity, but an indefinable impulse takes possession of the whole being,” and a great excitation of the imagination also is perceivable. Just here, then,

the educator recognizes a duty. This increased force, which we could not prevent if we would, and would not if we could, must be guided into rational channels—and here I have to speak of a branch of the subject which is not often considered. I mean the duty of the mother, who is in this department the proper educator, to speak earnestly, fully, and plainly to the girl of the mysterious process of reproduction. Rosenkranz* says, somewhere, that when any nation has advanced far enough in culture to inquire whether it is fit for freedom, the question is already answered; and in the same way, when a girl, in her thought, has arrived at the point of asking earnest questions on this subject, she is fit to be answered. But just here let me call attention to the infinite importance, in this part of education, of perfect confidence and freedom between mother and daughter, and to the equally important fact, that this confidence which does exist at the beginning of life, if once lost, can never fully be restored. If there is a shade of reserve on the part of the girl, it will manifest itself just here and now. Instead of seeking the information which she really desires, at its only proper source, at that source whence she would receive it pure, and invested with a feeling of reverence and sanctity, of which she could never divest herself, she seeks it elsewhere. She picks it up piece-meal in surreptitious and clandestine ways, as if it were some horrible mystery which must, from its very nature, be covered up from the light of day. She talks it over with her young companions in secrecy, and the charm of mystery keeps her thoughts unduly brooding upon the subject.

* Dr. Karl Rosenkranz, Doctor of Theology, and Professor of Philosophy at the University of Königsberg.

In old times, and even now, in other countries, the danger was not, is not, so great. Foreign girls have a much closer supervision exercised over them, and their life in the nursery is far less nerve-stimulating than that of American children. They do not ask questions so early as the American girl, and when they do, they have at hand not nearly so many sources of information. If this all-necessary love and confidence is unbroken, and if the mother have been so educated herself, that she recognizes the importance of the moment, and has the requisite knowledge, there is no danger at all. The occasion is seized, and her womanly, "clear, and dignified statement, destroys all the false halo with which the youthful fancy is so prone to surround the process of reproduction, and, at this time, the fancy is very active with relation to whatever pertains to it."

I do not for one moment forget that I am speaking of physical education. The physical consequences of mistakes on this point are decided. By the continual dwelling of the imagination on this subject—of the imagination, I say, for there can be no thought where there is no clearness—the blood is diverted to these organs, and hence, "the brain and spinal cord, which develop so rapidly at this period, are not led to a proper strength. The easily-moulded material is perverted to the newly-aroused reproductive organs," and the preternatural activity thus produced is physical disease.

But more than this: I should be fairly accused of quitting the physical for the moral side of education here, if it were not that I am now upon ground, where, more than on any other, body and soul, matter and spirit, touch each other, and it is very difficult, if not impossible, to draw the dividing line. The inter-action of the two upon

each other here becomes so rapid and intense, that one scarcely knows the relation of cause and effect. I repeat—more than this: The patched and medley knowledge of the young girl to whom her mother does not speak, comes to her garbled and confused, the sacred seal of modesty torn off, soiled with the touch of vulgar hands, defaced by the coarse jests of polite society, its sanctity forever missed. The temple has been invaded, its white floors trodden by feet from muddy alleys, the gods thrown down. Is not the temple as much ruined when this profanation has been accomplished, as if the walls had fallen? I will not be misunderstood as doubting, for one moment, the purity of soul of American girls as a whole; but I assert, that the result of which I have spoken is terribly common in our large cities, and that it is much more likely to be common in America than in any other country, from the effect of our climate, our free institutions, and the almost universal diffusion of printed matter.

The remedy lies alone in the hands of the mother, and, where a girl is away from her mother, in the hands of her woman guardian, whoever she may be. When our women are better educated, there will be less prudery and more real modesty.* When the minds of our

* I quote again from Rosenkranz, because I cannot improve upon his words: "Modesty is the feeling of the primitive harmony of nature and spirit, and it is very decidedly active in children, however unconstrained they are with regard to nature. True modesty is as far removed from coarseness as from prudery. Coarseness takes a delight in making the relation of the sexes the subject of ambiguous, witty, shameless talking and jesting, and it is just as blamable as prudery, which externally affects an innocence no longer existing therein. Here is, consequently, the point in which physical education must pass over into moral education, and where the purity of the heart must hallow the body."

girls and women are kept busy on other things, they will have no time for this most dangerous brooding. Most truly does Schiller say: "*In müssiger Weile schafft der böse Geist,*" and he spares neither body nor soul.

It is always asserted that woman makes and rules society. When our women are better educated themselves, their righteous indignation will banish forever from all conversation in which they have a part, the fashionable jests on subjects which do not admit of jest, and the *doubles entendres* whose power to excite a smile consists in their vulgar and profane suggestions. They are as common in companies of average women as in companies of average men, and they evidence thoughts, and are themselves as much coarser and lower than the outspoken utterances of Shakspeare's ideal women—whom they assume to criticise and condemn—as the smooth and subtle rhymes of Swinburne and Joaquin Miller are below the poetry of Chaucer and Spenser.

Closely connected with this part of my subject is that of the reading in which girls are passively allowed to indulge. How large a proportion of mothers and guardians exercise anything which can be called watchful care as to what books and papers the children shall read; and yet the booksellers' shelves groan under the weight of the most dissipating, weakening, and insidious books that can possibly be imagined; and newspapers which ought never to enter any decent house, lie on the tables of many a family sitting-room. Any one who will take the trouble to examine the records of any large circulating library, will be astounded at the immense demand which there is for these average novels. And in our parlors and chambers to-day, myriads of little girls are curled up in corners, poring over such

reading—stories of complicated modern society, the very worst kind of reading for a child—stories “whose exciting pages delight in painting the love of the sexes for each other, and its sensual phases.” And the mothers do not know what they are reading; and the children answer, when asked what they read, “Oh, anything that comes along.”

How find a remedy for this evil? How stem this tide of insidious poison that is sapping the strength of body and mind? How, but by educating their taste till they shall not desire such trash, and shall only be disgusted with it, if by chance it fall under their eyes? How, but by giving their minds steady and regular work? If the work be intermittent, it will, under the general principles laid down in the remarks on exercise, not only be, from that fact, injurious to the brain, but it will afford, at the most susceptible period of life, leisure for reveries which can lead only to evil, moral and physical. But give our girls steady and regular work of muscle and brain, a rational system of exercise for both, so that the “motor and nervous systems may weary themselves in action, and may be desirous of rest,” and evil will be not only prevented, but cured, if existing.

Even if these trashy books, which we find everywhere, not excepting the Sunday-school libraries, be not actually exciting and immoral in tone and sentiment, they are so rapid, so utterly without purpose or object, so devoid of any healthy vigor and life, that they are simply dissipating to the power of thought, and hence weakening to the will. No one needs to be told how great is the influence of the will over physical health, and any weakening of it tends inevitably to a slackening of all the

vital forces, by which alone we preserve health, or even life itself.

All such books can be kept out of a house, and their entrance should be guarded against far more vigorously than we oppose the entrance of noxious gases, or even of draughts of pure air. Some of us, many of us, have reason to be grateful that in our fathers' houses no such books were to be found. Poets were there, novelists were there in abundance, but of such poisonous and weakening literature, no trace; and as we are grateful to our parents for the care and simple regimen which preserved our physical health for us, we thank them also for the care which kept out of our way the mental food which they knew to be injurious, and for which they themselves had been too well educated to have any taste.

The possession, through the instrumentality of education, of simple and healthy appetite and taste, physical and mental, is the most valuable gift that the father, that the mother, can give their children, a gift in comparison with which a legacy of millions of dollars sinks into utter insignificance. And a tithe of the thought and care which are expended in accumulating and investing property on the part of the one, a tithe of the care and thought used on dress on the part of the other, would serve to secure it!

The exclusively American habit of taking young girls to fashionable resorts for the summer should also be alluded to here. No custom could be more injurious than this in the influences of food, clothing and sleep, which it almost inevitably brings; and added to these, girls in idleness, and left to amuse themselves, are often in such places thrown into contact with persons of both

sexes, whose conversation is the worst possible in its effect on mind and body.*

But, according to the general principle of education, we must not repress imagination in one direction without furnishing it some rational food in another; for education, as has been said, consists not in destroying but in training the natural man, and any system which aims at destroying any natural impulse only defeats its own end. For this purpose, and at this period of life, it were well to draw the imagination to "the enjoyment of the beautiful through an actual contemplation of it, and for this purpose the study of painting and sculpture is of pre-eminent value. * * * * * Through their means the allurements which the wholly or especially the half-undraped form has for us, becomes softened and purified. The enjoyment of beauty itself is the enjoyment of something divine; and it is only through a coarse, indecent, and already infected imagination, belonging to a general sensuality, that it degenerates into excitement." † "Let our artists rather be those who are gifted to discern the true nature of beauty and grace, amid fair sights and sounds; and beauty, the effluence of fair works, will meet the sense like a breeze, and in-

* A friend of undoubted accuracy testifies to a case where acute dysmenorrhœa and menorrhagia, begun in over-excitement and tight clothing, and aggravated by the very cause above-mentioned, gradually yielded to regular and nutritious food, a rational mode of dressing, regular sleep, and to the regular brain-work which gave sufficient employment to the over-excited imagination.

† Rosenkranz refers here, of course, only to the antique, and to the products of modern art which breathe the true spirit of the antique; for it is unfortunately quite possible to find a Joaquin Miller and a Charles Reade, or a Tupper and a T. S. Arthur, in painting and sculpture as well as in literature.

sensibly draw the soul, even in childhood, into harmony with the beauty of Reason." *

There is another matter which can scarcely be passed over in silence in this discussion, but the evil effects of which are seldom recognized. There are many men in middle life against whose character no whisper has ever dared to raise itself, men of culture and power, men of strong personal "magnetism"—I use the term because no other will express exactly what I mean—who often attract the almost idolatrous admiration of young girls and young women. They may do this at first unconsciously; but they are pleased by it finally, and seem to enjoy being surrounded, as it were, by a circle of young incense-bearers, and they seem to see no harm in, to say the least, passively permitting this excessive, sentimental, and unnatural admiration. No harm is done? But harm is done, and that of the most insidious character. There is a time in the life of a majority of girls and boys when the half-conscious and just awakening spirit is, as it were, casting around in every direction for a some one, they know not who; † and if at this time the young girl

* Plato, *Rep.*, Book III.

† "The great mental revolution which occurs at puberty may go beyond its physiological limits in some instances, and become pathological. The vague feelings, blind longings, and obscure impulses which then arise in the mind, attest the awakening of an impulse which knows not its aim; a kind of vague and yearning melancholy is engendered, which leads to an abandonment to poetry of a gloomy, Byronic kind, or to indulgence in indefinite religious feelings and aspirations. There is a want of some object to fill the void in the feelings, to satisfy the undefined yearning—a need of something to adore; consequently, when there is no visible object of worship, the Invisible is adored. The time of this mental revolution is, at best, a trying period for youth; and when there is an inherited infirmity of nervous organization, the natural disturbance of the mental balance

comes under the influence of one of these men, she is likely to fall into a most unnatural and morbid state; and the man, whoever he be, that shows himself pleased by such adoration and devotion, who does not by the force of loyalty to the simple Right, persistently and quietly repel, and effectually repel, all such tribute, is responsible for much harm, and must answer for much unhappiness. The remedy would lie in an education for these girls which should be sound and healthful; in ample, active employment of the thought in other directions. The safeguard, however, lies in the mother's hands. No mother who holds the unquestioned confidence of her daughter need ever fear for her in this or any other way. So long as the girl knows that she can go fearlessly to her mother with all her thoughts and fancies, foolish though they be, so long as she is never repelled or shut up within herself by ridicule or want of comprehension, so long she is as safe, wherever she may be and into whatever companionship fallen, as if fenced about with triple walls of steel. But let that perfect confidence which should subsist between mother and daughter be once lost or disturbed; let the girl once fear to think aloud to her mother, and the charm is broken, and dangers encompass her around. No thoughtful woman can see a girl, thus alone, carried away by her impulsive feeling, devoting herself to the worship of some prominent man who dares to encourage or permit such tribute, without longing to step between and defend

may easily pass into actual destruction of it. * * * * * What such patients need to learn is, *not the indulgence but a forgetfulness of their feelings, not the observation but the renunciation of self, not introspection but useful action.*" (The italics are ours.)—Maudsley, *Body and Mind*, 2d Edition, pp. 83, 84.

her, as Spenser's Britomart did the innocent Amoret from what she knows is the unseen, unfelt, and yet real danger.

As to direct physical care of themselves, American girls between fourteen and twenty-one are to be ruled only through their own convictions on the side of prudence, for they will not, as has been before said, blindly obey what seem to them arbitrary rules, as the girls of some other nations can be easily made to do. The American mother is not so likely to say to her daughter, "You must not go to this party," as, "Do you think you had better go?" If a girl, then, is made to know that when any organ is in a congested and softened state it is much more likely to be injured than at other times, she will not, while this is the case, if previously properly educated on the will side, draw her dress tightly around her yielding form, and stand or dance at a party for hours together; she will not skate for hours; she will probably not ride for hours on a trotting horse; she will not take long walks; she will not race violently up-stairs, or plunge violently down, because she has been taught to believe that no one can with impunity array her individual will against the laws of nature; and thus two of the most frequent causes of trouble, which are displacements or the bending forward of any organ, will be avoided. If she persists in trying experiments, she will not be obliged to experiment for a very long time in order to satisfy herself that the wisdom of ancient tradition is of more value than her individual opinion; but the girl who has been properly educated for fourteen years has already made this discovery. However, if, after all advice, any one should persist in so unreasonable a course, she is, when fully grown, a rational and respon-

sible being, and, as such, is answerable alone to herself and to her Creator for the marring of his workmanship. What folly, what worse than folly, should we think it in the managers of a steamship to intrust the care of the machinery to an engineer who knew nothing of its construction, or of the way in which the parts act upon one another; and yet, the mother who leaves her daughter in ignorance, and then does not carefully guard her herself, is guilty of worse than this; and when the evil is done, the advice of the wisest physician can only be the enjoinder of the very sanitary rules which she herself should have long before enforced; for "the true method of Sexual Education must remain that which has been always hitherto spoken of, that of correct living.

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“The next step will be to desire our opponent to show how, in reference to any of the pursuits or acts of citizens, the nature of a woman differs from that of a man. That will be very fair; and perhaps he will reply that to give an answer on the instant is not easy—a little reflection is needed.”—PLATO, REP., BOOK V.

MENTAL EDUCATION,

OR,

THE CULTURE OF THE INTELLECT.

“Now, as refusal to satisfy the cravings of the digestive faculty is productive of suffering, so is the refusal to satisfy the craving of any other faculty productive of suffering, to an extent proportioned to the importance of that faculty. But, as God wills man’s happiness, that line of conduct which produces unhappiness is contrary to his will.”—FRANCIS BACON.

If one is to educate the body, she would be presumptuous in the extreme if she made the attempt without first understanding in some measure its anatomy and physiology. With as much reason, in approaching the subject of mental education—that one third of education which with too many persons stands for the whole—we must pause a moment for a few reflections on the nature of mind and the necessary results thereof. “*Mind is essentially self-activity.*” In this, as we have been taught, lies its essential difference from mere matter,

whose most essential property is inertia—*i. e.*, absolute inability to move itself or to stop itself.*

When, therefore, mind acts at all, it must act from within, and no amount of information given will be of the slightest concern to it, unless by its own activity the mind reach forth, draw it in, and assimilate it to itself. This voluntary activity, directed towards any subject, is Attention, and so great is the power of mind when in this state, that it dissolves and draws in all food, no matter how abstruse, that may present itself. Thus the problem of mental education, which had seemed so complex, resolves itself very simply. We have first to educate the attention of the child, so that she shall be able to use it at will, and to turn it towards any object desired; and secondly, we simply have to present to the aroused attention the knowledge which the past centuries have created and accumulated, and to present this in such quantity and in such order as the experience of the same centuries has decided to be best for its normal growth.

To begin with, then, we must educate the child from the first into a habit of controlling and directing her naturally drifting and capricious attention by the will. The power of the child is very limited in this respect. Her eyes, the index of her attention, wander easily from one external object to another, and consequently our work must be very gradual, for, if we attempt to hold the attention one moment longer than the mind has strength for, the tense bow snaps, and the over-

* On this statement we may perhaps rest, as our present distinct object is to illustrate mind, and not matter; though any reader will, of course, be entitled to his own "mental reservations" on the other side, and his own ideas on the subject of Attraction, etc.

strained activity lapses into inanity. We must ask her attention for very short intervals at first, and during many years; for every time that we attempt to convey information for so long that the attention gives way, we have weakened, and not strengthened the power. Exercise, to be judicious, we must remember, must, in mind as well as body, be regular, and increase steadily in its demand. The object of the first teaching should, therefore, be the steady and methodical cultivation of the faculty of attention, and not the acquisition of knowledge. Our first work must be to give such judicious exercise that the mind shall acquire a habit of exercise and an appetite for it, and not to spoil at the outset the mental digestion. A healthy appetite being once created, we have then only to spread the table and place the courses one after another, at proper intervals, and within convenient reach, in regular order, and the work is done.

But the child, as she grows from child to woman, must pass through three stages, showing three different directions which are successively taken by the intelligent activity. First, she is occupied in perceiving objects. She then passes into the years dominated by the imagination, and she should emerge from this into the dominion of rational, logical thought, but, through the fault of a defective education, she often never passes beyond the second stage. Thus dwarfed and crippled she remains during her whole life, physically a woman, mentally a child. Better days are, however, dawning, though the sun be but one hour high.

Again, serious errors are made in education, from the want of a proper appreciation of the time at which the girl passes inevitably from one to the other of these stages. When, for example, authors of text-books on Natural

Science, History and Reading, designed for pupils of fifteen and sixteen years of age, cover more space with illustrations than with text, we recognize the fact that they forget that at that age, the first or intuitional stage is past ; and when publishers endeavor to recommend their books to teachers, by sending them specimens of the pictures in the books, instead of specimens of the explanations and statements, the teachers know that they are supposed to be equally admirers of fine wood-cuts.

In the first, or intuitional stage, when the child is chiefly employed with perceptions, there is little to be done but to train the eye, the ear, the hand and the voice, and to teach the correct use of distinctly spoken language.

It is clearly impossible to investigate the subject of mental education in detail in the present essay ; I must content myself with a few suggestions and statements.

First, is it not evident that it is all-important what kind of training the little girl receives in the first years of her school life, while she is yet in the intuitional or perceptive stage ? A failure to properly train her attention here, and the whole of her after-work is invalidated. Her school work becomes, in its progress, tiresome, and hence disagreeable, from the constant necessity of repetition, a necessity arising from the want of a trained power of attention. She is found fault with for restlessness and want of interest, as if that were her fault, and not her misfortune ; and, at the end, her knowledge is at best but " a thing of shreds and patches," till, when all is done and the result exhibited, we ask, with a sigh, " whether it be really worth while to go through so much to gain so little." And yet, what care do guardians take to secure the best advantages for their daughters at fifteen

and seventeen, and of how little importance do they consider it, under what kind of teaching they place them between eight and fifteen ! The error is all the same in the intellectual as in the physical education of our girls. We are continually carefully locking the stable-door after the horse is stolen ; we are continually allowing things to go wrong, and then making superhuman efforts to right them, not remembering that it is far easier to keep out of trouble than to get out of it. If a girl must be trusted to incompetent, or, at the best, doubtful, teachers during half her school life, let that half be the last, and not the first, and incompetency will be shorn of half its power to injure. Not only directly in the interest of the girls, but in the interest of my own profession—though the two are one—I ask this, for in that case, our profession would soon be elevated in its general tone by the elimination from it of those who ought never to have entered it.

Passing from the intuitional epoch to the age when the imagination and emotion become the ruling powers, we next arrive at the time at which it becomes necessary for parents to see to it that plenty of good reading is provided for the eager child. It makes not so much difference what kind of books she reads, but they should always be the very best of their kind, for this is the time in which the formation of a correct taste becomes, perhaps, the most important duty of the educator. To poetry, either in verse or not, each child inclines naturally, as did the race in its childhood, and the stories of the Old Testament and Homer are never wearisome. Generally, “the proper classical works for youth are those which nations have produced in the earliest stages of their culture.”

Now is the season for fairy stories, and the Ger-

mans, who, of all nations best understand the needs of children, have them ready furnished to our hand. I do not mean the absurd, aimless, and meaningless fairy tales with which modern writers endeavor to supplant the fairy classics, and which, for the most part, the instinct of a child at once condemns. I doubt very seriously whether it is possible at the present time, and in America, to write a fairy story which shall have the true ring in it, any more than it would be possible for any one to write a genuine epic poem. The circumstances favorable to the production of both have passed away with modern times, but the productions are left us, a perpetual legacy of delight and charm to every little girl.

We are too apt to forget that the child must live through certain stages of thought and feeling in order to arrive at maturity. And perhaps Americans are more liable to this error than any other nation. We might as well expect the full bloom of the rose to burst from the root without the intervention of stem and bud, and the slow passing of the years. It is right that the children should devour fairy stories, and she, who, at this period of life, fails to read the *Arabian Nights*, must miss forever a most valuable part of her mental education; for this period, once past, never returns. Don Quixote and Gulliver's Travels may be also mentioned here. It is true that they were not written for children, but so true and genuine are they, that the child enjoys them thoroughly, while the most mature find them a profitable study. This peculiarity of adaptation to all ages belongs to all the genuine myths of any nation, its best modern master being Hans Christian Andersen. It is the royal sign and seal of authority in stories. Ballad poetry belongs too to the beginning of this stage. Scott comes in later, but

Tennyson does not belong in it at all. These examples will be sufficient to express my meaning.

It would be a very valuable aid in the education of our girls at this time, if some one who is capable would, out of her riches of wide reading, give us a list, with publishers' names, of these books of all time which ought to be read by every child; a list to which any mother, anxious for the right guidance of her little girl's taste, and yet ignorant of the best means, might refer with perfect confidence.

We must not, as has been well said, deprive books for children of the "shadow-side" of life, because in that case they become artificial and untrue, and the child rejects them. "For the very reason that in the stories of the Old Testament we find envy, vanity, evil desire, ingratitude, craftiness and deceit among the fathers of the Jewish race, and the leaders of God's chosen people, have they so great an educational value," and when we have purged the narrations of all these characteristics, and present to the child an expurgated edition, we find that they no longer charm her. Nothing disgusts a child sooner than *childishness* in stories written for her, and it is because very few people can rightly draw the line between what is childish and what is childlike, that we find so few who are able to write stories which are really adapted to children, and that so many who address Sunday-schools fail to interest. Every woman who has proved her power in this direction may be said, in the dearth of valuable books for children, to owe a duty to her country by giving them more. As the child grows towards womanhood, tragedy will take the place of the epic poem and ballad, and will lead, it may be unconsciously, to a deepening of the sense of responsibility.

The question what the girl shall read belongs not at all to herself, but to those who know the world better than she, and who, through the fact that they are educated while she is not, know what and when to select. Hence the immense importance, not only to the girl herself, but to the whole country, of the thorough intellectual education of our girls.*

But enough has been said on the subject of reading, and of the distinctions which should be made. I may add, however, that the line before alluded to is to be drawn in novels. As, for instance, the girl is ready for Dickens before she ought to read Thackeray, as Dickens dwells more in the region of the simple emotions, while Thackeray has moved on into the sphere of emotion which is conscious of itself, or of the reflecting and critical understanding.

Supposing now that the girl has passed beyond the psychical stage of the Imagination into the stage of Logical Thought, it is immensely important that in this stage

* When those who are supposed to be the educated women of America are really educated, we shall not be pained through our sympathies, in view of such wide-spread evil as the following paragraph from a recent editorial of a leading New York journal would seem to attest.

“It must be confessed, we fear, that wives and mothers are responsible for no little of our too general disinclination for that steady, persevering pursuit of high intellectual aims, of which Agassiz was such a bright example. They are naturally ambitious of the outward signs of social position, and also, on account of those they love, eager for the solid advantages to be obtained by money. They are not content if they cannot be dressed as finely and ‘receive’ as elegantly as their friends do; and, also, they fret if their children do not have such advantages of education and association as will secure for them an enviable future. And thus, husbands and fathers are driven, not only to ceaseless labor—that they would bear willingly—

also she should not miss a systematic education. If this should be the case, she is defrauded of the key which alone can render intelligible the scattered work of the previous epoch. The work of education in the first, or intuitional epoch is general; in the second, or imaginative, special; and in the third, or logical, returns again to the general; and thus only can it constitute a whole. In the first, the child picks up facts and general principles from them; in the second, the little girl pursues, each for itself, different branches of study; in the third, she should be led to see the connection and interdependence of these branches, to weave together the loose ends. If she is not so led, if her education stops with the work of the second stage—the only work which it is possible to do in the second stage, on account of the laws of the development of the intellectual power—her education remains forever unfinished, a garment not firm enough to endure the stress of time, not fine enough to bear a moment's keen scrutiny, and only strong enough to fetter and trip feet that endeavor to make any real after-progress by its aid.

but to the abandonment of their best-loved pursuits, and their highest, most cherished purposes. Thus, money-productiveness comes to be the test of the value of all intellectual labor, even with men who would gladly devote their lives to science or to literature, and perhaps be willing, for themselves, even to be poor in a society in which poverty is almost a reproach. Thus it is that high aspirations are checked, and that strong resolves are broken. And thus it will be, until we have advanced to such a point of civilization and culture that we shall award that something which is only expressed by the word 'consideration' to other eminence than that which is attained in politics or in trade."

I venture the question with extreme diffidence, but would not this broader education of future wives and mothers save perhaps so much new legislation on the subject of divorce as is now in progress in those parts of the country most characteristically American?

And yet this is what we are in the majority of cases doing for, or rather against, our intelligent and energetic American girls. Does it ever occur to us to ask what becomes of this energy, deprived thus of its natural outlet? We have only to turn to the records of our insane asylums or to the note-books of the physician and we are partially answered. This is more true than is generally supposed. If these girls had had real work for which they were responsible, and felt themselves able rationally to utilize the power of which they were blindly conscious, they would not be found to-day in the wards of asylums, or condemned to the luxurious couches on which they spend their "inglorious days." Or, thirdly, we may find another and quite different development of this perverted but not destroyed energy,* this closing of the top of the chimneys. Many a woman is antagonistic, is combative, because she is forced into such a position, not because she herself desires it. The smoke starts for the top of the chimney, as it should; but, baffled, it frets itself in eddy whirling against the bricks, till, driven by the necessity of an outlet somewhere, not understanding what the trouble is, but only dimly realizing that there is trouble, it rushes back, choking in its passage the fire, and revenging itself on the author of the repression.

Men and women are wonderfully alike after all. The same motives move them, the same incitements spur to

* "We are imperfect beings, and in nothing more imperfect than in our power of appreciating each other's mental suffering. We see the odd contortions to which they give rise without seeing the reasons for them, and they are to us fit subjects for caricature. We all know Mrs. Pardiggle and Mrs. Jellyby, but few who have not borne it, know the pain of the pressure from within that forces natural activity into such distorted motion."—Mary Taylor, *First Duty of Women*.

honorable effort, and if a girl is assured that, being half-educated, half-educated she must remain, she will not, unless driven by the internal fire of irrepressible genius, try very earnestly to fit herself for the higher plane which she can never reach.

“Were it not better done, as others use,
To sport with Amaryllis in the shade,
Or with the tangles of Neæra’s hair?”

By all means it were far better, if effort for broader work be of no avail, to cease to think of it, and to make one’s self as comfortable as possible. And yet, how about the comfort in the coming years, when her girls, who, thanks to the inevitable march of Truth, will have a better chance than she, and her boys, to whom the last stage of education is to be had for the asking, come to her in vain for sympathy and appreciation, to say nothing of the husband, from all understanding of whose rational thought she finds herself barred out? * Babies and

* “Young America is conceited, disrespectful, does not honor overmuch his mother. Commonly he soon outstrips, or thinks he outstrips, her mental attainments. Her stature dwindles as his increases. At best, in his fancied greatness, he pities while he loves her. But what if she has traversed every inch of these intellectual regions before him, has scaled those heights, has conquered those enemies, has looked deeper into those mysteries, is superior at every point, can in an instant flood his darkness with light, sweeps with steady gaze the circumference of his groping thought, and shows him ever an angelic intellect as well as a mother’s heart! With such a mother, filial love would almost become worship.

“How much of Francis Bacon’s greatness was due to his mother, who was the daughter of Sir Anthony Cooke, tutor to King Edward VI.? Every evening when Sir Anthony came home, he taught his daughter the lessons he had given to his royal pupil. Anne Cooke mastered Latin, Greek, and Italian, and became eminent as a scholar and translator, and she taught her son. A suggestion of Bacon’s

half-educated children are very pretty to play with, interesting to watch, and delightful to care for, but when they are married and have children, for they can never be said, in any true sense, to be wives or mothers, they appear in a somewhat different aspect. I have sometimes, out of sheer pity, wished that there were some State asylum for such children, when they are left, as the chances of life and death so often leave them, unprotected in the world, with dependent children clinging to their useless hands. I have never seen a sadder sight than such a woman, her physical system in perfect order and superbly developed, looking stunned and helpless into the world, unable to do anything for herself or her children, and dependent upon the charity of her dead husband's friends—and perhaps the wise thought and tender care of a faithful servant, whose practical education was complete in the stern school of necessity—for food, clothing, and shelter. They have been only half-educated, and it seems as if the authority which has refused in the past to provide them with the power for their own maintenance, ought to recognize their right to be supported; as much as it does recognize the duty of supporting others, for whose education it has failed properly to care in their youth, in jails, penitentiaries, and prisons.

As to the effect of the want of education and culture upon what are known as the most characteristic womanly qualities, whether physical or mental, no better illustra-

reverence for her, some conception of what he felt that he owed her, may be gained from the touching request in his will that he might be buried by her side. 'For my burial, I desire it may be in St. Michael's Church at Gorhambury, for there is the grave of my mother.'—*Address of Homer B. Sprague, at the laying of the corner-stone of Sage College, Cornell University.*

tion can be furnished than that of the women among the Arkansas refugees, who during the war came crowding for protection into Missouri. They had not dwelt in a frigid and contracting climate; they had not been physically over-worked, and they had not been co-educated, for they had not been educated at all, either physically, intellectually, or morally. Should we not have expected to find in these children of nature, these women who had spent their lives in idleness, undisturbed by any brain-work, at least, finely developed forms? But what did we find in the quarters assigned them? Without a single exception, they were tall, thin, and angular in face and form, while the masculine loudness, harshness, and depth of their voices, and the masculine expression of features and movement, made us involuntarily recoil from them as if they were something monstrous, in being neither man nor woman. The animal nature, informed only in a small degree by the spiritual, inevitably descends through lower forms, and when we find it deprived entirely of spiritual guidance, we find a something lower than the dog that is grateful for our kindness, or the horse that whinnies as he hears our step on the gravel-walk; for we find the idiot.

But meantime, while the child is passing through all these stages of mental development, as ordained by the Creator, the definite school-work is intrusted to the hands of professional teachers. American parents throw this responsibility entirely off from their own shoulders when they send their girls to school, with somewhat the same feeling of relief as that with which they lead their family physician to the bedside of the little girl, for whose indisposition they have, before summoning him, anxiously endeavored to care. There is only one difference: in the case of

the physician, they relate to him fully all the symptoms and previous treatment ; they remain by the bedside after he has gone, in the capacity of nurses, and they see to it that his prescriptions are obtained and administered, and his suggestions in every respect exactly followed, while, in the case of the teacher, they send the child, leaving her to make her own discoveries as to previous symptoms and treatment, and they do not inquire into the directions given, the nature of the work prescribed, or the effect. Having thus, as they think, placed the whole matter in the hands of the teacher, they are often surprised and annoyed at the result. I am taking it for granted here that the teacher is qualified for her part of the work, as to method ; and, if not working under a course of study laid out for her, as in the public schools, is herself able to arrange and plan. This is the most favorable aspect of the subject. But there is indisputably another side. If mothers would only work with the teachers, so that the home influences brought to bear on the girls in matters already discussed, especially in the direction of the reading of their daughters, should be healthful and strong, the teachers would be saved much time and energy, which could be far more usefully applied for the benefit of the child. I speak from the midst of a profession which often suffers in reputation, nay, even in actual character, from this very cause.

To go in detail through the part of intellectual education which belongs especially to the teacher, is impossible here, nor would such a discussion be in place in these pages. It has its place properly only in professional literature, just as the details of the treatment of a case placed under medical care, whether preventive or curative, belong only in the pages of a medical journal.

A few suggestions only will be added in this department.

It is evident to the most superficial observer that a vast amount of time is spent over such studies as grammar, geography and history in our schools, with but little perceivable result. This is due in great measure to the fact that the manufacture of text-books has become in America a profitable business in a money point of view, and that, consequently, what text-books shall be used in our schools, both public and private, is decided more by the publishers than by the educators. Hence the graded series of School Geographies, for instance, through some five or six of which the pupil is obliged to wade, one after another, to find in each, only the same matter in sentences of a somewhat greater length. Hence, to go one step farther, the stupefying of so many minds in our schools. Nothing is more deadening to all mental activity than unmeaning repetitions, a fact easily verified by any one who, wakeful through mental disturbance at night, will take the trouble to repeat and re-repeat any meaningless thing. It is the lounging, deadening brain-work of which we have too much, not the active, vivifying brain-work of which we have too little, that does injure the system. The whole healthy tone of the mind is destroyed, and evils, mental and physical, follow in rapid succession.

From the process of text-book manufacturing also spring the endless number of compendiums and abstracts with which our schools are deluged, mental power diluted, and the pockets of the parents unnecessarily taxed for the support of large publishing houses, not for the education of their children.

Another cause of this stupefying process is the rigid

system by which most large schools are conducted, where promotions, from one class to another, can take place, say, once a year, the pupil who, on examination, falls short of the required per cent of correct answers, being forced to review the work of the entire previous year before going on. More elasticity, more fluidity, as it were, is sadly needed in our system of public school education before this evil will be to any great extent modified.*

It would be a waste of time to say that one ought not to be overworked, were it not that some persons always seem to imply that any intellectual work is over-work. It would seem equally superfluous to say that for intellectual health there ought not to be any surplus energy, for the latter statement seems as axiomatic as the former.

The problem with which educators are chiefly concerned is that of fully employing the energies without overtasking them. If the dividing line between *enough* and *too much* could be determined as exactly as the Mississippi River marks the series of lowest points where the eastern slope of the Rocky Mountains meets the western slope of the Alleghanies, our work as teachers were easy indeed. Teaching, however, is not the only profession where such unsolved problems exist, for individual cases, and we teachers are thus but a part of a noble army of professional workers, so we take heart of grace, and are not ashamed.

But the fact remains to be considered that the work of school education is, as the result of unavoidable destiny,

* For a full and masterly discussion of this subject, its evils and remedies, I must refer to the report on the St. Louis Public Schools for the year 1871-2, by Wm. T. Harris, Superintendent, p. 80 *et seq.*

in America, passing very rapidly into the hands of women. We may deplore this, but we cannot prevent it. The last census showed that the number of women teachers in the United States stands already to that of the men as 123,980 to 78,709, and the ratio is daily increasing. There is no other country in the world, then, where it is so all important that the girls should receive a complete education. In one view, this tendency of the times is of great value. The years spent in teaching are often the most valuable training for the work of the mother. No other employment calls for a greater exercise, and hence, a greater development, of the directive power, and of the knowledge of human nature which will enable her well and wisely to direct her children, successfully to grapple with the "servant problem," and to sweep a large circle of details within the compass of generalized rules. She has learned what industry means, not, as was said by a Christian writer of the thirteenth century, only "to pray to God, to love man, to knit and to sew." She has not "everlastingly something in her hand, though no one profits by her labor, and she is reduced to look for her sole reward in civil speeches made for useless gifts, or insincere praise of household ornaments that are in everybody's way," covers, and covers for covers, and covers for covers of covers.

Many women "are busy, very busy; they have hardly time to do this thing, because they really wish, or ought to do that, but with all their driving, their energy is entirely dissipated, and nothing comes from their countless labors," and I ask, in the words of a Russian woman, "Is it not a great loss to the economy of society when such an amount of strength is wasted and leaves behind it no good work?"

But many persons continually pursue self-contradictory ends, simply for the reason that their education has been so narrow and limited that they are not able to see these ends as self-contradictory.ool.com.cn

Indeed, there are other disabilities than the physical for the duty of a mother. "The want of self-control that comes of an objectless life, the uninquiring habit of frivolous employment, disable her from fulfilling this duty, and to remain a child does not give the ability to educate children." * The power of independent thinking, without which there can be no judgment, and which alone frees the soul, the real mother must have, and our girls should be most carefully educated into it.

Which course, then, will be best to fit the average child for her future work in the active world, a course of private lessons, or the life of the school, which is in itself a miniature world, where she learns to measure her own acquirements and character by those of others, and is educated into the knowledge that individual caprice cannot be allowed as a rule of conduct? And is there any country in the world whose citizens need to learn a respect for law more than in America?

As to the branches which girls have the ability successfully to pursue, the question is no longer an open one. The experiments at Oberlin, Antioch, the Northwestern University, Michigan University, Vassar and many other institutions, not to go out of our own country, are sufficiently positive and conclusive to convince the most incredulous.† If the question be as to the branches

* Mary Taylor, *First Duty of Women*, p. 93, Emily Faithfull, London, 1870.

† Extracts from the last two Reports of the President of Michigan University on this point will be found in the Appendix.

which she ought to pursue, that is also to some extent settled. The courses of study which are laid down for students in European and American universities, represent simply the condensed judgment of centuries of experience and induction as to the means by which the human intellect may be most surely strengthened and developed. They are the results of long generalization, and are founded deep on a knowledge of the human mind. Shall we venture to depart from the old ways, and to decry the customs handed down to us from the ages gone by? Do we not know that the wisdom of twenty centuries, as to the best means for developing the human mind, is greater than the knowledge of one? Since we are "heirs of all the ages," why throw away our inheritance?

In one word, our girls should be so educated intellectually that there will no longer be any internal barriers to their progress, and when this is done they will find that the external barriers, against which they fret themselves, have disappeared. When Britomart had fairly conquered and bound with his own chains the enchanter within the castle, she found, as she passed out, that the castle walls, the iron doors and the fire which had barred her entrance had no longer any existence. We can yet afford to learn lessons of wisdom from the prophetic "woman's poet" of the sixteenth century.

Whether our school girls and college girls will be injured physically, mentally or morally, by granting to the boy and man students, in our high schools and universities, the advantage of fellow-workers of the other sex, is a question which, though practically settled to a large extent by experience, ought not perhaps to be passed over here in

entire silence. One very curious feature of this question with regard to the education of our girls seems to be this: those who are most urgent that the question should be decided by facts do not bring them forward, but base their position on general principles assumed, and on theory. As has been well said by President White, of Cornell, to seek for information on the real results, so far, of the experiment in our colleges from the authorities of colleges that have never tried it, would be to commit the same absurdity as "if the Japanese authorities, aroused to the necessities of railroads and telegraphs, had corresponded with eminent Chinese philosophers regarding the ethics of the subject, instead of sending persons to observe the working of railroads and telegraphs where they were already in use." Where inquiries were made of universities which had never tried the experiment, "the majority of responses were overwhelmingly against the admission of women. It was declared to be 'contrary to nature,' 'likely to produce confusion,' 'dangerous,' 'at variance with the ordinances of God ;' in short, every argument that a mandarin would be sure to evolve from his interior consciousness against a railroad or a telegraph which he had never seen."

I am not forgetful that the high ground of philosophy is the only proper one from which to settle the question of the sphere of any human being, and what education will fit her for it; but after this has been done, if special objections are raised against the possibility or advisability, in a utilitarian or physiological point of view, such special assertions, in default, from their very nature, of any other possible demonstration, must be proved or disproved by experience—and yet these material facts are not allowed in evidence by those who theoretically insist

most vigorously upon facts.* The opponents of higher education for women, which practically is the same thing as co-education, have within a few years shifted their ground. At first it was asserted that woman was not equal, mentally, to the thorough mastering of the higher branches of study. Having been driven from that position by the indisputable evidence of percentages on written examinations, they have taken up their new position with the assertion that women are not able physically to pursue a thorough and complete course of study—for, I repeat again, that for the masses, co-education and higher education for women are practically one and the same thing. In this position of the question, we have only two things for which to be profoundly thankful: The first is that we, as living women, are asserted by no one to be composed of more than two parts—spirit and body. The second is, that we have in our own hands, at last, the means of finally disposing of this question, by disproving the second assertion.

To us as women, as wives, as mothers, as older sisters, as friends, as teachers, as college girls, as school girls, and to us alone, the settlement of the question has at last been fairly handed over. We have only, in all these relations, to learn the laws of physical health, and to obey them, and the whole matter will be set forever at rest. We have only to see to it, day and night, that our girls are educated into proper ways of living as regards food, clothing, sleep and exercise, till we have created for them a second nature of fixed, correct physi-

* On the subject of Co-education, I refer again to the Report of Wm. T. Harris, Superintendent of the Public Schools of St. Louis, for 1869-70, p. 17 *et seq.*, where the actual effects, physical, mental and moral are given in detail.

cal habits—and we alone can do this—and the end is at hand. We have at last the right to settle our own questions conceded to us. The responsibility of the decision, whether our girls are to have what we demand for them—nay, what they themselves are eagerly and persistently demanding, is decided, by the new position, to belong to us, and to us alone. Responsibility means duty. Are we ready to accept the one, and to perform the other?

“The one that received the seed into the good ground is the one that heareth the word and understandeth it.”

MORAL EDUCATION;

OR,

THE CULTURE OF THE WILL.

“In hire is hye bewte withouten pryde,
Youthe withouten greffhed or folye;
To all her werkes vertue is her gyde,
Humblesse hath slayen in her, tyrrannye,
She is mirroure of alle curtesye;
Hir herte is verray chambre of holynesse,
Her hand mynistr of fredom and almesse.”

—CHAUCER, MAN OF LAWES TALE.

THE thorough education of the Will is that which renders the pupil

1. Civilized,
2. Moral,
3. Religious.

If educated into a civilized being, she learns to subject her own natural and unregulated—her savage will, we might say—to the customs and habits of civilized society. If educated into a moral being, she learns to subject her

will, not to the idea of what is agreeable or useful, but to the idea of what is simply right. If educated into a religious being, she learns to submit her will to the Divine Will, and in her relation to God, she first becomes freed from the bonds of all finite and transitory things, and attains to the region where perfect obedience and perfect freedom coincide.* A woman who is virtuous, so to speak, with regard to the first, might be characterized as polite; she who is virtuous in regard to the second, as conscientious; and she who is virtuous in regard to the third, as humble. She who is all these may be said to have been thoroughly educated as to her Will. The culture of the Will may be, then,

1. Social,
2. Moral,
3. Religious.

In this realm, as in that of the intellect, the process of education consists in developing a spiritual being out of a natural being. It is the clothing, or rather, the informing of the natural with the spiritual. The part of education which relates to the social life is almost entirely given to the parents; and generally, from the great demands which business makes on the father, it falls almost wholly into the hands of the mother. It is she who must train the little girl into habits of neatness, of obedience, of order, of regularity, of punctuality—small virtues, but the foundation stones of a moral

* I am following here, as elsewhere, the direction indicated by the German philosopher, my obligations to whom I have before acknowledged, and from whose work on the Science of Pedagogy I have so often quoted.

character, and into habits of unselfishness and of politeness.

Social Culture.—Neatness in person, as in dress, is not natural to the woman of a savage tribe, neither is it a characteristic of hermits. It is the product of civilized society. It is a recognition, in some sense, of the equality of others to one's self, a bending of the undisciplined will to the pleasure and satisfaction of others. Like all other habits, it becomes, in time, agreeable to the person who practises it, but the first training into it, is a painful struggle.

Do we not all remember that in the picture painted by the melancholy Jacques of the shadow side of human existence, the "*shining* morning face" of the child was not forgotten as one of the shadow tints of that stage of life?

The education into habits of neatness is almost entirely in the hands of the mother or of her deputies. She herself then must be thoroughly educated into it, and it were well that she remembered and taught her daughters to remember, that real neatness includes the unseen as well as the seen. Neatness has a moral significance not to be despised, for though it is true that the dress is an index of the character, and that external neatness habitually covering untidy underclothing, is only typical of some moral unsoundness, it is equally true that there is an influence in the other direction, from the external, inwards. The habit of neatness furnishes soil in which the tree of self-respect may begin its growth. Do we not all know that a child behaves better in clean clothes than in soiled ones? And has there not been a perceptible elevation in the real character of the city police since they were dressed in neat uniforms? I know that the

fact that they are in *uniform* touches another point, and yet it is not all. If instead of setting the beggar on horseback, we clothe him in clean and neat garments, we all know that we have given him an impulse in the direction of the good.

Obedience is perhaps the next habit to be spoken of. Unquestioning obedience we must demand from the child for her own safety. It may often be a question of life and death whether the little girl runs when she is called, or throws away something which she has in her hand, instead of putting it into her mouth. But has not this habit of obedience a higher office than this? It is the first yielding of the untrained will to rightful authority, and as such, has an immense significance. The mother who cannot train her daughters and sons to obedience were better childless, for she is but giving to her country elements of weakness, not elements of strength. She is furnishing future inmates for jails, penitentiaries, and prisons, and putting arms into the hands of the enemies of law and order. And yet, how can a woman who has no clear ideas herself of what should be demanded and enforced, and hardly a sufficient command of language to express directions clearly, who was never taught herself to obey, and who has no definite idea of what end she really wishes to attain, educate her children into obedience? A sense of exact justice, a persistent attention, and a consistent thought are necessary. Has the education which we have been giving our girls tended to develop these? Are they not "developed only by mental work in those very directions which have scarcely heretofore formed a part of the education of our girls?" Does not the welfare of the country imperatively demand that we give those who are to be the only educators of the chil-

dren in their first and decisive years, a thorough, slow, a well-founded and finished education ?

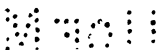
Order, in any of its manifestations, is not natural to the race. But the very nature of civilization forces it upon us. We may yield our will at first to its demands, or we may oppose, but it will not take a very long time in the latter case for the demands of social life to give us so great an amount of annoyance, that the pain of the inconvenience incurred will far outweigh the pleasure of lawlessness in this respect. Here, also, the mother is supreme, though the teacher should come to her aid very effectually when the school-days begin, and here I touch a subject which demands a little more attention than has hitherto been paid to it, for too much cannot be said of the great significance of rules as educators in girls' schools. It is allowed in very large schools, and where boys and girls are brought together, that there must be strict rules, because large masses cannot be successfully managed without ; but it is generally taken for granted in a girls' school, and where the numbers are small, that very little or no discipline is required or even desirable. This view follows logically enough if one assumes that the object of discipline is the present good of the school as a whole. But if we assume that its prime object is the future benefit of the pupils, individually, it will follow that the size of the school is not an element which should enter into the question at all, and this is the basis which I assert to be the only true one.

I do not deny that there may be too many rules. One may endeavor to hedge pupils around with arbitrary prohibitions, but any attempt at this, like any other unreasonable action, will soon result in its opposite, so that the two extremes are ultimately the same in effect. Many

persons speak and act as if they believed rules to be in themselves only a necessary evil, of which the less we have the better, and an entire absence of which would be the desirable state. Rousseau might be said to be the leader of this class, educationally speaking, for this is pre-eminently the doctrine which he teaches, though I fancy that those who object most to rules are not often aware that they are arraying themselves under his banner.

That school-work should go on in regular routine, that a regular order should be established, and that no slight cause should be suffered to break this, that there should be some well-defined and regular order in which pupils should come to and go from their hourly duties—the importance of these things to quiet and economy of time is as nothing, compared to the results of regulations like these on the intellectual and moral character. The daily and hourly habit in external observances repeats itself in habits of thought and study. Unconsciously, facts are learned, and thoughts take on regular habits, and the impress made by the silent work of years is ineffaceable. It will show itself, in years to come, if we refer only to so-called “practical” things—and this is what our condemners of rules are seeking for,—in well-ordered homes, where each duty has its appointed time, and where the necessary labor goes on so regularly that it is hardly noticeable, except in an absence of all confusion and a permanent sense of quiet ;—homes where, because of this regularity, time will remain for higher culture, and the whole family will be elevated thereby.

Closely connected with this matter of regularity is that of Punctuality, which should be no less trained at school into a habit, and the effect of which, on the moral char-



acter, is no less important. As far as school goes, punctuality is necessary in order that work be thoroughly done, and that time be saved. But it is not for this reason so much as for the far-reaching influences on the whole character, that the little girl should be made to feel it a matter of importance that she is in her seat when the bell strikes, and that she is ready for her work at the precise minute appointed. Is it not at once seen how a requisition of this kind will gently force her into habits of order? If she suffer for being late, because, when she started for school she could not find her rubbers or gloves, she will be more careful the next day that they are in their proper places. If she is late at recitation because her pencil was not to be found at the call, she will finally conclude that it would be a better plan to keep arithmetic, slate and pencil together; and so, almost insensibly, her books and appointments generally will fall into groups and classes in her desk. Not only there, but at home, will the same effect be seen; and not only now, but through all her life, the habit will run. It needs only a moment's reflection to show how great will be the result. Accustomed to collect her thoughts at a certain time, for a certain work, she will have acquired a mastery over them which will make her self-controlled, ready in emergencies, and able to summon her whole mental power at will for any work when it may be necessary.

Again, that silence should be enforced in school may be desirable for the immediate quiet resulting therefrom, but that the continual impulse to talk should be restrained and held in check by the will, till the subjection of impulse to will shall become a daily and hourly habit, is a matter of no less than infinite moment.

And the wise teacher, who must always look beyond

the present and immediate result, to its future and mediate consequences, works steadily, through the enforcement of such regulations, on the formation of the character of the child under her influence, basing her action on the rational foundations of the Science of Education, and mindful ever that the so-called intellectual part of her work will not be well performed if these be neglected.

Laws and rules are, to her, not an unfortunate necessity, inseparable from society, but the divinely-appointed means whereby the human soul shall attain perfect development; not a record of rights grudgingly surrendered by the individual for temporal advantage, but the voluntary placing under foot of capricious impulses, that by this renunciation the individual may ascend to his own noblest freedom.

Do not the very weaknesses, habits and failures, which are considered especially feminine, result from the general lack in a proper appreciation of the educational value of strict and exactly enforced rules? It is because little girls have not, in their educative process, been forced to accept the responsibility, and to suffer the results of their own deeds, that they are, in after life, placed in false and ridiculous positions, when they are forced to come in contact, whether in housekeeping or in business, with the rational regulations of business life. They expect, and take, special privileges, and feel themselves aggrieved if these are not accorded; they continually place their own individual opinions or fancies alongside of the necessary laws of trade, as if the two were to be balanced for a single moment; they have not learned that there are times when silence is better than speech, and they seem to think that a polite apology ought to be accepted

by the president and directors of a bank, in lieu of the payment at the proper time of a protested note.

That these follies are universally characterized, wherever they occur, by the term "a woman's way of doing business," is sufficient proof that they are characteristic of the majority of women; but that the cause of the trouble lies, not in their nature, but in their education is proved by the fact that wherever women have received a thorough business training, these charming and bewildering feminine characteristics, which render them only a source of confusion, are not found. Co-education is, in this respect, of incalculable good to our American girls, for the necessary laws of rational discipline, in a mixed school, must bear as well on the girls as on the boys, and the result is, if possible, of greater value to the girls than to the boys.

When we tell the little girl that she must not insist on keeping all her playthings tightly hugged to her bosom, and persuade her to allow her sister to look at or play with them, when the little arms are slowly unfolded and the toy half hesitatingly handed over, we behold the bending of a natural will, and one of the first victories of the spiritual being. There is a great struggle going on in the tiny thought. She is probably too young to be amenable to reasoning, and simply yields to the force of the already acquired habit of obedience, or to the force of her affection.

But if she do not yield, if she still hugs the toys in her natural selfishness, shall we be *educating* her if by physical pain we force her to drop them? A single illustration and question of this kind will show how large interests are involved in what is seemingly so simple a matter. The question of how we shall deal with her to force her

to do what she ought to do, cannot be answered without first determining what is the end in view. Have we simply in mind as an end that the other child shall have some of the toys in that particular instance, or is it the training, the education of the untrained will, of which we are thinking? And yet the question must be decided at once. The pouting child stands there in full possession of all the playthings, her arms rosy with the strain, and the other child, quite as natural, quite as untrained, is perhaps preparing to take her share by violence, and cries aloud for justice. Is it not manifest that every mother—that every woman who may have the care of children, should be so educated that she may guide her conduct in every such emergency by some established principles, and with a clear vision of causes and results? How many such questions come up for settlement in the course of twelve hours, only a woman who has had for a day the charge of two or three young children can know; and how often has she, in the course of half an hour, either from the result of her decision, or from her own reflection, become convinced that she has done exactly the thing which she ought not to have done! This would not be so often the case if our girls were really educated.

We hold a general in the army responsible for the mistakes of execution made under his orders, and if he commit many, we assert him to be incompetent, half-educated, and demand that he be superseded.

We put a girl who has never had the chance for any study or comprehension of the only thought which could give a rational ground for such decisions, at the head of a family, and when, either in devotion to interests which she practically thinks of greater importance, or in despair at her own want of success, fretted and worried beyond

the power of endurance, she fails in nervous health and gives up the care of her children to ignorant nurses, we wonder that American children are so unruly. We sow the wind and we reap the whirlwind, but the sowing was done long ago in the narrow and unfinished education which we gave to our girls, now the mothers.

Politeness does not consist in any outside mannerisms, nor is it simply kindness. It consists, as a wiser than I has said, in treating every person as if she were what she might be, instead of what she actually is. A person tells us what we know not to be true. We do not contradict her, which would be treating her as if she intended to tell a lie, though we may be convinced that such was the actual case, but we treat her as if she intended to be a scrupulously truthful person. We speak not to *her* then, but to a non-existing ideal of her, when we ask her politely whether she may not be mistaken, or when we do not answer at all, thereby assuming that her statement was correct. Or a self-important salesman insists, very impolitely, because he thereby implies that we know nothing of what we desire, that the piece of goods which we are examining is of charming colors, tastefully combined, and is in fact the very thing which we most need. If we answered him as our natural impulse prompts, "according to his folly," we simply treat him as what he actually is, and we are as impolite as he. The woman who has been educated into true politeness answers him, if she answer him at all, as if he were what he actually is not, a better judge of her needs than she herself is. And so with all cases of politeness.

It is manifest that no manual of manners or etiquette of polite society can be of the slightest avail, and all such would seem beneath notice here, were it not evident from

the number of such books published, and the number sold, that there is a large demand for them.

Nothing to an observer can be a more comic sight than the result produced on manners by their faithful study. It is sufficient for us to try to imagine the man who of all our acquaintance is the most truly and exquisitely polite, endeavoring to follow out the cast-iron rules contained in these books, for us to appreciate the difference between the politeness which springs from within and that which is only a shabby veneering. Of American mothers and American teachers what proportion are, by having attained a mastership in this art of politeness, fully able to educate our girls into it? Are we not a sadly uneducated people?

But there is still something else to be done. In the unrestrained and affectionate intercourse of the family, the girl has not felt the necessity of concealing in any degree her real self. She is under an observation that is intelligent and sympathetic, and she is sure of the kindest construction of all her actions. If she talks or laughs loudly, for instance, it is not supposed that this springs from a desire to attract attention, but from the natural, innocent overflowing of healthful spirits, and a forgetfulness of self. But her social education cannot be called finished till she has in some measure been taught to distrust others. She must learn that society is not one vast family, abounding in sympathy, and always ready to put the kindest construction on her words and actions. She must learn this sooner or later. Shall she learn it by mortifying experiences, by finding herself often in absurd and annoying positions, by having her confidence betrayed, and the outspoken utterances resulting from her very purity of thought made the occasion of coarse

remarks and suspicions; or shall she be guarded against all these by being taught that she must not give all the world credit for being as pure and innocent as she? We must so educate her that she will not lightly give her confidence, or show to uninterested persons too much of her real self. In other words, we must educate her into a reserve, into the gentle, unoffending dignity which holds all but the nearest and dearest at a little distance from herself. This is not teaching deceit. It is only teaching what must be learned, the means of "possessing one's self in peace." The majority of our girls who talk and laugh loudly on Broadway, do not do this to attract attention. They do it simply because their education on this point is not yet completed. A slight indication of the same defect in education is the profusion of endearing pet names, which we find in the published catalogues of girl students. If the girls themselves do not realize the impropriety of thus publishing to a world of careless strangers, the names which family affection has bestowed upon them, should not the teachers who compile the catalogues, direct and overrule their uneducated taste? It is only necessary to imagine the catalogue of Harvard or Yale, printed in the same manner, to make manifest, even to the girls themselves, the want of proper dignity displayed. Men, in their intercourse with the world, learn sooner than women, by the rough teaching of experience, the necessity of fending in their inner selves from the outer world. But both boys and girls might be saved much time and pain, if parents and guardians recognized more clearly that this was a part of education.

But in all the training of the will on this social side, we must never forget, and here lies the greatest problem

for the educator, that individuality is not to be sacrificed, that it must be most jealously preserved. We have only to remember what has been so often said before, that education consists, not in destroying, but in training. The will is only to be directed, never to be broken, or even weakened, and she who endeavors to do this is working in the interest of evil and not of good, while she who should, if it were possible, succeed in it, would have, as the result of her efforts, only a total ruin instead of a fair and stately edifice. It may often, indeed, become her duty to strengthen it, for without a strong will, the moral nature will fall a prey to the forces of evil as surely and quickly as the body, deprived of the life principle, rushes to corruption and disintegration.

Moral Culture.—In the previous division, the will has been supposed to be guided by the educator, but now another guide is to be followed, for it becomes the work of the educator to teach that “nothing in the world has any absolute value except Will guided by the Right.” We must presuppose before we can produce any great effect in this direction a considerable education of the intellect, in order that the child may have some intelligent idea of the Right, otherwise we shall be leaving her to the saddest mistakes. The African chief, who, being convinced that it was right for him, before baptism, to dispense with one of his two wives, for both of whom he had a sincere affection, performed, so far as he knew, a highly virtuous action in eating one of them, and no girl whose intellect has not been well trained can safely be delivered over to the direction of her own conscience. The Spanish and the French mothers tacitly recognize the truth of this

proposition, by the constant surveillance which they exercise over their daughters. It is contrary to the whole spirit of our American life to be so watchful. By so much the more, they ought to see to it, that the conscience, to whose custody American mothers hand over their daughters' actions, be an enlightened one. No merely prescriptive external rules, borrowed from society when the mothers were girls, can fully answer the purpose. These may do for communities that are comparatively stationary, but in our rapidly moving American life, our girls must have a more stable guide.

It is not often recognized that the cause of much chafing and worry in American homes—a chafing and a worry which is scarcely found in Europe—is only this truly American phenomenon of rapid national growth.* The mother who was educated only thirty years ago finds herself unable to understand her daughter's restlessness. As great a distance divides the thought of the mother and daughter in America as in Germany lies between the great-grandmother and the great-granddaughter, and these latter named relatives are, by a wise provision of Providence, not often permitted to come into contact at the time when the girl begins to assert her own individuality, and hence, the chafing referred to above, is saved. If Methuselahs were not exceptional in these days in America, who can estimate to how great a degree the unavoidable friction of family society would be increased!

We must never, in this question of education, forget

* We may, from the same cause, expect soon to detect signs of the same trouble, to a marked degree, in Russia.

for one moment the peculiar conditions which surround our girls, from the peculiarities of national government and society. Again, then, it is, in this point of view, of imperative ~~importance that our~~ girls be allowed, nay, forced, to complete their intellectual education.

We have now so to educate the girl that she shall do what is right, simply because it is right, and not because it is useful or politic so to do; that she shall abstain from what is wrong, simply and, only because it is wrong, and not because it will be harmful to her if she do not. These two statements would, however, be fully expressed by the first one, for it is evident that if she always do what is right she will never be able to do what is wrong, and positive education is much better than negative, and an active, better than a passive state of mind. In the first years of the little girl's life this lesson can be impressed upon her only by example, and fortunate have those of us been who, both in grandmother and mother, from our earliest childhood up, can remember no single instance, however trifling, of deviation from obedience to the "stern daughter of the voice of God." Though at first we did not know what the power was, we felt, through all our childish consciousness, that there was a power behind the throne from which our laws emanated, whose voice was authority itself. Some of us may even recall the impression made upon us, as clear now as in the long gone years, when we distinctly formulated in words, with a certain sense of satisfaction, the conviction that "even grown-up people cannot do as they please;" and yet, that the power which prevented this doing as they pleased was neither fashion, nor custom, nor the opinion of society.

Let the little girl be so educated that "while she

praises and rejoices over, and receives into her soul, the good, and becomes noble and good, she will justly blame and hate the bad, now in the days of her youth, even before she is able to know the reason of the thing, and when Reason comes, she will recognize and salute her as a friend with whom her education has made her long familiar." *

But when the girl is older, and especially at the time when the whole character is most impressible, this part of education can be firmly laid in the cement of rational conviction, and if it is laid on no shifting sands of contradictory character in the educator, we may safely trust to its enduring support. There must be no compromise here. The doctrines that the good are happy, that honesty is the best policy, etc., are of no avail. They will not do as a guide for life, and the sooner American mothers and teachers learn this, the better for America.

When the girl yields in every direction unquestioning obedience to Duty, she is virtuous, and she is virtuous only in so far as she does this. But as duty rules in every direction, to God, to the State, Society, the Family, and ourselves, and as her voice is as authoritative at one time as at another, it follows that no one virtue can be said to be superior to any other. Those of us who have had the widest experience have learned that the whole hierarchy of virtues generally stand or fall together, for they are all only the making actual of simple duty.

I quote again from Rosenkranz, with regard to a habit often found among girls: "The pupil must be warned against a certain moral negligence, which consists in yielding to certain weaknesses, faults or crimes, a little

* Plato, *Rep.*, Book III.

longer and a little longer, because he has fixed a certain time, after which he intends to do better. Perhaps he will assert that his companions, his surroundings, his position must be changed before he can alter his internal conduct. Wherever education or temperament favors sentimentality, we shall find birthdays, New Year's day, confirmation day, etc., selected as these turning points. It is not to be denied that man proceeds, in his internal life, from epoch to epoch, and renews himself in his most internal nature, nor can we deny that moments like those mentioned are especially favorable in man to an effort towards self-transformation, because they invite introspection; but it is not to be endured that the youth, while looking forward to such a moment, should consciously persist in his wrong doing. If he does, when the solemn moment which he has set, at last arrives, he will, at the stirring of the first emotion, perceive with terror that he has changed nothing in himself, that the same temptations are present to him, and the same weakness takes possession of him. * * * In morality there are no vacations and no interims." *

The power of voluntary Renunciation is another power which the educator has to develop in the girl. It can be cultivated, of course, only by judicious exercise.

But the formation of Character is the great work of the educator, for this may be said to be the object of a woman's existence. Character has been defined as "a completely fashioned Will"—*i. e.*, a completely educated Will. If it is "completely fashioned," it must of neces-

* *Pedagogics as a System.* Rosenkranz, p. 83, Published by William T. Harris, St. Louis, Mo.

sity be consistent. It is scarcely necessary here to call attention to the fact that by character, in any educational sense, we mean that which the woman really is—not what she is thought to be by others.

Character may, it is evident, be either good or bad; for one may be consistently bad as well as consistently good. But we are concerned only with the building of character where that building means the “making permanent the direction of the individual Will towards the actualization of the good.”

The woman of good character is she who, while she acts spontaneously, acts in all things consistently; the parts of whose life grow together, as it were, into one organic unity. We know what to expect of her. In her friendship we confide, on her love we safely rely, by her judgment, provided she has been intellectually educated, we regulate our action in times of difficulty and distress. “The heart of her husband doth safely trust in her, and her children rise up and call her blessed,” and when she passes through the gate of death, her country should mourn, for it can ill-afford to miss her.

RELIGIOUS CULTURE.

When the girl has learned to accept duty as the decisive guide of her actions, she is acting conscientiously, and passes over into the real religious life. A distinction must be here made between Religion and Theology, the latter of which belongs to special educators. At first, in the child, religion is a feeling, a sentiment, which the mother generally fosters and directs. It appears in the form of wonder at natural phenomena, of fear and terror when these are disagreeable, and of gratitude when they

are agreeable. But this feeling or sentiment of religion the savage has, and it properly belongs, in civilized Christian communities, only to the period of childhood. If the little girl be not educated into a higher religion than this, and if, at the same time, her whole mental horizon have, from unfinished intellectual education, remained narrow, she has nothing on which any teaching of Theology can be based, and nothing which will bear the stress and strain of actual life. In such a case—that is, if her religion is only gratitude for favors, if her only idea of God is that of a Benefactor—when benefits fail, her religion will fail also. While she has all that she can desire, she is full of religious faith. She loses parents, husband, and only child, and her faith has vanished, and she even doubts whether there be any God, since he can allow so much misery. She asks why, if he were good and kind and loved his children, he could not have divided his gifts more equally, why he could not have taken one child from her neighbor who has seven, instead of her one ewe lamb. Allowance must be made for the first unreason of terrible torture to the affections, and the first heart-broken exclamations are not always to be trusted as an index of the religious faith. But when in many a woman, this becomes a chronic state of mind, is it not a serious question for educators to ask, whether the fault does not lie in her narrow education? Ought she not to have had her intellect so cultured that she should be able to hold at once in her thought, and without confusion, these two truths: that God's thought and care for the Universe must be a thought of Law which cannot be broken for individual cases, and also that even one sparrow does not fall without his notice?

Ought she not to have been educated into so wide a

horizon of thought that she herself, and her affairs, her loves, and hates, should not loom up before her in such disproportionate size? A woman is to live in her affections? But what if her affections have been outraged, betrayed, or crushed? The sentiment is a very good one, but it is but sentiment still, and our American girls will not be less strong in their affections if we educate them into thought and knowledge, as well as into emotion and blind belief. If the mere religious feeling which belonged to the child is not led over into a something stronger and surer, it becomes morbid and degenerates into sentimentality and mysticism. Can we afford to let the strong feeling in our American girls be lost for all real good, in this way? Shall we not rather direct it by a sound religious education, into more healthy channels? In such a completed education alone can we find the ground for any active acceptance of our lot. "The constant new birth out of the grave of the past, to the life of a more beautiful future, is the only genuine reconciliation with destiny."

Only when we have accomplished such an education as this for our American girls, the best material the world has ever yet seen, may we safely trust the interests of future generations to their strong, intelligent, and religious guidance.

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A MOTHER'S THOUGHT

ON THE

EDUCATION OF GIRLS.

“ Why does the meadow flower its bloom expand ?
Because the lovely little flower is free
Down to its root, and in that freedom bold.
And so the grandeur of the forest tree
Comes not from casting in a formed mould,
But from its own divine vitality.”

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A MOTHER'S THOUGHT

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EDUCATION OF GIRLS.

THERE is no situation in life more freighted with responsibility than that of the mother of girls, be it one or many, the one as heavy as the many, because the only child is less naturally situated; and therefore upon the mother rests the necessity of intentionally providing many influences which are spontaneously produced in a large and varied family circle.

I emphasize also the responsibility of the education of girls over boys for the same reason, because girls are more largely withdrawn from the natural education of life and circumstances than boys, and their development seems to depend more exclusively upon the individual influence of the mother.

The public school, the play-ground, the freedom of boyish sports, the early departure from home to college or business, the prizes offered to ambition, all exercise a powerful influence upon the boy, tending to modify the action of the mother's conscious training. More powerful than her intellectual and determined effort is usually her affectional influence, swaying him unconsciously and giving him always a centre for his heart and life, to which he returns from all his wanderings.

For men, too, life, with all its evil, seems to be measurably adjusted. We do not hear constant discussions of men's sphere and men's education. Each man is left very much to work out his own career, without the responsibility of the whole sex resting upon him. He is at liberty to make mistakes in his medical practice, to blow up steamboats by his carelessness, to preach dull sermons, and write silly books, without finding his whole sex put under ban for his shortcomings, and so he works with a sense of individual power and responsibility which calls out his energies, and educates him even in spite of the foolish cossetting of a mother or the narrow pedantry of a teacher.

But in regard to woman, there is a general confession that life is not yet well adapted to her needs, or she to her place in the world. There is a perpetual effort to re-adjust her claims, to define her position, and to map out her sphere, and these boundary lines are arbitrarily drawn at every conceivable distance from the centre, so that what seems extravagant latitude to one, is far within the narrowest limits of another.

Very few have arrived at the conclusion that woman's nature, like man's, is self-determining, and that her character and her powers must decide her destiny; that instead of prescribing the outward limits of her action, the important point is to increase her energy, to regulate her activity by self-discipline, to purify her nature by nobility of thought and sentiment, and then to leave her free to work out her thought into life as she can and must.

But this, it seems to me, should be the grand leading principle of a mother in the education of her daughter, to give her such faith in herself, such knowledge of the laws of her own being, such trust in the guiding power

A MOTHER'S THOUGHT.

of the universe, that she will have a principle of life and growth within her which will react upon all outward circumstances and turn them into means of education.

It is in this freedom alone that the essential meaning of her nature will show itself. In free, conscious obedience to law, natural limitations become a source of power, as the hardness of the marble gives effect to the sculptor's forming stroke; but all arbitrary restraints dwarf and deform the growing soul.

But in the very beginning a great difficulty meets the mother of the girl who seeks to train her up into glad, free acceptance of life, for instead of general rejoicing in the birth of her child, too often there is a wail of discontent over the hapless infant who is "not a boy."

It is an idea very deeply grounded in our social feeling, that it is a misfortune and an indignity to be a woman. True, all men do not, like the Jews in the old service, insultingly thank God that he has not made them women, while the meek woman plaintively thanks God that he has made her at all. But how constantly is the thought and feeling expressed, that the boy is a more welcome comer into the family circle than the girl, and that the woman is to have a hard fate in life. And if the popular idea of woman be true, is it not a great calamity to be born a girl? "If man must work, and woman must weep," who would not choose the former lot? It is a very common thing to hear women wish most earnestly from their earliest to their latest hour of life, that they had been born men. It is very rarely that the youngest boy wishes to be a girl, or that men covet the vaunted privileges of womanhood.

Margaret Fuller alludes feelingly to this prevailing sentiment in her noble *Essay on Woman*, and quotes

in Southey the despairing cry of the Paraguay Woman, "lamenting that her mother did not kill her the hour she was born—her mother, who knew what the life of a woman must be."

And yet, it seems to me, any woman is entirely unfit to educate her daughter who has not so sifted her life experience, so learned the meaning of her creation, so separated the accidents and follies of to-day from the divine purpose, as to read clearly the meaning of life, and to accept for her daughter, as for herself, the great fact of her womanhood; not with submission merely, but with a joyful recognition of its wonderful possibilities and its supreme glories.

That this is possible to achieve, I might bring the testimony of women speaking from the midst of suffering and anguish, and yet rejoicing in the spiritual ideal of womanhood. Mrs. Eliza Farnham has done great service by her eloquent vindication of the claims of womanhood, which she bases on very noble spiritual truths. But too often the high estimate of woman is placed on purely æsthetic and sentimental grounds, and does not satisfy the demands either of mind or heart in the hour of trial, or the practical common sense applied to daily life. It hardly strengthens a woman, to be told that women are more angelic by nature, more amiable, more religious, and more holy than men, when she is suffering from excessive nervous irritability, from neglected solitude, from want of employment suited to her feeble powers, or from the unused energies of mind and body which are devouring her day by day—to be called an angel, when she is only a drudge, is not consoling.

The work must be begun early in life, and the mind of the girl must be braced by a recognition of natural

law to the acceptance of all the conditions of her nature. But for this she must learn to distinguish between the ideal and the actual, between woman's nature as God designed it, and her nature as long years of hereditary sin and disease and false custom have made it; between the unfallen Eve, the last best work of Creation, and the daughters of corruption and luxury, bearing the sins of their fathers and their mothers for more than three or four generations.

The mother must be prepared to meet the terrible questionings of her daughter on those points of physiology which are still baffling the most candid observers.

She should prepare herself for this duty by obtaining all the knowledge of the subject that is possible to her. She will find that the laws of the human organization are marked by the same wisdom and beauty as those of the physical world; and many things which seemed dark and cruel will be seen to be beneficent and beautiful when their whole relation is understood. She may then give some reasonable answer to the question which the young intellect, struggling with the great problems of physical life, is so prone to ask, "Why was I thus made?" It helps us very much to learn the *how*, even if we can never solve the *why*.

Every mother has not the power to answer these questions scientifically; but if she have it herself, she can at least inspire in her child a firm faith that everything in creation has its meaning and its use, and that until the workings of any function are made to promote the highest health and welfare of every human being, its law has not been discovered and obeyed.

The very search after the answer to her inquiry, is

often the healthful exercise of mind which will drive away morbid doubts.

Health is the holiness of the body, and every girl should have a high standard of perfect health set before her, and be made to feel that she has no more right to trifle with and disobey the hygienic laws, than those of morality or civil society. She should be as much ashamed of illness brought on by her own folly, as of being whipped at school for disobedience to her teacher.

But how low, on the contrary, is the standard of health for woman! A thoroughly strong, able-bodied woman is almost an unknown ideal to American society.

A physician pleading before a legislative committee of Massachusetts a few years ago, bade the gentlemen present be grateful for their happy lot in being exempt from the infirmities that beset women. A very admirable teacher once said to me, "I tell my girls they mustn't complain if they do have to lose a year or two by ill health, it is hardly to be expected they should not."

Michelet treats semi-invalidism as the natural, inevitable, and charming condition of women. A perfectly healthy woman he considers to have lost her great charm. Science makes the astonishing discovery, that on the whole, women average a little smaller than men, and society seems to accept the idea that therefore, the smaller they are, the more womanly. But before we decide upon this puny condition as the necessary state of woman, let us look at some of the facts on the other side, and see what are the possibilities of physical strength and health compatible with womanhood. In the University of Michigan, pursuing her studies equally with the young men, is a young woman from Kentucky, who measures six feet two inches in height, and is well pro-

portioned. She has a younger sister there who is already five feet eight inches high, and growing very fast. At the South, the negro women performed every kind of labor in the field, and were said to plough better than men. In Europe all kinds of hard work are performed by poor women; even yoked with animals for draught. In England women are employed in stacking large bars of iron. In Dahomey the Amazonian guards of the king perform all military duty with equal ease and thoroughness with men. Now, if these things be possible to women of the poorer classes, and of other countries, it proves that it is not her essential womanhood, but her artificial life and her inherited weakness that makes the lady of Western Europe and America an habitual invalid.

And this muscular power, though not the only essential to health, is of the very first importance, and, within proper bounds, is absolutely requisite for the healthy and full development of animal life. It is possible to carry muscular activity too far, or rather to make it exclusive of the exercise of other powers. The gladiator of old was not found to make the best soldier, nor did the wood-cutter bear the fatigues of the war as well as the cultivated citizen. But as a basis for other culture it is all-important. And it is especially needful for woman, for the great peculiar function of maternity requires the finest muscular power. It is the want of it, among other causes, which produces the pains and perils of child-birth, which are almost unknown to women of savage life. "The women of Abyssinia," says a missionary there, "never rest more than two or three days after child-birth," while in luxurious Athens, where women of the higher ranks were kept alike from physical and mental exertion,

six weeks of seclusion was considered absolutely necessary.

The German mother begins at the birth of her infant daughter to spin and weave the linen which is to form her dowry in marriage. If all mothers would begin to lay up for their daughters a dowry of muscular energy and nervous strength from the time of their birth, how would the mythical curse be removed from maternity, and the saddest of all deaths, that of the young wife in the first child-birth, be as rare as it is in Abyssinia.

The first requisite for the mother is to believe in a possible happy destiny for her child, and to seek to secure it for her.

One great secret of all art, and therefore of all education, is the nice balancing of the generic with the special or the individual. Coleridge says "this is the true meaning of the ideal in art." False culture, by the emphasis laid upon peculiarities of race, sex, or families, develops these peculiarities more and more, and tends to produce monstrosities, while nature always strives to mix the breed and restore the original type.

Nature has her own boundaries, which she does not pass over, but they are always delicate and nicely adjustable. When the gardener wishes bleached celery, or seedless bananas, or monster squashes, he gives special food in the soil of the plants, or covers them from the sun, or nips off the spraying tendrils, that he may produce the variety he covets, but when the farmer would raise corn or wheat for the millions, he ploughs deep into the soil of the prairie, sows his seed broadcast, and trusts it to the free influences of the sun and the winds, and the harvest that he reaps is reproductive, and may be multiplied for hundreds of years.

It is curious in tracing the progress of both vegetable and animal life upwards towards humanity, to see how nature plays with the secondary distinctions of sex. The great distinction always remains of the fertilizing and the reproductive function; but as regards size, beauty, the care of the young, and all moral and mental qualities, there is the greatest diversity of manifestation. In some species, even, the male builds the nest and protects the offspring from the ferocious mother, who, like Saturn, devours her own children, and sometimes, among fishes, even her mate. So is it in regard to the mental differences between men and women. Few persons will deny that the difference of sex which runs through creation, colors every part of life; and yet the difference is so delicate, and so varied, that I have never heard any broad statement which was not liable to sufficient exceptions to destroy its value. I have again and again asked teachers of mixed schools, What difference do you find between the proficiency of the boys and girls in their various studies? Where differences have been pointed out, they have often been just opposite in different schools, one claiming mathematics, another languages, another grammar, or logic, as specially adapted to feminine taste or capacity.

So, in human education the first attention should be given to bringing out the broad, healthy powers of human nature, not to increasing any peculiar attributes. "How much of life," asked Margaret Fuller, "is the life neither of man or of woman, but of Humanity?" Every mother should seek to lay a firm foundation in this common ground of Humanity, out of which the special flowers will grow more rich and abundant.

Especially should all premature recognition of sex be

avoided; nature should be allowed to develop slowly and quietly. Sex must be recognized; the names of brother and sister, the slight difference in costume are sufficient, but in play and work, and especially in dress and manners, the early distinctions between the sexes tend to produce mannishness on one side and effeminacy on the other. The girl's dress may be a little different in form, but why should the boy wear stout gingham or warm flannel, and she be clothed in fragile muslin, or expensive silk? Why should he be able to climb fences or leap ditches without risk to his clothes, and she be kept in perpetual bondage by her ribbons and her ruffles? Look at a boy's simple round straw or felt hat, with a plain band about it, and pity the little girl with her delicate chip and a wreath of artificial flowers. Is it because the girl's physique is more delicate and complicated, that she is thus denied the natural and healthy exercise of her powers, and burdened with a load of finery under which the strong man would halt and stagger? The more delicate the organization, the smaller the lungs, the more absolutely important is perfect freedom of dress and motion, and the more essential is life in the open air. If we must keep any of the children in-doors let it be the boys; they will have out-door life afterwards, but let girlhood have its free play before custom and fashion fetter it forever. So, too, in manners; how many mothers apologize for their unendurable little ruffians by saying, "You know boys will be rude!" Why should boys be rude? Is not *gentleman* our highest term for all that is honorable and manly? The physical power that is not under the control of higher qualities is rude, but rudeness is not evidence of power, only witness to the want of culture. A sadly pathetic vein runs through

Miss Edgeworth's children's stories, especially *Frank*, in the difference she makes in the life of man and woman. The children make a list of the virtues which should be cultivated by men and women, and courage is put down very low on the woman's side and first on the man's. But there is no sex in morals, and until courage is deemed essential to woman and purity to man there can be no moral perfection in either.

Still more is the direct appeal to sexual differences to be avoided in early childhood. Many foolish parents encourage the custom of having little beaux and juvenile flirtations, and even very young children are taught games in which the boy takes out a girl as his partner, and the reverse. I once saw a dear little girl about four years old put her arm affectionately around the neck of a little playmate, and her father said, "Oh, for shame, you shouldn't kiss a boy." Could he have answered her simple question, "Why not?"

This is one of the important benefits of the co-education of the sexes. Brought up together in schools as in families, side by side, from early childhood, there is no false mystery about their relation. Their common life is developed, and they value each other for individual qualities. I have never found an exception to the statement by teachers of mixed schools, that there is less of nonsense, less of false sentimentality and precocious sexual attraction, than where the boys and girls are kept separate.

In life as in art those characters are the finest in which the distinction of sex is recognized but not emphasized—in which the human nature preponderates over that of man or woman. In the Hercules, the masculine attributes are exaggerated almost to repulsiveness, but in the

Apollo they are present, but they never intrude themselves upon our attention. Vigor, freedom, life, and action, the inspiration of genius, joy in existence, are his attributes, and while the muses are feminine, he is the god of poesy and music. So the Milo Venus has all the traits of womanhood, but not in excess, and her sweet, dignified presence reminds us that she is a goddess, and not a weak, self-conscious woman, like the Medicean image. But the type of womanhood in western Europe and America has emphasized all that is weak, all that is sentimental, all that is helpless in woman, and attenuated it to such delicate proportions as to give it a strange and unnatural charm, like the beauty of consumption. Let us recognize it as an exquisite creation of art, not of nature, as wonderful as the pouter pigeon or the saffron rose. The delicate whiteness of the complexion, scarcely tinged with pink, the fine silky hair, the fragile, willowy form, the tiny hand and foot, the languid blue eye, the soft, low voice, the sensitive nerves that shrink from every breath of heaven, and weep at every tale of woe, the slight cough that touches your compassion, the trembling step that appeals to you for help, are not these all characteristic of that fair, frail, lovely being, to whom sonnets are written and homage tendered when she is young and rich.

A celebrated painter once heard a woman of this stamp commended as "very graceful." "Graceful!" he indignantly exclaimed, "weakness isn't grace! strength and agility are the conditions of grace."

One of the services of true art is to hold before us models of beauty which keep the eye pure amid the corruptions of fashion. The Diana does not suggest any training of corsets or wearing of long skirts, yet poetry and fiction have helped to perpetuate this idea of the

lady. Shakespeare has given us his Ophelia and Desdemona, creations of this false theory, and I have heard men declare them to be perfect types of womanhood. In Ruffini's charming story of *Doctor Antonio*, we have the same lovely heroine in our prosaic modern life. But mark how all these women utterly fail in the great hours of trial. All untrue to the demands of their love, all incapable of mating the men who have sought them. But in Portia, in Miranda, in Imogen, we have women in whom is all the charm of womanhood without its exaggeration; they are independent noble existences, capable of living alone, and therefore able to meet nobly all the conditions of life and of love.*

We can almost forgive Charles Reade's later flippant creations of women, in whom moral weakness is considered as great a charm as physical delicacy, when we remember the charming picture of health and vigor which he first gave us in "Christie Johnstone."

But while this admirable modesty of nature is the finest grace of humanity, yet there are limits which cannot safely be overpassed. Nature rarely suffers one sex really to pass the common boundary and take on the special attributes of the other, seeming only to permit these extreme cases as warning and landmark. The contralto in woman and the tenor in man are delightful, but when the woman's voice is bass or the man's treble the impression is ludicrous.

In due time the great distinction of sex rightly asserts itself, and the delicate distinctions between man and

* It is a little curious that Shakespeare even in his age has made these three finest types of women "reading women." Portia was highly educated, Miranda the companion of her learned father, and Imogen sits up late at her book.

woman, so easy to feel and so difficult to state, begin to be recognized. Then the broad general law of humanity will come to a more definite and varied expression in special natures. And although the mother will never forget the common ground of humanity which must underlie all training, she will prepare to meet the peculiar claims of her daughter's nature, and help her to understand and appreciate her needs and her powers.

The child instinctively begins to inquire into physiological questions concerning marriage, birth, etc. There is but one way in which such questions should be met—with perfect truth in perfect reverence. To little children, utterly incapable of understanding the truth, the pretty fables of the stork or the angel may be harmless, but all earnest inquiries should be met with the simple truth as far as it can be understood, and the promise of full explanation whenever the mind is mature to receive it. The mother should anticipate this natural need of the mind for knowledge, and should prepare her daughter for initiation into the higher mysteries of human life by an acquaintance with life in its simpler forms, where it is not complicated by human passions. The functions of reproduction in vegetable life are the natural method of instruction, and lead the way to a recognition of the sacredness and beauty of the whole subject. The child's delight in the flowers of the field is easily deepened into intellectual instruction by pointing out the functions of the various organs and their beautiful adaption to use. In the care with which variety is sought the important lesson against intermarriage may be recognized, which fable and theology has surrounded with such fearful imaginings.

Next, the care of domestic animals will naturally

interest the child, and from her kittens and her hens she will learn much, without excitement or effort, that will form a basis for the higher truths of human physiology.

The mother should thus always anticipate in her own mind the needs of the daughter, and prepare her for the changes in her physical condition which will come with maturity, in the simplest, the tenderest, and the most reverent manner. Everything approaching to levity or coarseness of speech should be utterly avoided, so that, while the young girl will speak frankly and without shame to her mother or her physician, she will shun light speaking to chance companions as she would blasphemy.* And here the great lesson of a high standard of health should be re-enforced. There is no function of woman's nature which in its right exercise does not tend to strengthen, refresh, and revivify her physical and mental powers. If healthy, no one need interfere with any rational enjoyment, any reasonable amount of intellectual labor, or necessary work. All functions will be best regulated by a full, harmonious, normal development of all. And in physiology as in religion, the grand paradox holds true, "that he who loveth his life shall lose it, and he that hateth it for my sake shall find it."

* The well-educated woman physician should be the friend and counsellor of the mother during this anxious period. It seems a strange fact, but it is one, nevertheless, that the nearest family tie does not always lead to perfect freedom and confidence, and a wise stranger can often give the help that even a mother cannot. The physician should here be, not the *mediciner* to disease alone, but the guardian of health; and the wise woman who has her own experience to guide her, as well as the learning of the schools, can speak with an authority which will be respected when that of the mother fails. Quite as often, perhaps, she will have to shield the daughter from the unwise demands which the ambitious mother makes upon her, as from her own vanity or love of pleasure.

There is no surer way to destroy the health than to care for nothing beside it; and the most important condition for the young girl approaching maturity is to have her thoughts turned from herself to wide and large interests, and to have her mind and body healthily and regularly occupied. When any organ is feeble or diseased, the thing most to be avoided is fastening the mind upon its functions, so that nervous irritability or congestion is produced. And yet, as I have constantly intimated, the actual mother has to deal not alone with ideal womanhood, in full possession of a birthright of health, but very likely with a feeble and diseased being, who develops new forms of evil in every crisis of life. There she must be the watchful guardian, and recognize the limitations of her individual child, and with wise provision apportion the tasks and the pleasures to her peculiar needs.

While all sickness is the result of broken law, it is rarely mainly the sufferer's own fault; and the mother will tenderly and lovingly shield her sickly child, and show her the rich compensations which are possible to her in mental and spiritual life, though she should never fall into the morbid error of believing physical weakness to be the most favorable condition of spiritual welfare.

But if she is conscientious and true, really seeking her child's best good, instead of the indulgence of the hour, she will be more likely to err on the side of too much care than too little.

Even in such cases, she should seek more a positive than a negative care; striving rather to brace and fortify her daughter against the ills of life, than to shield her from them. "Remember," said wise Dr. Jackson, "the danger is in staying in the house."

For this reason, books especially written for the instruction of girls are often very pernicious. They emphasize certain topics in their relation to woman, and so excite disgust and produce abnormal excitement, where the simple teachings of science, reverently enforced, would produce only a sacred respect for law. The great responsibility of the transmission of hereditary qualities, may be early taught without any mental excitement. A little girl of twelve years old said to her teacher one day: "When you told me to brush my teeth, I thought, why should I—of what consequence will it be, fifty years hence, whether I do so or not; and then I thought that if I ever had a child, if I had bad teeth, she would be more likely to—wouldn't she?" "Yes," replied the teacher with deep seriousness; "and that is a most sacred reason for guarding your own health and strength."

Perhaps no subject has been more fully dwelt upon than the danger of great intellectual activity for girls at this youthful period of life, and it has come to be thought that an idle brain insures a healthy body. But nothing can be more false. The brain, as the ruling organ of the body, requires a healthy, rich development; and this can only be secured by regular exercise and training, fully using but not overstraining its powers.

The usual accompaniments of intellectual study are the cause of this false prejudice. Close school-rooms, late hours of study, restless excitement from over-stimulated ambition, have no necessary connection with intellectual progress. Much of the evil effect of schools comes not from too much intellectual activity, but from too little; from listless hours spent over lessons which under good conditions could be learned in half the time. Mental action, continued after the brain is weary, or

when it is not nourished by fresh blood, or under any disadvantages of physical condition which prevent it from being easy and delightful, will injure the system; and will prove a waste of mental power as well as of physical health. The greatest lesson that we have to learn in our mental life, is to value quality of work more and quantity less. Everybody knows how much more exhilaration and less fatigue is experienced from a brisk walk, than from standing listlessly around for double the length of time; and it is just so with mental effort. We want neither feverish, excited work, nor lazy work; but earnest, hard, vigorous effort, ceasing when the brain is weary or the object is accomplished.*

I have yet to see the first proof in man or woman, that well-regulated activity of the brain injures the health. I have known many instances where vigor of body was

* Dr. Carpenter says in his *Physiology*: "From the moment when an indisposition is experienced to keep the mind fixed upon the subject, and the thoughts wander from it unless coerced by the will, the mental activity loses its spontaneous or automatic character, and more exertion is required to maintain it volitionally during a brief period; and more fatigue is subsequently experienced from such an effort than would be involved in the continuance of an automatic operation through a period many times as long. Hence he has found it practically the greatest economy of mental labor to work vigorously when he is disposed to do so, and to refrain from exertion, so far as possible, *when it is felt to be an exertion.*"

"Of course, this rule is not applicable to all individuals; for there are some who would pass their whole time in listless inactivity, if not actually spurred on by the feeling of necessity; but it holds good for those who are sufficiently attracted by objects of interest before them, or who have in their worldly circumstances a sufficiently strong motive to exertion to make them feel they must work—the question with them being, *how* they can attain their desired results with the least expenditure of mental effort."

restored by earnest mental life; and I believe that more young women sink into invalidism, or die prematurely, from the want of adequate thorough mental training, than from any other, one physical or mental cause.

For we must remember that the brain craves thought, as the stomach does food; and where it is not properly supplied it will feed on garbage. Where a Latin, geometry, or history lesson would be a healthy tonic, or nourishing food, the trashy, exciting story, the gossiping book of travels, the sentimental poem, or, still worse, the coarse humor or thin-veiled vice of the low romance, fills up the hour—and is at best but tea or slops, if not as dangerous as opium or whisky. Lord Bacon says most truly: "Too much bending breaks the bow; too much unbending, the mind." After labor, rest is sweet and healthful; but all rest is as dangerous as all labor.

One great trouble in women's intellectual life is that it is too much mere study, too little work with a purpose. It is all income without an outlet, and that, we know, always produces congestion and disease. Mental dyspepsia might be the diagnosis of many an irritable, unhappy woman. She has eaten, but for want of exercise she cannot digest the intellectual food she has received. An active pursuit, an earnest purpose, is to the mind what out-door air and exercise are to the body. But in our present social system, where it is still considered out of place for a lady to work for her living, it is the hardest problem for a mother to solve, how to supply this most important need of her daughter. Mental and moral influences are as real active agents in hygienic life as material ones. The reaction from asceticism, which despised the body and made it only a hindrance, or, at best, a slave to the soul, is in danger of going so far as to forget

the rightful supremacy and control of the mental powers. A high purpose is often the best of tonics, as an agreeable amusement is the most refreshing of sedatives. A determination to live and work has kept many a person from the grave. But it must be a strong, calm, persistent purpose that will have this good effect, not the feverish ambition of an hour. The girl who works to gain a prize or to rush through school in less than the usual time, will doubtless exhaust her nervous system, and bring on disease or feebleness; but she who looks forward to a life of noble usefulness will learn to husband her powers, and make the future secure by wise forbearance in the present.

When circumstances do not supply the needed stimulus to use of the mental faculties, by a demand for present work, the mother may keep before the mind of her daughter the great duty of preparation for contingencies that may arise, and show her how the rapid changes now taking place in our social system may at any time bring her new duties and responsibilities, for which she will need all her physical and mental powers.

When Harriet Beecher was the leading spirit in a girls' society for mental improvement, she did not know that the intellectual gifts there developed would enable her to strike the keenest blow that slavery ever received in this country. When Maria Mitchell studied astronomy with her father she could not tell that a professorship at Vassar College awaited her, and that her thorough fitness for it would prove a tower of strength to the cause of higher education for women throughout the country. Keep the sword bright, keen, and well tempered, and opportunity will come to use it in defense of truth and right.

I have said little, directly, of school education, because there comes in the teacher's influence, and, as regards intellectual training, it is usually better than the mother's. And though the mother should never yield her right of interest and ultimate appeal, yet, having selected a teacher, she should give her generous confidence and conscientious support. But she must always be watchful to guard her daughter's health, most of all against herself. From my own observation I should say that the over-work and over-stimulus complained of in schools is far more often the fault of pupils and parents than of teachers. The calm, steady work which lays a foundation for future mental power, is not appreciated, and brilliant results are demanded at once.

And here I wish to speak of the study of music, as it is usually pursued. From the tradition of David's soothing Saul by his harp, has, I believe, arisen an idea that music is a thoroughly healthful, refreshing influence, with a wonderful soothing power over the nerves. And yet the nervous excitability, and even irritability, of musicians is proverbial. We must make nice distinctions. The influence of hearing music is one thing, the study of music is another. Unquestionably the power of music to lift the mind into fresh regions of enjoyment, to change the current of thought, to rouse and quicken the nervous action, and so to vivify and raise the tone of health and spirits is very great. I have known those to whom it is the best of medicine, and whom I believe it has saved through severe trials, from utter despair and morbidness.

But even listening to music such as we now hear is a high intellectual exercise. A symphony of Beethoven's, with its complicated movements and rich harmonies, is

quite another thing from the simple melodies with which Browning so beautifully represents David as soothing the troubled spirit of Saul. And when to these are added the passionate fervor of the opera, the tax upon the nervous system is very great. Properly to hear and appreciate the opera of *Fidelio* or *Don Giovanni* or the *Seventh Symphony* of Beethoven requires as much exercise of brain as to listen to a scientific lecture. I do not deny its value as an influence, but it is a positive value, not a negative one. It is *re-creation* rather than relaxation, and is no more fit to succeed a long, exhausting day of study than a sermon, or a disputation, or any other change of intellectual exercise. Still more is the study of music, and the practice necessary to acquire command over so difficult an instrument as the piano, a very great tax upon the nervous strength of our young people. Many mothers consider the music lesson only as the using up of so many minutes of time, and think it may rightfully be put into any hour of holiday or rest. I have heard music teachers say that their pupils came to them weary and listless, and their parents seemed to have no idea of the amount of intellectual and even physical exertion which the music lesson required. We cannot all become fine musical performers, but if the mind is well developed, with a healthy sensibility of feeling and culture of imagination, we can get all the influence and enjoyment of art from the works of thoroughly educated and creative artists, and we shall do so with more relish, without the weary remembrance of mechanical practicing uninspired by active interest.

Music leads the way to a world of the greater danger from over-stimulus of feeling and sentiment, than of intellectual work. Few physicians allow enough for the im-

mediate effect of spiritual causes upon the physical health. Cheerful influences, sunny surroundings, happy relations, will save one through heavy tasks of work or privation; but any blight of the affections, any misunderstanding, or treachery of friends, the lowering of one's ideal of life and humanity, will depress the nervous system and ruin the health far more surely than even overwork of the purely intellectual faculties. Often intellectual labor is the true antidote and corrective of this state of feeling.

Theodore Parker once recommended a course of metaphysical study to a young lady, who, from physical weakness and other causes, had become morbidly nervous and introspective.

I have spoken of the importance of thorough healthful training of body and mind in view of the natural conditions of marriage and maternity, which may be the lot of every woman. It is not possible to overstate the importance or the sanctity of these relations, but it is possible to look so much at the mere outside facts of marriage as to ignore its real meaning.

The woman, falsely or carelessly mated, is far less married than she who keeps her ideal high and true and remains single; not because she values marriage too little, but because she has too great reverence to enter into it lightly or falsely. And the mother has far more need to fit her daughter to meet nobly the possibilities of unwedded life, than even the duties of marriage. Marriage is so perfectly natural a state, that it reveals its own laws; and a simple, healthful, happy, trusting love, will guide woman more wisely than much precept.

But in our present social state, the probability for any girl is by no means small that she may be called on to

live out her life without entering upon this blessed relation. If she has been taught that woman's sphere is marriage and marriage alone, that only by that means can she hope for a life of happiness, usefulness, and respect, she will probably become a miserable, helpless, lonely, irritable woman—perhaps seeking marriage at any price to escape from the condition she dreads; or failing that, finding life without purpose, occupation, or delight.

But if she has learned that Providence is boundless in its resources, and that when one way is closed, another is opened, so that “all things work together for good;” if she knows that her nature will be far nobler without the form of marriage unless the spirit and truth can be present also, she will find that there is a life open to her—a life of devotion to truth, right, and beauty, of service to humanity, and of love just as noble and true as she could attain in marriage. She is not fit to marry until she is fit to stand alone. Unless life has a purpose and meaning of its own to her as well as to her husband, she cannot bring him an equal dower, and she has no test of the new feeling which should take its value from the richness of the life that she is ready to blend with another's.

Nothing marks the progress in the elevation of woman, during the last half century, more than the passing away of the opprobrious use of the term “old maid,” which is now rarely heard.

It is possible to remain unmarried from low motives, shrinking from the duties and responsibilities of the relation, or from a worldly ambition for higher station than love can offer. Such sin brings its own terrible punishment with it. But far more often it is from a high ideal of marriage, from true nobility of character, or from de-

votion to some other relation which seemed paramount, that a woman remains single. How many a woman, hiding in her secret heart the romance that gave a charm to her youth, but did not find its reality in life, has devoted herself to the service of humanity with all the passionate devotion of a lover to his mistress! Of such an one, to whom hundreds of helpless babes looked up as to a guardian and protector, an artist said, "She has the mother in her face." We owe too much to this noble class of women, in art, literature, and philanthropy, and in the service of the country in its most trying hour, ever to forget their claims, and he will be forever stigmatized as unworthy of the name of pure and noble manhood who sneers at the virtue which he cannot understand, or vilifies with opprobrious epithets the noble women whom Theodore Parker—God bless him for the word—called his "glorious phalanx of old maids." *

Another wrong is often done to the young girl, under the name of prudence or worldly wisdom, by breaking down her ideal of life, and especially her ideal of the possible partner of her future life. Tennyson speaks of one

* There lately died near Boston, a woman of eighty years, whose life exemplified the very truth I have been seeking to enforce. Full of courage and zeal, she withstood all the prejudices of her birth and surroundings, freed her own slaves, and then devoted herself with voice and pen to the Anti-Slavery cause, to the enfranchisement of woman, and to every good word and work that she could aid. Her high literary attainments, as well as her earnest purpose, gave her great power of thought and expression, and she was the wise counsellor of many of the foremost men and women among the reformers of the day. As her brother-in-law, himself a noble man of high culture, stood by her coffin, with eyes filled with tears, these were the words of his eulogium upon this woman of dauntless courage, firm purpose, and tender heart: "For this dear saint and moral heroine, there is only one word that expresses what she was,

form of this, in addressing the vain coquette as the possible future mother:—

“Oh, I see thee old and formal, fitted to thy petty part,
With a little hoard of maxims, preaching down a daughter's heart.”

Men often speak of the pain it is to them to see the debasement of woman, because she represents to them an ideal of good, the other nobler self, for which they must strive. Man should represent the same thing to woman. Love should see in its object the very crown and glory of creation.

“The person love to us doth fit,
Like manna, hath the taste of all in it.”

But the low social standard of morals and manners for man has so degraded him, that the very ideal of manhood is belittled, and the mother warns her daughter not to expect much from her future husband; she has no right to hope for the loyalty of Sir Philip Sydney or the pure ideality of Michael Angelo.

It is a great wrong to man to demand so little from him. All human beings from childhood upwards are stimulated by the opinion entertained of them, and the claims upon them for noble and high behavior. Whatever your own experience, do not thrust the poison of doubt and unbelief in goodness into a daughter's mind. Let her keep her faith and her romance, and look for a hero to win her young heart. True, it is hard to see a Thad-

and that is LOVE. He that dwelleth in God dwelleth in love. She dwelt in love which went out to win the warmest friends among all sects and conditions of life, and so she dwelt in God. Her love never failed.” All who heard, felt how beautiful must have been the private life which could receive such a tribute from such a man. Has such a woman missed the crown and glory of womanhood?

deus of Warsaw with a cigar in his mouth, or to imagine Hamlet with a blue veil about his hat, but nevertheless the race of heroes is not extinct, and the girl had better preserve her faith and her love till the true knight appears, than accept the dreary belief that all men are alike unworthy, and that she must not ask for a purity and truth which exist only in the dreams of romance. Man's low idea of woman has reacted upon him; her elevation will restore him to his true dignity, as equally entitled to spiritual and moral elevation of soul and refinement of manners with herself. It is as demoralizing to young women to hold men in contempt, as it is for young men to have a low idea of women. "In honor preferring one another" is the true condition of love, and no one has truly loved who has not exalted the beloved far above one's self.

But, after all that I have said, perhaps at too great length, I come back to my original thought of the grand art of education as of life. Do not dwell upon petty details or exaggerate accidental peculiarities. Lay your foundations broad and deep in the common ground of humanity. Base your calculations on the sure ground of universal law. Then, gradually, out of this common earth will grow up the special flower, true to its own individual law, which is just as sacred and unalterable as the general law. All the art of the gardener cannot transform the oak to a willow, or produce the blue dahlia, though by its aid the sour crab has become a mellow apple, and the astringent pear, the luscious Bartlett. We need to study the great subject of education more, and to talk less about the special peculiarities of woman's education, and we shall find that the greater includes the less, and that the more thoroughly we develop all the

powers of mind, the more eminently will each woman be fitted to perform her own peculiar work in life.

I did once see a man crippled of both legs, who claimed to be specially able to manage a washing-machine because he stood lower than other men. I honored his acceptance of his limitation, but still think the ordinary complement of legs an advantage not to be despised.

The great duty of the educator is to place his wheel so that the stream will fill its buckets evenly. Far more than you can do directly for your daughter, will the great social forces, the influences of custom, society, hereditary tendencies do for her; but you can hold the helm and keep the rudder firmly fixed towards the pole-star of truth and right; and so, from all these forces thus combined, and from the overflowing fullness of a mother's love, always warming and kindling the spirit of life, however much you may err in details, on the grand basis of humanity, and in the consummate perfection of her own individuality you may rear

“ A woman nobly planned
To warn, to comfort, and command;
And yet a spirit still and bright,
With something of an angel's light.”

EDNA D. CHENEY.

Jamaica Plain, Mass.

NOTE.—I have said nothing of the father's influence upon the education of girls, simply because I was not writing on that subject, but I do not wish to be suspected of undervaluing it. By the beautiful law of relation between the sexes, a father may often have a finer understanding of his daughter on some points, than the mother, and one of the great needs of our home life seems to me to be the more intimate acquaintance and influence of the father.

THE OTHER SIDE.

“ All mankind must serve ; the widest sway
Is but the law of service.”—FESTUS.

“ I rejoice in the decline of the old brutal and tyrannical system of teaching, which, however, did succeed in enforcing habits of application, but the new system, as it seems to me, is training up a race of men who will be incapable of doing anything which is disagreeable to them.”—JOHN STUART MILL IN HIS AUTOBIOGRAPHY.

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THE OTHER SIDE.

“THIS is a hard world,” said a morbid girl of fourteen some forty years ago.

“Yes,” answered cheerfully the well-known apostle to whom she spoke, “and God meant it should be a hard world.”

When later he himself was caught up into heaven in a chariot of fire, the serene face showed how gladly he had accepted this “meaning” as his Father’s will.

It is not so with the greater number of the world’s workers to-day. James Mill, to whom we are indebted for some of the very best intellectual work, thought life was not worth having, and was so devoid of spiritual perception that he could get no glimpse of a God in a “world full of sin and misery.” This proves nothing as to the universe. It only shows how unhappily one great man has missed the music of the spheres, and failed to catch the “meaning” of God’s work.

For mother and child, for teacher and pupil, the first essential point is to accept this fact. Only so, can the sweet order of a divine life be brought out of the chaotic elements stirring in every soul.

The mother, who holds the month-old infant at her breast, and gently imprisons the tiny fingers that would tear her laces, or disorder her hair, takes the first step towards the development of moral consciousness. Let her repeat again and again that gentle restraint, and by-

and-by wide open eyes will ask her why, and when it is once understood that food can be had only while the little fingers are quiet, the first foundations of obedience are laid. So far most mothers go, for their own comfort's sake. If they had but the resolution to go still farther, for the sake of the child's life-long content! No child respects the teacher who does not *control*. All the modern methods—including lavish gifts and the gilding of all bitter pills—fail absolutely before the clear-sightedness of youth. If we older people know how to rise to the occasion and thank those who demand the best of us, still more certainly is this to be expected of the young and the fresh-hearted; but if it were not, our duty remains the same.

So much discipline as shall preserve order, develop respect, and make possible such opportunities as the young soul needs, is the first point. It is idle to ask how this is to be secured. No two children can be managed alike, and it is the variety of her tasks which consoles the mother for her daily fatigue, and inspires her for the encounter.

Until the child is taught deference, it is idle to teach it Latin; until it sees the necessity of self-control, and the beauty of self-denial, grammar and mathematics are to be dispensed with. In one word, the foundation of all true development lies in preserving the natural relation of parent and child. Whatever turns the child into a tyrant and the mother into a slave, degrades the ideal of both, and makes any true progress impossible. To do what is difficult and disagreeable with a faithful and cheerful spirit, is the first great achievement, remembering, nevertheless, that God is a loving Father, not a hard Master.

Yet, loving as he is, his laws are inexorable. The baby stumbles, and bruised limbs or swollen lips warn it against the second careless step. Young and tender as it is, severity encircles it on every hand. Is it possible that we are no longer "perfect even as he is perfect" in this regard?

But let us suppose this point gained, a foundation laid, what obstacles lie in the way of the teacher of to-day? The conscientious and well-meant answer to this question, from the majority of persons is, the health of the pupils. Worst of all, this answer comes from the physicians.

We are often told that the health of women now is not as good as it was generations ago, and this has been repeated and repeated until everybody believes it.

A long time ago, I was walking through Broad street in company with John Collins Warren, when I alluded hastily to a severe attack of croup from which my little boy was suffering, and said, impatiently, that it seemed as if all my care might secure for him as happy a babyhood as that of the little things whose frozen heels were at that moment hitting the curbstone.

"You do not ask how many of these children die," replied my friend, "and if your boy had been born down here, he would not have lived six months." We are apt to ignore the large class of existing facts of this same kind.

Civilization has done so much for human health that the invalids who once died, survive; nay, they do more, they marry, and bring into the world other invalids, who need special care; and, whereas, in the old time, out of a family of twelve, five or six would die in infancy with a persistency worthy of a better cause, the whole twelve

would be saved by modern science; and not only that, but enter into the statistics which are intended to show how much worse off we are now than the typical men and women of the past.

A few years ago I watched beside the death-bed of a woman who was the only child of an only child of an only child. I mean that for three generations the mother had died of consumption after the birth of her first-born, and in the first instance was herself the sole survivor of a large family. When my friend was born, it was said at first that she could not live, but her father was a physician, and his care in the first place, and removal from a country to a city life in the second, conquered fate.

She did live, she married, and became the mother of ten healthy children, all of whom survive, and died herself at the ripe age of seventy-three.

It is difficult to write upon this subject, because there are no proper statistics. During the seventy-five years that succeeded the settlement of New England, the record of deaths was very imperfectly kept in many places, but no one who gives much time to genealogical research can fail to be impressed with the short lives of the women, and the large number of children who died at birth or soon after.

In those days, the "survival of the fittest" was the rule, and if that survivor happened to live to a good old age, no one inquired about those who did not.

I allude to these facts, as I have done before, not because I think them of much importance, but because it is desirable to set them against the equally undigested facts of general invalidism which have been so persistently pressed of late.

I do not believe in this general invalidism, so far as it

concerns women especially. I believe that in no country, in any age, was life ever so reckless, and so carelessly dissipated as it is in America to-day. In Sybaris itself, in Corinth, and in Paris, only a few wealthy people could indulge in the irregular lives which the unexampled prosperity of this country opens to the great bulk of the population.

I am amazed when I see it stated that "length of time cannot transform the sturdy German *fräulein* into the fragile American girl." The influence of climate does this in one generation for our Irish and German population. Standing in the mills at Lawrence, the pale faces and constant cough of the operatives will attest these words to any competent observer. During the past three years I have parted with three satisfactory Irish servants, who were in the incipient stages of consumption. I dismissed them because no influence of mine could persuade them to retire early, wear waterproof shoes, or thick and warm clothing.

In a singular preface to the fifth edition of a work which has lately occupied the public mind the author says:

"When a remission or intermission is necessary, the parent must decide what part of education shall be remitted or omitted, the walk, the ball, the school, or all of these."—"No one can doubt which will interfere most with Nature's laws, four hours' dancing or four hours' studying."—"In these pages the relation of sex to mature life is not discussed."

It is necessary to state at the outset, that this preface does not in the least represent the book as it naturally strikes the reader. Women may read carelessly, as they have been accused of doing in this instance, but when hundreds of women, writing from all parts of the country,

in private and in public, and without concert with each other, all testify to the same impression received, it is impossible that the carelessness of numbers should always feel the same bias.

It is quite certain that four hours of dancing is far more injurious to a delicate girl than four hours of steady study: why, then, in considering the education of girls, does the author steadily avoid all cases where dancing, late hours, and bad food, have been known to interfere with health?

What satisfaction can any girl find in the fact, that the period of mature life is not covered by the statements in this volume? The period of a working life is included in the years between fourteen and nineteen, and as matters now are, society life is nearly ended at twenty. If the beginning of brain-work were deferred till a girl were jaded with dissipation, how much could be accomplished in season for self-support? Schools vary in varying localities, and since women are hereafter to be elected on every school committee, it is reasonable to suppose that unwise pressure from that source will soon cease.

All figures of speech are misleading, but it is quite fair to meet the statement that we must not train oaks and anemones in the same way, by retorting that that is precisely what God does.

He gives to different plants different powers of appropriation, sets them in precisely the same circumstances, and leaves them.

The sturdy oak, that centuries of storm have beaten into firmness, which fits it to encounter the fiercest blows of the wave; the stately pine, which is to tower as mainmast when the gale is at its height, stand serried or single on the mountain's peak. At their feet nestles the wind-

flower, quite as confident of its destiny, although no sun is moderated, no shower abated for its tender sake. It is protected by the very way in which it is made, by its very loneliness, pregnant as that is with the charm of sweetness and color. So might it be with woman!

Private schools in our large cities cannot be said to over-work their pupils. Fifty years ago, when my mother was educated, far more was required of girls at school than was ever possible in my day. Thirty years ago, when my school education ended, far more was possible to me than has ever been required of my daughter. It is the uniform testimony of teachers, that girls now study less, that the hours of recitation are fewer, and that dilatoriness and absences are far more frequently excused than was once the case.

At the most fashionable, and also the best conducted school in Boston fifty years ago, my mother was allowed no study time in school, and committed thirty pages of history as a daily lesson. For myself, at a time when we were pursuing languages and the higher mathematics, we took a whole canto of Dante three times a week, and were required to give an explanation of every historical allusion. I had no study time in school; but neither my mother, nor myself, nor any girls in my class, were in the least injured by anything required of us. During the whole of our school life, we "thought and understood" as children, and very reluctant we were to "put away childish things." We rose for a bath and walk before a seven o'clock breakfast, nine o'clock found us at school, and we returned to a two o'clock dinner. In the afternoon we walked, or rode on horseback, or studied together for an hour. We took tea at six or half

past six o'clock, and the curfew ringing at nine found us preparing for bed. We had no time for unsuitable reading, and none of the cares or dissipations of maidenhood perplexed our straight forward way.

If we could secure this simplicity for our children, we should have small reason to be anxious about their health.

What, then, are the drawbacks to a teacher's efforts today? If girls are not studying too hard and too much, what are they doing which stands in the way of a true education, taking the word in the broadest sense?

The teacher's first obstacle lies in the superficial character of the American mind. We have scarcely one in the country capable of being a hard student. The whole nation repels the idea of drudgery of any sort, and the most conscientious teacher has to contend against a home influence, which, working at right angles with her own, hardly allows any noble effort.

Next to this is inherited tendency: from fathers fevered with restless mercantile speculation, or tossed between "bulls and bears" in Wall street, or who allow themselves to indulge in practices which their daughters are supposed never to know, girls inherit an "abnormal development of the nervous system," and every fibre in their bodies feels the "twist in the nerves."

From mothers of large families, overworn with housework themselves, or, still worse, fretted by the impossibility of keeping a home comfortable, aided only by unwilling and half-trained servants, girls inherit a depressed and morbid tendency to call life "hard."

The spirit of the age is also against them. They do not have the help which comes from a trusting religious spirit. The "Conflict of the Ages" has pene-

trated to the heart of almost every household, and care is too seldom taken to save that love of God and trust in his Fatherly care, upon which the comfort and happiness of the young so much depend. It seems to me that very few parents realize this. If a girl has a loving mother, it is not enough. She needs, still farther, the consciousness of that sustaining Power which holds both her and the universe in its embrace. If she has not a loving mother, how can she endure life without this support?

But let us suppose that the teacher has met and vanquished these difficulties—she has enemies still at hand that our ancestors never knew. The girls whom she teaches live in high houses, piled storey upon storey, so that three or four flights of stairs come between them and the open air—between them and healthful play. The crowd of people who go annually to Europe, and bring home its follies instead of its charms, have succeeded in changing our simple mid-day meal into a dinner of many courses, eaten under the gaslight. At this meal the young girl finds food very different from the roast mutton, and bread and butter eaten daily by her English sister at the same age. She has tea and coffee at other meals, and probably a glass of wine at this, especially if she is thought to be studying hard. In the afternoon, she has no longer simple, happy life in the open air. Although her ear be so deficient that she may hammer all the afternoon over an exercise that she will not recognize when she hears it well played at a concert the same evening, she is kept at her instrument as if all her salvation of body and soul lay in the keys of the piano.

The irritability which bad habits, bad food, and the

want of fresh air develop, needs the counterpoise of a fresh excitement—so a German, the opera, or a tragedy, occupies her evening hours. Three or four days in the week, at least, she is up till midnight, and rises just in time to get to school at nine. She never stands in the cool evening air to see the red sun sink below the hills; she misses the holy calm of the early morning, which falls upon a flushed and heated life as its dews fall on the flowers. Dissipation, either mental or physical, crowds every cranny of her life. Parents object to every lesson out of school, so the whole period of preparation and recitation is pressed into the school-hours. Her dress is wholly unsuited to health; and when I say this, I wish to be understood as saying nothing in favor of bloomers or any other special dress. An intelligent woman can decide for herself and her children as to what need of change there is in her dress; and many of us have worn for half a century clothes that were loose, well adjusted, and healthful, without drawing attention to any peculiarity. Nor must there be any tyrannical dictation on this subject. Some of us prefer to rest our clothes upon our shoulders; some of us are only comfortable when they depend upon the hips. It cannot be denied that the heavily-weighted skirts now in vogue are uncleanly and unwholesome, even when worn short; and while school-girls elaborate, friz, powder, and puff their hair like their elders, and trim their dresses to such excess, it will be impossible for them to find time for consecutive study. Every separate curl, lace, or fold, becomes a separate cause of worry; and "worry" lies at the bottom of American degeneracy, male and female.

Every heart in this country came to a sudden pause the other day, when the name of Agassiz was moaned

out by the funeral-bells of Cambridge. Who ever worked harder than he? "Without haste, yet without rest," his summer's recreation became the hardest work of the world; but in his life an ever-flowing cheerfulness, and a genial welcome for any honest soul, showed the healthfulness of his busy walk. If anything shortened his three-score and ten years, it was the care and anxiety which insufficient appropriation and political indifference or chicanery crowded into his later life.

The scholar, young or old, must keep a calm and well-poised mind. Let our mothers consider whether this is possible to children upon whom the follies of mature life are crowded in infancy.

If in idle moments the children of this generation take up a book, it is no longer a simple Bible story, or a calm classic of the English tongue, but the novels of Miss Braddon, Mrs. Southworth, or Mrs. Wood wake them into a premature life of the imagination and the senses. Before they are six years old they hold weddings for their dolls, enact love scenes in their tableaux, or go to theatrical exhibitions as stimulating as the "Black Crook," if less offensive to the taste. The skating parties and gymnastics are also fruitful sources of ill-health. The girl prepares herself for the former by inflating and over-heating her skirts over the register in the hall-floor; a few minutes' exercise chills the hot drapery—what wonder that a morbid bodily sensitiveness follows the insane exposure? No thoughtful person can watch a class of gymnasts, without seeing how extreme and unnatural are many of the attitudes assumed, especially for women. What would be thought of making bread or sweeping floors, if these compelled such attitudes, or brought about such fatigue?

The sleep of these exhausted pupils is often broken, by what has been wittily called a "panorama on the brain," in which the worries, excitements, dissipations of the day, are incessantly repeated, and they rise late, more wearied than they went to bed.

In spite of eminent authority to the contrary, mothers observe that it is their sons who require the largest allowance of sleep, and who keep the morning meal waiting; but if the growing girl cannot sleep, she should be compelled to lie in bed the proper number of hours, and it is obvious, that sleep like that I have described is no refreshment, and furnishes no opportunity for repair of tissue.

"I want to borrow a book, doctor," said a patient the other day to a famous specialist. "Any book upon my shelves, madam," was the reply, "except those which concern the diseases of women," and the lady turned disappointed away.

It behooves all those who have the care of children of both sexes, to bear their possible futures silently in mind; but all talk to them, or before them, all reading upon physiological subjects, during the period of development, should be forbidden, for the reasons that dictated the answer of the specialist; children should be instructed long before the developing period. I cannot tell what might be possible if we had to deal with girls in a normal state of health; but the girls and women of to-day are encouraged to a morbid consciousness of sex; and I believe, that all that relates to personal care should be ordered by those who are the natural guardians of the young, without unnecessary explanation or caution. When development begins, special treatment is required; not according to the sex so much as according to the in-

dividual ; and no parent or teacher can dictate to another on general grounds. That school or family is an absolute failure which does not allow a margin large enough and loose enough for all possible contingencies, as regards boys or girls.

If any one thinks the picture of youthful life which I have drawn an exaggerated one, let him read the books commonly published, descriptive of child-life, and once convinced, he will not wonder that the "number of invalid girls is such as to excite the gravest alarm." From all the cares imposed by dress, and from much of the weakness deduced from furnaces and high-storeyed houses, boys are exempted by their habits and general custom. If it is thought by any one that the boys of to-day are stronger than the girls, let them be subjected to the same regimen, and the result fairly reported. Let their steps be clogged by skirts, embroidered or plaited into death warrants ; let them be kept at the piano or running up and down stairs when they should be in bed or at play ; let them read sentimental novels or worse, and hang over the furnaces, instead of frolicking in the open air. We shall understand better, when this experiment is once tried, that God makes boy and girl alike healthy ; but that social folly has, from the very first, set the girl at a disadvantage.

Do sisters "imitate brothers in persistent work everywhere?" Nay, it is not the brothers whom they imitate, but their own steadfast, God-implanted instincts, which they thus attempt to work out. Girls cannot do two things well at a time. Then let them resign the life of fashion, excitement and folly, and give themselves to study, fresh air and an obedient life in a well-disciplined home. Every teacher of to-day will tell them, that those

girls who go most regularly to school are healthier than those who lead desultory lives, and that among the students of any one school or college, the healthiest are generally those who work the hardest.

This is as true of boys as of girls. It is not the "honor man" who breaks down at college, but he who leads an irregular and idle life. It is true, for the very simple reason, that hard study is incompatible for any length of time, or in other than very exceptional cases, with luxurious habits, over-eating or drinking, late hours, or excessive dissipation.

In this recent work it has been stated, that all schools are adjusted to meet the requirements of men; and in quoting a case which was wholly imaginary, so far as its supposed connection with Vassar College was concerned, the author goes on to say:

"The pupil's account of her regimen there, was so nearly that of a boy's regimen, that it would puzzle a physiologist to determine from that alone, whether the subject of it were male or female." Of course, these words are intended to express disapprobation, and carry a doubt as to the fitness of Vassar College to educate girls. Nothing could be more unjust or preposterous than the conclusions likely to be deduced from this statement.

We are told that from fourteen to nineteen, no girl must be encouraged to persistent effort in study, or anything else. Now, the laws of life are absolute, and if proper habits of study have not been formed by the age of nineteen, they never can be formed in this life; the girl who gives only an intermittent attention to study up to her twentieth year, is prevented by all the influences about her from "intermitting" the press of her social

duties, so I will not deny that it was the happiest surprise of my life when the first four years of Vassar College showed me that there were still hundreds of girls willing to come to Poughkeepsie, after they were eighteen years old, and shut themselves out of the world for four years, abandoning gayeties of all sorts, the German, the opera, and the parade, that they might fit themselves for the duties of their future life.

The debt of this country to Matthew Vassar's memory can hardly be exaggerated. In eight years of steady work, the college has contrived to exert an influence that is felt in all parts of the United States and of Canada. This is an educational influence in the broadest sense; it pertains to dress, habits, manners, regularity of life, and sleep; the proper preparation and serving of food, physical exercise, physiological care, safe and healthful study, and the highest womanly standards in all respects.

The college has received delicate pupils, whom she has sent out four years after, strong and well; and it is the rule, that the health of the classes steadily improves from the Freshman to the Senior year.

Vassar has been fortunate in retaining its resident physician throughout the whole eight years of its existence, and if the Faculty were to grow careless, the parents, educated by what she has been accustomed to give, would demand the care that their children need.

The pupils of Vassar belong to no special class in society, and are drawn from varied localities. When the college opened, she had upon her Faculty three women whose peers it would be hard to find, for excellence of character, refinement of feeling, delicacy of manner, attainment in science, and a quiet elegance of dress. Of

these, one is now gathered to a wider sphere of usefulness, so we speak of Hannah Lyman by name, as a woman whose equal most of the students would never have seen, if good fortune had not taken them to Vassar. The first pupils of Vassar were thoughtful women, who had been long prepared for its expected opening. They appreciated at once the lofty influence of these examples, and the reverent respect they always showed was impressed upon every succeeding class. These teachers were in every detail of their lives, what intelligent, modest, and cultivated women should be.

As to dress, so far as example and counsel could do it, the pupils were taught simplicity.

As to habits, they were taught regularity, order, cleanliness, and the self-denial in small matters which would prevent them from annoying one another.

As to manners, the courtesy shown by so finished a gentlewoman as Miss Lyman, not only in all her intercourse with the Faculty and the teachers, but to the pupils, in all the minute details of official and social intercourse, took effect, as no lessons born of foreign travel or intercourse with the world could ever have done. It was courtesy growing out of character and conscience; it was not the mere dictation of custom.

To live with such regularity as Vassar enforced for four years, made it almost certain that these pupils would never fail of that divine blessing for the rest of their lives. Their meals were served at the minute, their rising and retiring were at the proper hours, and sleep was as secure as good health, cheerful minds, and moderate excitement could make it.

Their food was of the best material, of good variety, and most careful preparation. It is not too much to say,

that none of the girls could ever have seen in their own homes such perfect bread and butter, so abundant milk and meat, or simple delicacies so carefully served without interruption for four years.

Their exercise was watched by the resident physician, and every flagging step or indifferent recitation was supposed to have two possible bearings, one upon the goodwill of the student, the other upon some incipient physical derangement.

Their study hours were carefully regulated by teachers who knew what girls could properly accomplish, and when a question arose it was decided in the only proper way—practically. I was present once when a pupil complained to Hannah Lyman of the impossibility of preparing a lesson in arithmetic in the prescribed time. That night Miss Lyman sat late over her own slate, and by going slowly through every process required of the pupil, justified the complaint and corrected the error.

In all table manners and social life, the girls at Vassar had the highest standard constantly before them, and when they went out into the world at the end of four years, they carried into their varied homes wholly new ideas about dress, food, proprieties, and life.

The conditions of a girl's successful growth, we are told, are to be found in—

1. Abundant and wholesome food.
2. Care in all relating to her health.
3. Work so apportioned as to leave room for growth, beyond the mere repair of tissue, and—
4. Sleep.

In no homes that I know in America, are all these points so completely secured as at Vassar.

Every year, about one hundred girls leave this institution, to take their positions in life. Some of them are to be teachers, some mothers, some housekeepers for father or brother, but they will not go to either of these lives, ignorant of that upon which family comfort depends.

Never again will they be content with sour bread or a soiled table-cloth; never again will they mistake arrogant self-assertion for good-breeding, or a dull, half-furnished "living-room" for a cheerful parlor. They have all been taught the virtue which lies in mother earth, and the fragrance she gives to her flowers; they know the health and power given by the labor of their hands and the use of their feet. Fortunately, the girls at Vassar come under few of the precautions required for growing girls* but of those who are younger, it may be said that the impending maidenhood sometimes makes such heavy draughts upon the circulation, that a girl's real safety is found in steady study or persistent manual labor; the diversion of blood to brain or muscles relieving the more sensitive growing organs.

"I have longed to put my word into this discussion," wrote an experienced teacher to me from the city of Portland the other day, "for I hold that hysterics are born of silly mothers and fashionable follies, and I find them easily cured by equal doses of ridicule and arithmetic." The 'arithmetic,' or other severe study that corrects or prevents morbid notions, that diverts a girl's thoughts from herself, her functions, and her future, is in most cases the best medicine.

Of this developing period of life it may be even more safely said than of any other, that "constant employment is constant enjoyment," and this employment, though

* Pupils usually enter at or after the age of eighteen.

steady, must be varied, so as to shift the effort from one set of powers or muscles to another.

I am not one of those who believe that girls require more care than boys through this period, if the laws of life are properly observed in both cases; and I think that when women and mothers come to utter words of the same scientific weight on this subject, their testimony will differ entirely from that of the leading physicians who now hold the public ear.

It is claimed that man is made for sustained, and woman for periodic effort. It is by no means certain that this is so, and if it be indeed a law of organization, then it must be a law which will dominate the whole life. It will not only keep a girl back from mastering her tools until the time for using them is passed, but it will interfere with her steady use of them through her whole life, shut her out from the markets of the world, and unfit her for all steady, consecutive duty, either public or private.

Let no girl be deterred from steady and faithful work in the vain fear that she will unsex herself, and to a loving mother's needful anxieties let not this superfluous care be added. True, we may all make mistakes as to what is desirable, needful, or possible, but to the humble seeker after the right way, a clear sight will always come, and to the preposterous cautions, born of a morbid and unwise interference with the courses of life, I oppose these words quoted from that "physiology of Moses," which it is said that we have not outgrown: "Ye shall not offer unto the Lord that which is bruised or crushed or broken or cut;" these words are true, whether spoken of a dove's feathers or a girl's soul; or the still later and wiser words, "Take, therefore, no thought for the morrow, for the morrow shall take thought for the things of itself."

The foundations of true manhood and true womanhood are fortunately laid too deep for our meddling. It is true that we may destroy the perfume of life, for men and women, by mistaken efforts and perverse guidance, but the fruit of our error is not immortal, and it is never too late to retrieve our false steps.

So far from losing what is best in either sex, as we advance in life, we may be sure that increasing years will find it intensified; that so long as men and women live, they may, if they desire, they *must*, if they are faithful, grow more manly and more womanly. If they draw nearer to each other, as they sit hand in hand looking towards the sunset, it is only because they are both heirs of the immortal, seeking and gaining the same end.

It is impossible to dismiss these considerations without touching afresh the subject of co-education. But we need not rest upon the family fact or the old common school system.

Oberlin was the pioneer in the system of co-education, a system into which she was forced, not so much by fanatical theories as by the cruel hand of poverty. For forty-one years she has held up her banner in the wilderness, and in 1868 I found her with nearly twelve hundred pupils. It was very largely to her men and women that the country owed its safety in the last war. As governors of States, generals of armies, and mothers of families, or teachers of schools, they kept the nation to its duty. From this beginning twenty-five colleges had sprung in 1868. It is nothing to the argument that these colleges may not present as high a standard of classical attainment as Harvard or Yale, if that should turn out to be the fact. For more than thirty years a large number of them have been proving the possibility of co-education,

and their graduates are not the unhappy childless women of Massachusetts, but the happy and healthy women of the West, who are strong in proportion as they are busy, and whose "children are plenty as blackberries." Beside these twenty-five colleges, Antioch has been working steadily for twenty-four years, and in addition to the small institutions scattered all through New York and the Middle States, Cornell has lately opened her doors to the same system. All those who have practical experience of its results know how much wiser, sweeter, and more serene is the life that is shaped by its methods.

It is a subject on which argument is alike useless and undesirable. We must observe and be guided by the practical result.

We are told that public duties are more exacting than private. No woman will be found to believe it. It may be often difficult to estimate the heavy stake that underlies the small duty.

"A man must labor till set of sun,
But a woman's work is never done ;"

and while this distich hints at the truth, it is certain that private life will continue to make upon her as heavy demands as the human constitution will bear. For every reason then, a healthy mind in a healthy body is the first thing to be sought. It is to be borne in mind that the first thing Nature sets us to do, is committing to memory—and experience will show that this is the natural first function of the young scholar. Three languages can be better learned under eight years of age, than the simplest lessons in grammar, arithmetic, or history—unless these are

confined to rules, tables, or dates, which may be most profitably committed, exactly as "Mother Goose" is. I take pains to allude to this, because I think great harm has been done of late by the axiom that a child should not learn anything but what it understands.

This is not true of any of us, young or old. We must learn many things before we can understand one; and nothing is so unsuited to young brains, as prolonged efforts to understand. Intellectual processes differ after we become old enough to understand; not only in the two sexes, but in every two individuals. Of this fact we must take heed, or all comfort will be destroyed and much unnecessary work done.

How then are we to lay the foundations of a sincere education? We must begin with the religious, the moral, and the emotional nature. We must sustain the relations God imposes on parent and child.

We must bring the child face to face with the fact that this is a "hard" world. By that I mean, a world in which difficulties are to be fairly met—not shirked, set aside, or "got round."

To help her to endure this hardness to the end, she must be taught a simple trust in God, and an obedient but by no means slavish deference towards parents, teachers, and elders.

Without this trust and this obedience, every child leads an unhappy and unnatural life; and their existence may be made sure without one word of dogmatic teaching. Having given to the well-poised mind these inward helps, which all true growth requires, we must secure simple food, easy dress, regular meals, and the proper quantity of sleep.

The child is then prepared for the steady work of mind and body which will develop both.

While we do everything to make knowledge attractive and to stimulate thought when the time for thought arrives, we must be careful never to yield to the superficial demands of our people. The Kindergarten, which is refreshment and help to the plodding German child, may become a snare to the light-minded American.

When the period of development arrives, study should be carefully watched to make sure there is no overwork; the character of the reading and the lessons should be guided, so that neither may tend to excite a precocious development of the passions or the senses.

Anatomy may be profitably studied at this period; but just as the specialist turned his patient away from his loaded shelves, lest her own maladies should be increased by a morbid study of their source, I would keep developing girls and boys from a careful study of their own functions.

If they are trained to quiet obedience, they will grow up in health precisely in proportion to the skill with which their thoughts are diverted from themselves to subjects of wider interest and more entertaining suggestion.

In conclusion I must say, that education is to be adapted neither to boys nor to girls, but to individuals.

The mother, or the teacher, has learned little who attempts to train any two children alike, whether as regards the books they are to study, the time it is to take, the attitudes they are to assume, or the amusements they are to be allowed.

CAROLINE H. DALL.

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EFFECTS
OF
MENTAL GROWTH.

“Clear away the parasitic forms
That seem to keep her up, but drag her down ;
Leave her space to bourgeon out of all
Within her.”

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EFFECTS OF MENTAL GROWTH.

A FEW years since, when Mr. Higginson's essay "Ought Women to learn the Alphabet?" first appeared in the *Atlantic Monthly*, and I was reading some of its keen sarcasms to a gentleman just returned from a tour of Eastern travel, he related a bit of his recent experience in the old city of Sychar, in Samaria. There was pointed out to him as an object of great interest and attention, a remarkable girl. She was the theme of animated discussion throughout all the neighborhood of Ebal and Gerizim—the observed of all observers, when she appeared on the street, or went with the maidens of Sychar to draw water from Jacob's well, still the glory of their city. This little maiden's distinction was that she was the first girl in that old city, who, during a period of nine hundred years, had transcended the allotted sphere of woman in so bold a step as that of going to school and learning to read. There had been no special purpose in the act. She had been attracted by the mysterious sounds from the room where boys were taking their first lessons in Talmudic law and lore, and had gratified her curiosity by learning what they meant. "It whistled itself," averred the little school-boy, apologetically, under fear of the rod; so she, another *it*, learned itself.

It was not until the steps of other little maidens were also tending towards school, that the gravity of her transgres-

sion, and the danger of the innovation, were at all comprehended. Then there was indeed an excitement among the orthodox Samaritans. In the opinion of the staunch appellants to the Law and the Prophets, she had transcended the limitations of her sex, and the marital claim, "My wife is my shoe" was ominously threatened. Sychar had not been so roused for ages. The scribes and prophets waited in expectancy to see fire from heaven descend upon a city where such things had been suffered, or to see the young transgressor transformed, by the judgments of heaven, out of the proper semblance of womanhood. But when she appeared in the streets, with her sister maidens, performed her appointed tasks in rank and file with them, talked and chatted as heretofore—though perhaps gossiped less—and bore her pitcher as deftly on her head as ever, the matter began to die away, and she was only pointed out as the one who had *first* sinned. True, the High Priest shook his head and prophesied "The end is not yet." But the fire had caught, and, according to the laws of fire, physical or Promethean, it spread, until between the mountains of blessing and cursing, a dozen Samaritan girls had learned the alphabet.

How far education has advanced in Sychar, what has been its effects upon the health of Samaritan women, or how much it has shaken the social basis, "My wife is my shoe," I have had no very late opportunities for learning; but, judging from the effects of learning the alphabet in other places, I cannot doubt that this innovation, seeing it did not precipitate the world out of its course, has been followed by others, less startling, perhaps, but tending the same way. Be this as it may, this initiate of an educational revolution in Sychar has its lessons for our times.

The Rabbis of the old Samaritan capital saw in this unlooked for seizure of the key of knowledge by the hand of a woman, a second fall, and to them the world again gave "signs of woe that all was lost." This Miltonian cry of woe to the world, through knowledge or privilege given to woman, has been repeated in every age by Rabbis and High Priests, who find the Eden of life in the poet's picture of the human family, before woman aspired to taste the fruit of the tree "to be desired to make one wise;" when there was as yet no misunderstanding of the object for which man and woman each were made: "He, for God only; she, for God in him." That the world was a paradise while man's wisdom sufficed for her who was to behold God only through him, has been the teaching of creeds not yet dead. There is a lesson in the little Samaritan maiden's repetition of the first transgression, as well as in its repetition a thousand times since. He that runneth may read in it this moral of the symbol, legend, or verity of Holy Writ, whichever way we may regard the story of the bite of the apple, viz.: that a desire *to know* was evidently an element in woman's original psychical nature, be it original sin, or otherwise; and correspondingly endowed, as is, just as evidently, her physical organization, to gratify this desire, we may conclude that she will compel some of the educational institutions of the age to her service in its accomplishment.

I am glad that the recent alarm of Dr. Clarke, certainly the most rousing of our time, has been sounded. Rung out from his high tower of professional eminence and authority, it must and does attract attention. It is a cry of "Halt!" and let us see where we are going. So, rude and harsh as are many of its tones, discordant with

truth as we can but believe some of his statements, and more of his conclusions, I am glad it has been sounded. His facts are momentous. Let us heed them, and charge the sin where it belongs. The book will lead to investigations and in the end to an improvement in methods, and a higher, more thorough, education of women. Dr. Clarke thinks "that if it were possible to marry Oriental care of woman's organization to her Western liberty and culture of the brain, there would be a new birth, and a loftier type of womanly grace and force." But his conclusions seem to be that this is impossible, and, since they cannot be united, of the two types of women, the brain-cultured, intellectual women of the West, and the Oriental women, "with their well developed forms, their brown skins, rich with the blood and sun of the East," he prefers the latter.

Two years since I visited some portions of the East, where these primitive Oriental types of womanhood are to be seen. Sometimes in the gardens of a harem, I have seen them, sitting, lolling, gossiping life away, only careful to guard their veiled faces from exposure, no matter if the rest of the body were as destitute of covering as their souls were of feeling, or their brains of thought. I saw more frequently another class of women—those from whom poverty had rent the veil—some still clinging to a filthy rag, or diverting a more filthy shred from the tatters of their garments to cover their faces, because, as a sheik explained to me, "cause she shame she's woman." Desiring to compare the length of the life of woman, under such conditions, with that of life which we have been wont to call civilized and enlightened, I often inquired the age of women whom we saw, and was surprised at being as often assured that women whose furrowed,

wrinkled faces would indicate that they were sixty, were not more than thirty-eight—at most, forty years old. Most Eastern women that I saw, exemplified the “Oriental care of woman’s organization” by abandoning their own to a mere animal vegetation. They had borne children innumerable. These swarmed upon us from fissures in the rocks, from dens, caves, and old tombs in the mountain sides—a scrofulous, leprous progeny of wretchedness, with a few fairer types, to which some principle of “natural selection” had imparted strength to rise above the common conditions of life.

I had also some opportunity to see the “Oriental organization of woman” under process of mental culture, in schools something like our own. Especially anxious to learn all that pertained to progress in education in the old cities in the East, I sought every opportunity to visit schools, Mahometan, Christian, and Jewish, under the old or under the more modern *régime*, and at the risk of being set down as a true American inquisitor, I pressed questions in every direction that would be likely to be suggested to a practical teacher, studying the problem we are here trying to solve: “What is the best education for our American girls?”

The best schools that I visited are those established within twelve or twenty years some, quite recently, by the Prussian Protestant Sisters or Deaconesses, who have had a rare and severe training for their work—physical, mental, and hygienic. In these schools, also, are to be found pupils from the better classes of the people, though they often have an orphan department attached, into which the neglected and wretched children are received, kindly cared for, and educated. In the opinion of these teachers, mental development is the source of health to

their pupils, and they invariably spoke of the improving health and vigor of their girls under school training. They come, often, miserable and sickly from the neglect or abuse of ignorant mothers. Many such were growing healthy. The inert were growing active and playful, the deformed, greatly improving. One teacher said that to see the girls under her care inclined to any active play, until they had been in school months, sometimes years, was very rare. This inertness was more difficult to overcome in girls from the higher than the lower classes, for, in addition to an inert physical organization, a contempt for labor, with which they associated all exertion whatever, was born with them; and only through a long course of training—not until their brains began to take in the meaning and pleasure of study—could they throw it off; To rouse a girl and find out what she looked forward to in life, she had often asked her, “And what do you intend to *do* when you leave school?” “Oh, sit,” had been many times the answer she had received. “Sit,” which meant, she said, to wait and get married.

At Beyrout I visited several very interesting schools. The Superior or Principal of one told me she had been associated, in her preparatory course, at Kaiserwerth, with Florence Nightingale, for two years; and she described to me the discipline of that institution and others, where these teachers and nurses are trained. It is a discipline of severe study, accompanied by nursing, watching, hospital practice, and sometimes the hardest drudgery of work. She had often seen, she said, “Miss Nightingale, a born lady, on her knees scrubbing floors. But there was no distinction of persons in these institutions. Those who came to them looked forward to lives, not of ease, but useful work, and they must be prepared

to bear hardness as good soldiers." "But Miss Nightingale has broken down; may not the severity of this discipline have been one cause of what she is suffering now?" She did not think so; they had all had a training just as severe as hers, the sisters here, in Jerusalem, Smyrna, and everywhere, and they were well and strong. But there were limits to human strength and endurance; and Miss Nightingale's work in the Crimea, performed under such conditions as it was, had transcended what the human organization could endure—cold, hunger, foul air, insufficient and unwholesome food, with such incessant work, watching, and nursing, that no human being was proof against it. It was a miracle what Miss Nightingale had withstood before she broke down.

But these sisters wear no long or heavy dresses. Their uniform is a simple dark-blue-and-white calico dress—skirt neither long nor very full, sleeves close, yet allowing perfect freedom in the use of the arm, a simple white collar and apron, and cap of shining, spotless whiteness. Their shoes, too, are after the pattern of those which, we are told, are always worn by Florence Nightingale—with a sole as broad as the foot they were made for, and fitted to the natural shape of the foot. The food, the sister said, at Kaiserwerth, as in all the training-schools, was "nourishing, but very simple." Such facts are worth noting. If they were accompaniments of our system of education, I do not believe that American girls would break down under the brain-work that any University course for men, in our country, imposes. As to the item of shoes, who does not know that a great deal more work, and better, can be performed in shoes that fit, than in such as tire the feet? And this is scarcely less true of brain-work than house-work. I believe that the shoes

worn by young girls and young women now, are a great cause of nervous irritability, and, joined with other causes, may be a source of disease, "nervous prostration," so called in after life. I have heard women say many times, "Nothing in the world will bring a sick-headache on so quickly as wearing a shoe that hurts my feet." The oft repeated words have led me to watch my pupils in this respect carefully, and to study shoes and their effects, as among the evils which certainly ought not to be charged to brain-work, *per se*, nor to our school system, in general. It also made me take especial note of the shoes that the Deaconess sisters wore as a part of the dress in which, through long practice, they learned "hardness," and came out strong and healthy, but not the less accomplished, charming women.

The school at Beyrout, under charge of these sisters, is probably one of the best in all the East. I was conducted by the lady Principal through every department. In one room an Arabic Professor was engaged at the black-board, instructing a class in studies pursued in that language. In another part of the same room, young ladies were reading to a lady-teacher an oration of Demosthenes in classic Greek. Another class was reading critically a portion of Milton's "Paradise Lost," and yet another was engaged in preparing a French lesson. With all these classes the lady sister spoke in the language under study or recitation, as did the teachers of each class; with the exception of the Greek class, in which, the sister said, the pupils were taught to read the classic Greek, but allowed to speak the language as now spoken, as they had many pupils to whom this was their native tongue; but they ought to be able to read the works of their great men of another age. In another department

I heard the same sister speak most beautiful German. This was her native tongue. Italian was also taught, and I heard it fluently spoken. It seemed to me that their course, though different, required nearly as much study as ours.

At the hotel, where I remained ten days, I made the acquaintance of two young ladies, of Greek and Armenian parentage. They had been in this school for several years and were still pursuing their studies. They spoke half a dozen languages, English, they said, the most imperfectly of any, but I have never seen an American girl who spoke French or German, when she graduated, as well as these girls spoke English, and their drill in music was quite as severe as that of American girls. They were taught arithmetic, but not to the extent that girls are in our schools. Physiology was also a part of their course. They were not so unctuously fat as many of the entirely idle women of the harems, whose object in life is to "sit," but to us, who are wont to call that a "well-developed form" which would seem to adapt its owner to do something in life, rather than to sit an existence through, their physiques would indicate more vigorous health than those of the "grave Turk's wifely crowd," which Dr. Clarke wished he could marry to the "brain-culture" of our women. Their faces were still "rich with the blood and sun of the East," and I should pity the American who could find a loss in the exchange of the "unintelligent, sensuous faces" of the harem drones for the soul-light which, through brain-culture, beamed from the eyes of these Oriental young women.

In this school they had advanced to an innovation beyond anything to which the teachers had been themselves trained in Europe—quite beyond anything in the

East, even the mission schools—the experiment of co-education, in the primary department, where a few boys had been admitted. Here I saw a daughter and a son of the Pasha of Syria in the same room and in the same class. “And how does this system work?” I asked. “Well;” the sister said, “admirably; it is especially good for the boys, who, in this country, are so arrogant and overbearing. They are born with a contempt for girls; and begin, when they are but little things, to lord it over them. But it has a wonderful influence to humble their pride, to find the girls fully their equals, as they are, in their classes.”

Dr. Clarke says, that “the error of the co-education of the sexes, and which prophesies their identical co-education in colleges and universities, is not confined to technical education. It permeates society.” That it does so, is true, but that it is always an “error,” we should not so readily admit, as one of its permeating effects upon society in Beyrout, may illustrate. In one church, through conformity to Oriental prejudices against any sign of equality between men and women, the sittings designed for the men on one side, and the women on the other, had always been separated by a heavy curtain drawn between them. Reaching far above the heads of the worshippers, even when they should be standing, it had formed a complete partition wall, dividing the church up to the space in front of the preacher’s desk. But this curtain had, within the last few months, been removed, and the minister was now, on Sundays, dispensing a straightforward gospel, the same to men and women. Thus was the co-education system in the school already permeating the church! This was noticed with surprise by a missionary whom I had met on the Mediterranean,

returning, after two or three years' absence in this country, to his former mission field, and who entered the church, for the first time after his return, with me. "Ah!" he exclaimed, "this denotes a great advance in Christian sentiment! This is as it should be. And how does it work?" he asked of the pastor of the church, in delighted surprise. "Admirably," was the reply. There was some remonstrance on the part of some of the older men at first, but even they did not seem to think anything about it any longer, and it was so much more agreeable preaching to the people all together, than to have his congregation separated by that high wall of a curtain, and to seem to be dispensing one kind of gospel to the men, and another to the women, of his church. Yet I had heard this good man, in a conversation with brethren who had come down to Joppa to meet him on his return, discussing with severe reprobation "this absurd woman movement" in America, "opposed to Christianity," "unsettling the churches," "pervading society in a thousand ways," "subversive of social order and refinement;" and, as one of its most ridiculous, almost monstrous effects, "putting into girls' heads the idea of going to college with the young men!" So little did he recognize as one impulse of the wave of the "woman movement," what he had but now been so heartily commending! So often is the Babe of Bethlehem nurtured by those who, seeing him as he is, a fair and beautiful child, welcome and worship him; but who, looking through the mists of prejudice, especially fearing through him some subversion of their power, position, or interest, cry: "Away with him! crucify him! crucify him!"

At Beyrout I had several conversations with a most intelligent Armenian gentleman, from Constantinople,

occupying an important governmental position. Having under my charge several young ladies travelling for study and instruction, our conversation very naturally turned upon our American educational systems, about which he was much better informed than many members of our public school boards. He had read our school reports, and his knowledge of our methods, courses of study, etc., surprised me. He discussed them, especially remarking upon the broadening influence of the increasing attention paid to the sciences in our schools, and the comparative effect of the positive sciences and the languages upon national character. And could it be possible that young men and young ladies pursued these studies together, he asked. The school reports which he had read would indicate this, yet he could hardly believe it possible. I must pardon him if he had seemed to observe the young ladies too closely, but he had been interested to study the influence of our ideas of education upon the first American girls he had ever met. And I could not imagine how the difference struck him—how it struck all Eastern men. Their freedom, their energy, their companionableness, was so different from women of the East. “And yet, they are perfectly modest!” he said. He had observed their anxiety to visit places of historical interest, getting up early in the morning and walking a long distance to do this. He had seen elegant, pleasing women in the East, women of graceful manners—the Eastern women were often that—but he had met few educated women. Their women were trained to please, but they were never educated to be a man’s intellectual companion. No Eastern man ever thought of a companion in a wife. But stopping thoughtfully for a moment, and seizing one of our idioms in his hesitating

English, he said, "Yet I can't see for the life of me why it would not be better that she should be."

This was the frank, involuntary utterance of a cultivated man, brought suddenly, for the first time, as he said, to consider the question of the education of women, an elemental half of humanity, in the unbiassed, comprehensive view of the subject that can alone lead to a just decision. He was an Eastern man, outside of the turmoil and interests of the discussion. No personal or professional craft lurked unrecognized behind his conclusions to give them a bias. With him it was a question of social science, general human happiness and welfare. With us, however, where it has become a practical question touching domestic, social, and professional interests, its complications multiply, and it is exceedingly difficult for the most honest and unselfish occupants of place or privilege, to look at it without touching, in some of its intricacies, the question, "Does not space for her to bourgeon," imply restricting me and mine?

The old Chinese wall of prejudice, surrounding the subject of woman's education, from which there are so many out-comes, is not broken down yet. We only learn how strong it is when we come to some new point in the siege or defence. Sermons that have been preached at learned women, and jokes perpetrated at their expense, are still issued in modernized editions, and scare and sting as of yore. It is quite curious to note how the style changes, but the thought remains the same. Our fathers planned our earliest educational institutions according to the best they knew. Our mothers economized and hoarded that they might leave bequests to colleges and theological schools, where their sons could be educated; while their daughters picked up such crumbs of

knowledge as they could find. Both wrought their best, according to the light of their day, but the shadow of their fuller eclipse extends to us. Calvin's requirements in a wife were with them as weighty to determine woman's status in society as was his "Five Points in Theology," their creed: "That she be learned is not requisite. That she be beautiful, only that she be not ill-looking, is not important. But she must be of sound health, that she may bear me children. She must be industrious, economical, obedient, and know how to take good care of *my* health."

This was the summary of what women needed to know and be, in the opinion of one regarded by our fathers as a law-giver, entrusted with the oracles of God. An old manuscript copy of a sermon, esteemed fifty years ago so rich in thought as to make it worth transcribing, to keep among family treasures, lies before me. From it, among more piquant instructions, I copy a sentence: "But if thou wilt please God, take much pains with thy heart, to make it stand in awe of thy husband. Look, therefore, not on his qualities but on his place, for if thou despisest him, thy contempt redounds upon God." "When a woman counts herself equal with her husband, though he be of meaner birth and smaller capacity, the root of all good carriage is dried up."

In proof that we have outlived only the form of such sentiment, I recommend the reading of Part VII. of Mr. Hamerton's "Intellectual Life," a very recent publication, and, the reviewers say, "a charming book."

In a discourse on "Women and Marriage" he says: "It appears to be thought wise to teach boys things which women do not learn, in order to give them a degree of respect for men's attainments which they would

not feel, were they prepared to estimate them critically." This educational policy and its workings Mr. Hamerton illustrates by numerous examples. He says: "The opinion of a distinguished artist was that a man devoted to art might marry either a plain-minded woman who would occupy herself exclusively with household matters, and shield his peace by taking these cares upon herself, or else a woman quite capable of entering into his artistic life. * * * And of the two kinds of women which he considered possible, he preferred the former, that of an entirely ignorant person, from whom no interference was to be apprehended. He considered the first Madam Ingres the true model of an artist's wife, because she did all in her power to guard her husband's peace, and never herself disturbed him, acting the part of a breakwater, which protects a space of calm and never disturbs the peace it has made."

A woman too ignorant to wish to comprehend her husband lest she should meddle in his pursuits, and who should find her crumb of the happiness that human life and family compact ought to yield, in "acting as a break-water" to protect him, and "never disturb his peace," was a great artist's view of the education needed by a woman! To this I would oppose my more humble experience, but I am sure there are women enough who would add theirs thereto, to make the sum equal in weight to that of Mr. Hamerton's artist friend. Among the women whom I have known in life, the most highly intellectual have been the least meddlesome; for the very good reason that they have been too busy with the work of their own brains to meddle with what concerned other people. Nor have such women been less the helps, fitted, if need be, to act as "break-waters" to protect the calm

of a man engaged in any great work. On the contrary, the discipline acquired in study and thought has been turned to account in this way, as well as in any other.

Mr. Hamerton gives another friend's view of the education needful for a woman,—“one of the most intellectual men he ever knew,” but “whose wife really knew nothing of his intellectual existence whatever.” His theory was “that women ought not to be admitted to the region of masculine thought; it is not good for them.”

So Dr. Clarke evidently thinks, and thinks he proves it physiologically. The existence of the terrible evils he depicts is not to be doubted; and she would be less than a true woman who did not protest, by precept, preaching, and example, against the follies and sins of school or social life that induce such evils: but that it was eating of the fruit of the tree of knowledge—“persistent brain-work” even—that furnished Dr. Clarke's cases, “chiefly clinical,” an experience of teaching extending over forty years would forbid me to believe.

As a woman, I have heard the smothered cry of woe as pitiful, of suffering as great, from those who prayed for death as a relief—though it was not from suffering of the body—as any that Dr. Clarke describes.

In our pity for physical suffering, some may well be reserved for the soul of her who

“Sighs amid her narrow days,
Moving about the household ways
In that dark house where she was born.”

Indeed, the supposition of Dr. Clarke that psychical influences may have caused diseases which he describes, casts light upon some sad cases of invalidism which I have known, and where disease may quite as probably

have been induced by soul-loneliness—intellectual starvation—as by the brain-work which, in his cases, he assumes to be the cause.

In the new education which is preparing for our girls, I trust regard will be paid to training physicians for the souls of women, as well as for their bodies, and there will surely be needed that very “feminine subtlety” that divines, if it does not reason out, a cause. “I believe in educating women to be physicians since I have read that book, if I never did before,” has been the exclamation of many women who have read it. We want women physicians, educated to habits of thinking, logical, as well as physiological—capable of tracing psychical, as well as physical, causes. We want teachers so educated, women drawn to study the science of teaching through a love of it, as Florence Nightingale was led through seven years’ preparation for her work—as a naturalist or an artist is drawn to his work. We want women on our School Boards and among our visiting committees, who know how to estimate the trust committed to them, and who will give time, thought, and study to their duties.

The science of education is, to-day, where the science of geology was fifty years ago. We are just beginning to think of it as a science. Men and women are waking up to its demands. Children, with their infinite variety of organizations, temperaments, and idiosyncracies, can no more be educated at random than plants, gathered from the four quarters of the earth, can be perfected through the same culture, and in the same climate and soil. Each child in the great crowd that gathers in our schools, is in some respects like a particular musical instrument, designed by God, in its complicated mechanism, to perform its particular part, to yield its own par-

ticular tone in the diapason of life ; and I shudder when I think how rudely it is often played upon by untaught teachers—teachers who have drifted to their work, or resorted to it as a temporary occupation, for its profits, but who have never thought of studying its principles, as physicians, lawyers, artists, study the principles of their professions. Played upon by the unskilled hands of those who have never troubled themselves to study the physical, much less the psychic delicacy of this wonderful human instrument, the only wonder is, that society should yield the harmonies it does. No! women need to think more, not less ; to increase, not diminish brain-work ; to overlive the drudgery of it, whether it involve teaching, writing, study, the work of a profession, or house-work, by breathing into it the living spirit of love, which sanctifies and ennobles whatever the hands or the brain find to do.

As regards different methods of education and their results, the old New England Academies may furnish some useful lessons. These began to be established from fifty to seventy-five years ago, and are now mostly displaced by Union and High Schools. But they were the initiate of a very important revolution in the status of the education of girls. In their earliest educational plans, our fathers had not taken their girls much into account. But these academies, though not planned with any special reference to giving the girls of the New England villages and the rural districts the opportunities of education, at once established a system of co-education, where the girls and the young men met on terms of as entire equality as any co-educational plan has ever since contemplated. The academy edifice was most frequently built by voluntary subscription from persons of all religious

sects, and the school was in charge of trustees, so chosen as to avoid any sectarian bias or rivalry in its management. The building generally crowned some hill, or stood in the midst of a grove where spacious grounds could be obtained. The school was usually under charge of a gentleman teacher—some college graduate—and a lady assistant. The course of study, aside from a course designed to fit young men for college, was largely elective. These schools were as perfect educational republics as can be imagined. The young men and the young women met in their classes, on terms of entire equality and respect for each other. There were few rules in the school, and as to government, the pupils were mostly put upon their honor. The course of study was frequently identical, and with the exception of the Greek—sometimes the Latin—designed to fit young men for college—largely so.

My own course was precisely that of the young men in every study, though Greek, to which I was persuaded by my minister, led me through a cruel martyrdom of jokes from my companions. Repeating at school what their mothers said at home, they even then satirized me with proposals to get up petitions to open the doors of our State University to girls “who wanted to be men.” I felt these jokes so keenly, that at first I pursued my study of Greek covertly, reciting out of school. But, cheered by my minister’s encouragement, I lived down jokes, and went into the class with the young men, kept up with them, and continued the study until they went to college, and beyond, until a call from one of our Female Seminaries for a teacher “who had been educated by a man,” broke up a course that I would have been glad to have extended through college. And

that without "wishing to be a man," without wishing for anything but to gratify a love of study, which was just as natural to me as to those I had thus far studied with. The daily hours of school were more than in our High schools, and we had recitations always, as usual, up to twelve o'clock on Saturday, while the number of recitations a student was allowed to have, nearly always exceeded the number allowed in our High schools. I have never in any schools known more thorough and persistent study than was performed by students in these academies, and the standing of the girls was invariably as high as that of the young men. Such recitations as we had in History, Moral and Intellectual Philosophy, were like a life elixir; we went from them, not wearied, exhausted, but rested, exhilarated. We had gained bodily strength as well as mental clearness and force. They had infused life.

And where are the girls, who, forty, even fifty years ago, made trial of "persistent" study, of the dangerous system of co-education in the Academies? There has surely been sufficient time to test its physical effects on them. Where are they? Scattered throughout the world, a host of noble women, many of them doing brain-work still.

If my limits would permit, I could give the history of scores of them who were educated mostly in those academies, and who have continued study and brain-work ever since—who have borne children, reared families, and are yet strong and healthy, far beyond the average of women who have lived in ease and idleness—quite as healthy as women devoted alone to domestic cares.

The invalids on a long list of old associates which Dr. Clarke's book has led me to call to mind and look up, are, I have been surprised to find, among those who

did "run well for a time," but they have turned back and ceased mental labor. Some have fallen into worldliness and a fashionable life, and are broken down under it. Others, restricted to some narrow creed of thought, have not dared to open their eyes to the light of any new day that is dawning on the world, until, ceasing to grow, they have, according to a law of nature, fallen into decay, invalidism, and "nervous prostration." Bringing this subject before several experienced persons, teachers, and one a physician, in the light in which I have aimed to bring it before my readers, I have asked, "And were these cases of invalidism (cases of which we have been speaking) from your best scholars? Were they, in short, persons still continuing to grow?" Stopping a moment to think, they have, in two instances at least, given precisely the same answer: "I never thought of that before, but they were not."

There are some other things that characterized methods of study in those academies of forty or fifty years ago, that may instruct us. While the girls studied harder, had more recitations, extending through more hours in a day than are required in any of our High schools, they seldom studied in school, but at their homes or at their boarding places. This gave them freedom of position, liberty to sit or stand or walk, when they were at work on a difficult problem, or engaged in close thinking—an advantage which any one who has been a close student in later life, must appreciate—an advantage which I have recently heard young ladies in our university say, they could hardly conceive of before they went to the university from the high school where they fitted. This also led them almost every hour into the open air, and to take a little exercise, as the girls in our university and

in some of our colleges are forced to do, effecting a visible and marked improvement in the standard of health among the girls in the university above that of the girls in the High schools. www.libtool.com.cn

Again, they had seldom more than one flight of stairs to climb; nor were they, in climbing these, burdened with skirts that weigh five, six, and even seven pounds, such as I know from actual weight, carefully reported, young girls of the present time sometimes wear in climbing three immense flights of stairs! Let any woman undertake this with her arms full of books, her hands tied in holding them, so that she cannot clear her feet from her long, heavy skirt, with its manifold flounces switching about them, while she is laboring to lift them with a movement of her hips and pinioned arms, and yet feels herself liable every instant to be thrown from her balance by all this encumbrance—let her undertake this, and she will learn that there is something besides study that is endangering the health of our school girls. Again, let her take her stand at the top of one of these long flights of stairs—the last in the building, perhaps—reaching up to the floor where the High school rooms are almost always located; let her watch the flushed faces of a class of girls coming up to recitation, note the palpitating, almost breathless efforts with which some of them achieve the last few steps; and when they have accomplished this, see here and there one clinging to the post of the balustrade, or leaning speechless against the wall until she can recover breath to proceed another step; let her do this, and she will get another insight into the causes of invalidism among the girl graduates of our schools. “How can a mother rest when she doesn’t know where her boys are?” we often hear asked. How can a mother

rest when she doesn't know where her girls are, or by what dangerous steps they have gone where they are? How can she rest? Simply, in most instances, because she has not herself been educated to any comprehension of the danger her child is in.

Neither did school-girls, in that earlier time, perform their brain labor under an outside pressure scarcely less than that of one of those iron helmets which one sees in the Tower of London, and which, the guide assures us, with an emphasis implying that he does not expect us to believe it, were actually worn by some Knight at the battle of Cressy, Agincourt, or some other which resulted in victory to the English. And how those old warriors did bear up under a head-gear weighing ten or twelve pounds, to fight the battles of their age, I have been best able to comprehend when I have seen what girls of our age can bear up under and live at all, much more, study.

I have a friend, an old pupil, a truly intellectual woman, who has not broken down under much more brain-work, since she left school, than she ever performed in school. Her husband greatly enjoys her intellectual tastes, and, without stint or jealousy, encourages them; only he would not have her "odd," nor so very different from "other ladies of our acquaintance." He would have her study; he "doesn't believe a woman should fall back in her intellectual life any more than a man." He would have her paint, and practise, and study; and since he provides abundant help, he thinks she may. He will buy any book, or set of books, to aid her; but he would have her wear her hair as "other ladies wear theirs, and not give occasion for all those flings about women who want to know so much," and go with their hair about their faces and themselves at "sixes and

sevens," generally. "And why can't she wear her hair put up?" "Sit down, and I will tell you why," she said, one day, rather out of sorts; he did not yield very ready compliance. But she persuaded him to permit her to illustrate her "why." He sat down, and she began by twisting his abundant curls into a knot as tight as could well be held by a strong hair-pin. This was the "underpinning" on which to rear the structure. So, with "switch" upon "switch," and "braid" surrounding "braid," a "frizz" here and a "frizz" there, with a few bows for capitals, and a few curls for streamers, and twenty-four hair-pins for fastenings and bracing-rods, the tower was finished, in less than half the time, as she assured him, owing to the advantageous position she enjoyed in her work, that it would take her to rear the same structure on her own head, and it was precisely like what other ladies of their acquaintance wore.

"Good gracious!" he exclaimed, "you do not pretend that women wear all this false pile on their heads!" "Yes, I not only pretend, but solemnly assure you that I have not exceeded by a braid or a curl what most of the ladies of our acquaintance wear on their heads." "Well, what do women want to be such fools for?" he asked impatiently. "What did you want me to be such a fool for?" she answered. "Well, take down the thing and let me go," he said, "you may wear your hair as you please, I have learned *why* enough for one day." "No, stay and let us read that chapter of Mill on 'Liberty' that we were going to read together sometime," she said. "Liberty! I think so. I wouldn't wear that thing half a day for all the profits of my business for a year!" "Well, then, we'll let Mill go, for I think if I have taught you *why*, with all that toggery on my head,

I can't do anything, I have done enough for one day," she said.

Think of a girl thus burdened working through a problem in mathematics, or arranging, in her mind, an analysis of it, which will be called for in five minutes; or, of her thinking over, so as to give clearly, with its heads and deductions, an abstract of a chapter in some branch of science! She will say, perhaps, that "one gets used to it and thinks nothing about it," and she thinks, no doubt, that what she says is quite true. But go to her room in the evening after the world is shut out, and you will, in all probability, find her with her wrapper on and her "braids" and "switches" off, and she will tell you, without thinking, what is nearer the truth—that you must excuse her, but she has a "hard lesson to get, and she can study so much better in this way, when she feels perfectly comfortable." A straw will tell which way the wind blows, and straws of hair-pins, during months of pain and feebleness, may, in after life, tell which way the wind has blown.

Just in face of some of these hindrances, in the way of the higher education of our girls, I place some reports from schools and colleges which I have received. The following is from a teacher of high reputation, Superintendent of Public Schools in one of our large cities, a gentleman who has studied the science of teaching as few have done, and added to the usual attainments of a college graduate, studies which would have given him a right to practise as a physician. He has now been engaged in his profession, without a term's remission, for thirty years:

"It is not hard study that breaks down the health of our girls, but the circumstances under which they study,

the demands of society and its thousand social follies, with all their excitements. It is the foolish ambition of parents to have their daughters accomplished before they are out of their teens, often allowing them to carry on five or six branches at a time instead of two or three. These, and some other like causes, as I think, do more towards breaking down the health of girls at school, than much study. The ability on the part of the girls to master the several branches, is fully equal to that of the boys, and when an amount of study is reached that is injurious to girls, we have gone as far as is profitable for boys. Boys also break down in study, from some of the evils of society. As to co-education of the sexes, my experience, observation, and reading, all convince me that it is the best way. If there are incidental evils in such a course, they are only incidental, and I can find those of equal, or, I think, of greater magnitude in separate schools."

Michigan has tried the experiment of co-education perhaps as thoroughly and extensively as any State in the Union—as any territory of equal extent in the world. Her six colleges, her University, her Normal school, all her higher institutions of learning—with the exception of the Michigan Female Seminary, on the Mt. Holyoke plan, and some young ladies' private schools—are open to young men and to young women on the same terms. There are no separate roads for the sexes up the Hill of Science, from the lowest primary, to the highest professional school. Kalamazoo College, against the opinion of many educated and educational men, admitted women to a full curriculum, twenty years ago. And classes, about equally divided, have been graduating from the college ever since, confirming the authors of the move-

ment and the whole Faculty, during these twenty years, in the practicability and the many advantages of the plan. The young women have always averaged as good scholarship and health as the young men. A smaller number of women than have abandoned their course on account of ill health. During the period of my own connection with this institution, many young women pursued there an extended elective course of study, who did not graduate. It was not their plan to do so when they entered the preparatory department. Many graduated from a course quite as extensive, requiring as persistent study, though not in all respects like that of the young men. They did not usually study Greek, though some did, and were leaders of their classes. They did not pursue Latin quite so far, but more than made up for this in a far more thorough study of French and German, History and Literature. There is scarcely a week in the year but I receive communications in some way from some of these old pupils. They are among my most enjoyable, intellectual, and literary correspondents. With few exceptions, they are *growing* women. Having learned how to learn—which they will all remember, was the most I ever professed to be able to teach them—they have instituted schools for themselves, compelled sometimes very hard circumstances to become their best teachers, and learned to draw lessons, as Mr. Emerson once said in a lecture to them, from “frost and fire.”

Some have learned to use the world as not abusing it, and are turning wealth and its advantages that have come to them, to useful, noble purposes. A few, but very few, of the large number, are invalids, but there is not one whose case does not furnish me with abundant evidence of many more probable causes of invalidism, than over-

study. There is not one, of whom I have heard, whose case does not wear on the face of it decidedly other causes than "persistent study."

Dr. Mahan, who was the first, and for fifteen years, President of Oberlin College, has since been for nearly as long a period the President of Adrian College, in this State. He says that, during his connection with Oberlin, the proportion of young men to young women who entered upon the course, and failed to complete it on account of failure of health, under the strain of thought and study, was at least *two to one*. The proportion was not quite so great in Adrian; but many more young men than young women—and, as far as he was acquainted with colleges, everywhere—succumbed under the change from their former life to one of study.

Dr. Mahan also says that, owing to the peculiar circumstances under which Oberlin College was established, he has, through subsequent years, maintained a far more familiar acquaintance with his former students than is common for old teachers to do; and that he can count many more broken-down men, among his old graduates, than broken-down women. It would be impossible for one now to conceive the obstacles in the way of the girls who were first admitted to study at Oberlin. Every step was achieved through a moral battle with public opinion and popular prejudice, the depressing effects of which cannot now be estimated. And yet they did go through—stood as high during their whole course, and in their graduating exercises, as the young men. They are all of them married, mothers of families of children, and are strong and healthy, far above the average of American women.

During almost thirty years that he has been president of college faculty meetings, he has never *once* heard, from any member of the Faculty, any intimation that the girls in the class were in any way whatever a drag upon the class. They invariably keep up, and oftener come out ahead than they lag behind. Nor is this more characteristic in one branch of study than another. Languages, science, philosophy, they grasp as clearly, strongly, and comprehensively as men; and as the result of his observation and of his experience, which, he says, in co-education in a higher course of study, has perhaps been greater than that of any man in the world, he thinks that while it is just as much better for men to be so educated as it is for women, the result to the latter is to make them more practical, more natural, less given to effeminate, rather than feminine affectations, and more readily adaptive to anything life may demand of them than any class of women he has ever known. Also, in the particular of health, he has carefully observed the effects of close and continued study, not only during the course, but in subsequent life, and he will risk his reputation for truthful statements, in saying that he believes—that he knows—the most careful statistics would show among the women who are college graduates, whom he has known, a higher standard of health than among the same number of women from any class of society—working women, fashionable women, or women of merely quiet, domestic habits. And yet, “every well-developed, well-balanced woman who is a graduate from our colleges has actually performed one-fourth *more* labor than a man who has stood by her side, and she is entitled to one-fourth more credit.”

A girl should be as free to choose for herself as a boy

is. She can never truly know herself, nor be known by others, as the power in the world, greater or less, which she was ordained by God to be, until these thousand restrictions that limit and dwarf her intellectual life are removed.

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“ Let her make herself her own
To give or keep, to live, and learn, and be
All that not harms distinctive womanhood.”

I have recently been assured by one of the best students that have ever graduated from our University, and by another who graduated from Hillsdale College in this State, from precisely the same course as the gentlemen students, that to girls of average capacity, the college course, all that is required of the young men—and all that *they* are accustomed to perform—is not by any means difficult, and will not over-tax any girl of average health and abilities, who is properly prepared when she enters. But the trouble is that while girls like the studies in the regular course, and study with a real relish, they want more. They are not satisfied with the French and German of a course, they want to speak and write these languages, and add extra private lessons to those of the regular classes. The few lessons of the course in perspective drawing have, in some, awakened an artistic taste, and they want to pursue drawing farther. There are better teachers to be found in the vicinity of a University than they will find at home, and they are constantly tempted to do too much. A number of girls in the literary course of the University attend the medical lectures in certain departments, some teach students who are “conditioned” in certain branches. From all the colleges, the report in this respect is the same—girls can

easily do all that is required of the young men, but they will do more. And yet the report from every college is—*more young men break down during a course, and are obliged, from ill health, to abandon their studies, than young women.* This certainly does not threaten danger to girls who attempt only the same that the young men do. The tendency in our colleges towards elective courses of study is in the right direction to remove the dangerous temptation into which girls are liable to fall—of taking studies outside the course. I hope to see even greater freedom of choice.

From a woman, a mother, and lover of little children, a few words about school buildings and school methods may not be out of place.

Americans are proverbially giving to boasting. People of the older world tell us that this is an expression of our undeveloped youth—a kind of *Sophomorism* denoting that we are yet not very far advanced. Be that as it may, I have observed that there is no more common subject for boasting than our schools and our school system.

“There are our King’s Palaces, where we are training our future monarchs! Those are the towers of our defence—the bulwarks of our republic!” I heard a western Congressman exclaim, as the railway train whizzed past one of those immense school edifices which so closely dot the area of many of our western States, that one scarcely loses sight of one ere the high towers and ornate roofs of another come into view. “I will acknowledge that I am proud—feel like boasting, when I can point a foreigner to such buildings as those, and tell him they are but our common free schools, open to every child in the land, rich and poor, alike.”

The friend addressed, an intelligent, shrewd, naturalized Scotchman, replied that he was "a little old foggy," he supposed, but that those great high buildings, where six or eight hundred children were gathered in one school, were like great cities, where too many people were gathered together. School life, no more than city life, could be healthy, nor just what life ought to be, under such conditions. To carry out these great union school plans, made a necessity for too much machinery. This it was which was grinding out the education of our children, rather than developing thought, and the result would be machine education. He said that school was a continual worry at home. One child was kept after school one day for one thing, and another the next day for some other thing, and there was a deal of worry and fretting about how they were marked, and a good deal more talk about the marks for the lesson, than there was about what was in the lesson itself. One little girl, a delicate lassie, they had been obliged to take out of school. The child didn't eat, couldn't sleep, and was getting in a bad way altogether.

"There is no more color in L—'s face when she is getting off to school in the morning, than there is in my handkerchief, she is so afraid of being marked," said a mother to me a day or two since. "Yesterday morning was especially one of trial to the child. I wish you could have seen her when she got off, or rather when she got home at night, and have heard her story. I had charged her not to hurry so, but come back if she was going to fail; I would rather she would lose the day than to gain her school through such an effort." The child reached the school, and came home at night to tell how. Rushing into the house, the delicately organized, nervous lit-

the girl exclaimed: "Oh, mamma, I did get there; and the best of it was, I overtook G— S— (another as delicate child); she was as late as I was, and we both ran every step. We managed to get our things off in the wardrobe and get into our seats, but G—— could not get her mittens off; and when she at last dropped into her seat, she put both hands up to her face and burst out crying as loud as she could cry. Oh, I did feel so sorry for her!" The effort of getting to school, the fear of the marks, had thrown the delicate child into hysterics, given her physical system a shock, and made demands on her brain that a year's study could not have done. I could fill a volume, as could any observing woman, with instances like this—the occurrences of every day in the year. They cannot, perhaps, be helped. Teachers are not to be blamed for them. Six or eight hundred children cannot be hindered for one child. All are tied to too much machinery.

In some of the public schools which I have visited in Germany, the lessons for children eleven and twelve years old seemed to me more difficult than the lessons set for children of the same age in our public schools; and our children are not in school nearly so many hours in a day as the children in German schools, which are so often referred to, not only as model educational institutions, but conservators of health as well. Children in Germany go to school at seven o'clock in the morning. In very early morning walks, I have often met scores of German children, with their little soldier-like knapsack of books strapped to their shoulders, and have stopped them to examine their school-books, and inquire about their schools. In a little valley in Switzerland, seeing a bevy of children starting, so many in one direction, be-

fore it was light in the morning, I inquired where all those children were going. "To the school, to be sure," I was answered. "But they cannot see to read or study," I said. "*O, sie müssen Licht mitnehmen*" (they must take a light with them), was the reply.

Our modes of education will be changed; there are defects to be remedied, evils to be cured, which affect both sexes; but women will be educated. All the tendencies of the age are towards a higher intellectual culture for them. Women's clubs, classes, library and literary associations, are, throughout our cities and villages—in little country neighborhoods, even—furnishing women with means of intellectual growth and advancement. There is no more marked feature of the age than these associations. The Babe of Bethlehem is born, and has even now too far escaped the search of Herod to be overtaken.

Nor is there anything in the spirit of the times which betokens the revival of the nunnery and monastic systems. Women already tread almost every avenue of honest thrift and business, unchallenged. The shrines of Minerva will not be desecrated by their presence. Their intellect will be developed, and their affections will be cultivated, and all truly womanly virtues fostered in the innermost penetralia even, of that temple where all wisdom, and all art, and all science, are taught; whose patron deity was prophetically made by a mythology, wise beyond its own ken, not a man, not a god—but a goddess, a typical woman.

As surely as girls persistently breathe the same air their brothers breathe, eat and drink as they do, go with them to church, public lectures, concerts, plays, and

social entertainments, so will they, in the new and more truly Christian era that is dawning, come, more and more, to study with them, from youth to old age, in the academy, the sacred groves of philosophy, halls of science, schools of theology—everywhere and “persistently.”

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GIRLS AND WOMEN

IN

ENGLAND AND AMERICA.

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WHEN I was giving, in Dundee, a lecture upon the Education of Women in America, the substance of which appeared in the *Westminster Review* of October, 1873, the chairman, on introducing me, said, "De Tocqueville, the French philosopher, considered that the chief cause of the great prosperity of the American nation is the superiority of the women; now we are to hear to-night how these women are produced."

Two things uniformly strike foreign travellers in our country; the general intelligence of the people, and the equality of the education and intellectual interests of the men and the women; and few remarks are oftener heard from those who have visited us, or have known our countrymen and women on the Continent than this: "American women seem so much superior to the men."

But a third fact stands just as boldly forth—the thin, unhealthy-looking physique and nervous sensibility of the American people; and the impression of this is deepened by comparing us with our original ancestors, the English, confessedly the finest physical race in the world. These facts—the superior average education in America, and the inferior average physique of the nation

—are so striking, that it is strange that they have not oftener and more forcibly been placed together as cause and effect. The education has gone on increasing, and the physique has gone on declining, till now the census returns begin to make us look anxiously about us. Our men are unmuscular and short-lived, the best of them; the men of a physique of the type of Chief Justice Chase rarely live beyond sixty or sixty-five. They are not invalids, but they are subject to fever, congestion, and paralysis, violent crises. The women are slight, graceful, impressionable, and active. In the poorer ranks of life they have a nervous, anxious look; in the well-to-do and wealthier ranks, a nervous, spiritual look. They are not invalids, but they are delicate, and are kept under a constant and chafing restraint from want of strength to carry out the plans they set before them, and they give an unsatisfactory prospect for the coming generations. Our census reports are very trustworthy oracles; these give us dark omens, and it is folly to shut our eyes.

Many causes may be assigned as contributing to this physical deterioration, any one of which, with a little ingenuity, may be clearly made to appear responsible for almost the whole; and such, in some degree, is the temporary effect of the very clever feint of Dr. Clarke—nothing else can it be called. The book gives us the impression that the author is going to attack our effort to produce the kind of women upon which any shrewd observer must see that our unparalleled prosperity to a great degree rests. It makes us believe he is going to attack the very method to which our success in educating women is due; and it makes us fear that he is going to attack the modern doubt concerning the old theory, that “the highest and ultimate aim of a woman is to be the

satisfactory wife of one man, and the nourishing mother of another ;” but he does not even try to do any one of these things. He has thrown a calcium light upon one spot, revealing some defects, and many eyes are for a time drawn towards it. His feint has created a sensation, and brought an important subject up to a grade of familiarity and openness where it can be talked of and examined, and I closed the book with a great sense of obligation on behalf of my nation.

I have long felt that physicians, themselves, have no adequate impression of the danger we are incurring in the average neglect that attends the physical rearing of American girls, and subsequent care of young women, nor adequate knowledge of their tendency to weakness in their present condition. Mothers are busy, and girls are left too much to take care of themselves.

From considerable personal knowledge, I am aware that the present state of things ought to occasion anxiety ; that girls, ignorant of the consequences, are disposed to conceal any weakness or unnatural condition, through their great aversion to medical attendance, and from a dislike to restrictions upon their social pleasures ; and also from the fear that these restrictions would produce suspicion among their friends in regard to their condition. I am sure that I am stating facts that are not appreciated in the degree that they deserve.

Looked at physically, and with a philanthropy that extends beyond our cotemporaries, English women do not allow us to feel wholly satisfied with our American women. They make us feel that there is a debit as well as a credit column when we compare our system of social life with theirs. But we must not be so unwise as to attribute the fault to four or five years in the American

girl's life; nor must we be so short-sighted as to limit the responsibility to the present generation. Our own grandmothers did thus and so; but, as Miss Phelps says, this is the very reason that we cannot do it; nor can we afford to be so unjust as to make women bear the whole blame, nor so injudicious as to criminate our society as a whole. Crime implies bad intentions, or mistakes that result from inexcusable neglect of available knowledge. Our bitterest enemies, the devotees of a "high-bred aristocracy," could not charge us with the first; and as to the second, the past furnishes no experience for our guidance. We do not know just how much work this complex human machine is capable of doing; nor indeed do we know how to adjust the action of the different parts, and to manage the repairs so as to get the best possible work out of it. Some overstrain it, others take needless trouble about the repairs. As yet the capacities of human muscle and nerve have never been adequately tested. We are carrying the experiments in this matter farther than they have ever gone before. We cannot know the full strength of a cord till it is broken; but we grow cautious when we see that the fibres are beginning to give way.

Our astonishing prosperity is due to the large total of brain-activity that is being applied in the development of the natural resources, industries, and social life of our nation—a total to which women as well as men contribute, and the poorer people as well as the richer. That they are able to make this common contribution, is due to the fact, that we educate not only men but women, not only the rich but the poor; that they are keenly stimulated to make it, is due to the natural resources of the country, to the mobile conditions of society,

and to the peculiar system of educating all classes and both sexes together, which conditions combine to afford to the various individuals, in viting possibilities foracquiring wealth and influence. Along with this tremendous brain-activity, a very large proportion of our people are carrying on an unusual amount of muscular activity. That is, our active brains multiply things to be done faster than they supply us with mechanical contrivances and organization in industry, to reduce muscular labor.

In looking at the conditions of English life we observe :

I. Comparative repose, the absence of an exciting hope and a hurried and worrying activity. A large part of the nation attempt to lead nothing beyond a simple animal life, putting their entire energies into animal force, and using this animal force for the benefit of those above them, almost as completely as the horse or the ox. This statement is so true of the agricultural laborers as to admit of very little palliation, and it is scarcely less true of the unskilled working classes in the towns. In all the lower ranks of society there are great obstacles to advancement in position, because each plane of life is crowded with its own members; because each class is educated in schools where only children of that class are found, and where the education is especially adapted to that class—that is, to their industrial needs and to what is expected in that grade of society—and does not fit them for any other place in society. One-fifth of the nation cannot read, and the education of the great majority of the remainder, when not limited to the “three R’s,” does not go far enough to create a taste for reading books; and, shut off as they have been from participation in political life, they have too little interest in public concerns

to read the newspapers. That is, as compared with our life, the possibilities for advancement are limited, the average education is of a low order, and the stimulus that comes from an acquaintance with the habits of those above them is absent. Nearly all the spurs to ambition are wanting, and in consequence there is little tendency to do more work than is necessary to keep along in the old ways. The skilled artisans have in this matter of opportunity for advancement more in common with the circumstances of our life. This sphere is not overcrowded, but they, too, lack the means for education and association with those above them provided in our public schools.

The result of their better chances for improvement shows itself with them in the same way as with us, in a tendency to overwork, though, as we should expect, not in the same degree. Complaints are made of the physical deterioration of this class, and laws are enacted to limit the working hours of children; and in the last session of Parliament, Mr. Mundella introduced a bill to fix the limit for women below that of men. The bill did not pass, but it will be introduced again in the next session.

The large shopkeepers and manufacturers are, again, more assimilated to us in their possibilities for rapid changes in financial conditions; but at best they are a small class, and efficient help is more easily attainable. With us, as soon as a man becomes conscious that he has good ability for work, he finds for himself an independent place. Here, as a rule, there is no independent place for him, and he is obliged to sell his ability to some other man who has an independent footing. So that the leader of a scheme is not only relieved from puzzling over details, but a large part of the planning is done by

able men in his employ, and he need give but little of his time. As a rule, a man must be on a pretty high platform to have much hope of crowding his way up higher.

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II. The importance of health is a dominant idea in the whole nation. This is probably due to the very permanent impress given to English civilization by the feudal system, to the demand made for the permanence of the family, and for the production of warrior barons and warrior retainers. The physical condition, that was formerly a necessity, is now maintained as a matter of aristocratic fashion and pride in ancestry. The higher classes have nothing to do that demands a strong physique, but they devote the best part of their energies to securing it, and set up their own results and methods as a model which the whole nation follow. As evidence of this national interest in health, we may observe the number of Public Health bills that come into Parliament, and it is not strange that they get the most attention from the Conservative side of the House. As farther confirmation we observe the great number of holidays spent, not in merrymaking, but in a stroll in the fresh air of the country, and the fact that nearly all the families of the whole nation make as regular provision for one or more "outings" in the year, as they do for the extra wraps for the winter; and still farther, that almost the poorest classes refuse to buy bread and meat of second quality, not from luxurious tastes, but from a belief that it is less healthful. This consideration for health pervades all ranks of the nation.

III. As conducive to the maintenance of health, we find, first, remarkable regularity of habits, which is largely due to the fixedness, or caste state of society, that keeps people in the same grade of life into which they

are born; that is, in conditions where they have no occasion to change their habits, and where they have little opportunity for seeing any habits, except those to which they conform. Children naturally fall into the ways in which they are expected to go. This permanence of conditions goes far to insure a degree of regularity that almost converts habits into instincts. Within the last few weeks, I have for the first time heard an Englishman say that he had eaten too much. Doubtless this mistake does sometimes occur, but the fact that it puts one at discredit to acknowledge it, is sufficient indication of the popular feeling respecting it. A child, even, is seldom seen eating a bit of fruit, or a bun, at other than the regular meals. Once I saw a woman, in an Oxford street omnibus, eating a basket of gooseberries, and so unusual was the sight, that I could not help wondering if she were not some stray American.

Perhaps, in importance even before regularity of living we should rank the athletic habits of the people, their large amount of vigorous out-of-door exercise. The upper classes are, by the customs of society, quite generally excluded from productive industry. They follow the custom of feudal times and live mostly in the country, where walking, driving, riding, and country sports furnish the chief employment and amusement. Children are trained into habits of out-of-door exercise till they get an appetite for it, as they have for their food, and it is not unusual to hear an Englishwoman say, "I would as soon go without my lunch as without a walk of an hour or an hour and a half in the day;" and the habits of the upper classes, as I have already intimated, percolate down through all ranks of life. As contributing in no small

degree to invite this open air exercise, we must include the moderate and equable temperature, and the excellent and attractive roads and walks.

IV. Almost as the tap-root of this long-lived, hardy race is the strong and universal desire for family permanence, which makes the peculiar constitution that gives the best promise of maintaining the family, the ideal standard for the whole nation. Mothers know that their daughters stand little chance of marrying an eldest son, unless they have a well-developed physique, and daughters are not slow in learning the same truth. This necessitates a high physical ideal for the women, towards which they consciously strive, outside of and above the general national habits.

These considerations, the repose, the care for health, the regularity of habits, the open air exercise, the demand for a strong physique as security for the permanence of the family, combine to produce a high average of health in men and women alike. In looking into the habits that more especially affect the health of the women, we may separate society into two classes, drawing just below the large retail traders, a line of division which, as a rule, marks the distinction between skilled and unskilled servants. In this upper division, we find a nurse who has served an apprenticeship as under nurse in the same grade of life, a cook who has served as under cook, etc. Each servant understands exactly the duties that belong to her sphere, that is, the regimen in her branch of work, proper for a family in that position.

Fashion says the women of the family should not only do no money-earning work, but also no money-saving work. In short, the best criterion of rank would be the degree

and naturalness with which they indulge an absolute leisure.

Ostensibly they very rigidly obey this fashion, though doubtless, in many cases, some dress-making or plain sewing is done somewhere out of sight. The plan is for the mistress to spend half-an-hour in the morning in giving her orders and looking over accounts; beyond this, for the women of the family to be exempt from any real household service, while all branches of sewing are to be given to professional seamstresses. If the family lives in town, the evenings are supposed to be very regularly spent in social enjoyment; if they live in the country, they fill in the time as best they can, after the late dinner. But whether at home or away, the food and habits are about the same, or, if there are late hours, the sleep is made up in the morning. The children are in the hands of a competent nurse, and from her they pass to a governess, who looks after their physical habits as well as their lessons. Few mistakes are likely to be made. The regimen of habits for the children at the advancing ages is well understood, and the success of the nurse or governess in keeping her place depends upon her fidelity in carrying them out. The children are trained into these regular habits till they become appetites, and seem to be laws of their nature.

In the lower division, the servants are less numerous and less efficient. Mothers and daughters do a part, or all, of the domestic work. But the baking, in most parts of the country, and much of the sewing, is done out of the house. More servants are employed than in corresponding families with us, and altogether much less work is included in the domestic occupations. In the higher grades of this lower division, the education of the

girls continues till from fourteen to sixteen, and is carried on either under a governess, or in small schools, which are either boarding-schools or day schools. The governesses are cheap, and the schools are cheap, and there seems to be little choice between the two plans.

The girls have a little history, French, music, and ornamental needlework. Below these upper grades, girls are educated at the National schools, where, if they remain long enough, they are taught the common branches and plain needlework, moderately well. Through the upper division of society, the education of the girls continues till from seventeen to eighteen. About half of their education, also, is given by governesses, and the other half about equally in boarding and day schools. Nearly all private schools are small, rarely exceeding forty pupils, and giving an average of from twenty to twenty-five. If there is but one session of the school, it never exceeds four hours. Great pains are taken not to have the schools change the dietary and hygienic habits to which the girls are accustomed at home. They either go home for their simple midday dinner, or they dine at the school, and their daily walks are provided for at home, or taken with a governess at school. That is, there is an approved system of habits for English girls, and these are rigidly carried out, whether they are in a boarding-school or a day school, or under a governess; and on the average, either in the efficiency of the teaching, or the physical results, there seems to be little choice between the three plans. As to the amount of intellectual work accomplished, no English person speaks well, nor indeed with a moderate degree of censure.

About ten years ago, a Royal Commission was ap-

pointed to inquire into the condition of the education of the country; and though the plan first contemplated, included only boys' schools, the commissioners were later instructed to extend their inquiry to girls' schools. The report of this commission bore the most concurrent testimony, that the girls' schools were much inferior to the boys' schools. They complained that too many subjects were attempted, too little thoroughness was attained; that there was a disposition to limit the education too largely to moral training; that much time was wasted on music; arithmetic is spoken of as "a weak point," and mathematics, beyond this, as seldom attempted. I have not space for the full consideration of the points brought out by the commissioners. I give only enough to show that the average and almost universal education of English women is wholly of the old-time feminine type—useful sewing, reading, writing, and religious instruction for the girls of the lower classes; ornamental needle-work, music, modern languages, history, and English composition for the girls of the higher classes. The result is, as far as I have been able to judge, women who are in a rare degree truthful, pure, and faithful to recognized obligations, but, as a rule, their range of recognized obligations is not very wide, and the subjects in which they take an interest are very limited. Among the lower classes men are said to seek society in the beer-shops, and in the higher classes, at the clubs and with their gentlemen friends, because they have little companionship at home. The education is so different that there is far less of companionship between men and women than with us. Among the lower classes, great wastefulness in the family economies is attributed to the ignorance of the women. In the report of one of the

meetings of the Social Science Congress, I find the statement of a working man which, I am sure, expresses the general feeling of the people of the country. In referring to the want of [education, and the consequent want of the home-creating power among the women](http://www.educationandthe.com), he said: "The homes of our artisans are not nearly equal to the work they execute, nor to the wages they earn." Among the higher classes, I am disposed to believe, that nowhere else can women be found so exactly fitted for the place that the popular sentiment expects them to fill; in short, that the handiwork of man shows no higher triumph of skill in adapting its instrument to the purpose it is meant to serve, than is seen in these moral, healthy, dignified, orderly, executive English matrons; and though the place they fill in the work of the world is not very large, it is not strange that the conservative sentiment of the country dreads to disturb the perfect balance.

The narrow intellectual attainments of these women do not interfere very much with the general prosperity of the family. Social position depends so largely upon birth that no amount of intelligence or grace would enable them to add very much to acquaintance or popularity; and the servants are so skilful in their departments, that the cleverest amateur could help them but little.

All these women of the upper class uniformly write and speak better English than we do. This is, perhaps, quite as much due to the fact that they neither hear nor read anything but good English, as to the careful drill in English composition given in English schools. I am speaking now of the intellectual attainments of the very large proportion of the women in this upper class; but among them are women, forming a considerable class,

with whom we have very few to compare, and none to equal the best. But these highly educated women do not owe their attainments to the schools and governesses. For the most part, they are the daughters of learned men, by whom they have been taught, or they have kept along with their brothers, who were getting "honors" at the public schools and universities. If women have once studied enough to create an intellectual appetite, the privacy of English homes, especially rural homes, furnishes great facilities for fostering it. In regard to the school habits of girls under eighteen, I quote the following statements, from the letter of a teacher whose opinion and practice respecting these matters would be received with as much authority as that of any person in England :

"1st. We insist upon plenty of sleep. Our oldest pupils go to bed at nine o'clock, the younger ones at eight or half-past eight; and none rise before six. We have no work before breakfast. We allow no later hours, and no omission of out-door exercises when preparing for examination.

"2d. We do not allow them to work immediately after a meal, and after dinner we have no lessons (recitations), except music and dancing, and no heavy study.

"3d. We regularly secure from one to two hours' exercise in the open air, and we never keep them too long at one occupation; but they must work vigorously while they are about it.

"4th. We make a great point of warm clothing and careful ventilation of the rooms.

"5th. The intellectual work is not allowed to exceed six hours per day; and if more than one hour is given to music, the other work is diminished.

“6th. Each girl is watched, and little ailments are attended to.”

This schedule represents the general practice in the best schools and under the best governesses, and the poorer schools differ mainly only in this, that they permit more dawdling work. In a few schools, girls who are a little older, or are exceptionally strong, are permitted to exceed the six-hour limit of work; but the general habit and feeling would be so much against it, that, as a rule, the girl would not think of asking the exceptional favor, and the teacher would not like the responsibility of giving it. These rules, of course, are not always thoroughly carried out; but with the careful home discipline, the habits of obedience in girls, and the frank intercourse and co-operation between parents and teachers, it is safe to say a pretty strict observance of them is secured.

In regard to the care taken of girls during the few years of their most rapid and culminating development there are no rules uniformly observed, except that riding, and very vigorous exercises, are prohibited on the occasions when the system has less than its usual vigor. Beyond this, the sixth rule given above covers the whole ground. Whatever especial care is needed, is adapted to individual cases. If paleness, languor, or unusual color is observed, it is at once traced to its cause, and that cause is removed. The schools that expect to get the daughters from the best families must show the best results in health. I quote the following from the letter of a teacher whose large and varied experience in teaching girls and women, and whose present educational position, together with her especial knowledge of physiology, makes her, I think, the best authority upon this point: “The result of my observation is, that Eng-

lish mothers and schoolmistresses are very careful about the health of girls between the ages of fourteen and eighteen—in fact, rather disposed to be over-careful, and to listen to the fears of medical men as to over-work. I have known girls who suffered from unnatural conditions of their functional organization, but I can safely say these have never been brought on by mental work; they have been induced by change of diet, such as girls brought into town from the country must always experience, or by coming into a sedentary life after an active one, or from inattention to the action of the digestive organs, but none from mental work. My own experience would lead me most unhesitatingly to say that regular mental occupation, *well arranged*, conduces wholly to the health of a girl in every way, and that girls who have well-regulated mental work are far less liable to fall into hysterical fancies than those who have not such occupation.”

The following is from the letter of an English medical lady educated on the Continent. “The exercise of the intellectual powers is the best means of preventing and counteracting an undue development of the emotional nature. The extravagances of imagination and feeling, engendered in an idle brain, have much to do with the ill-health of girls.”

In the evidence given by an eminent teacher before the Royal Commission, in answer to the inquiry whether there was not some danger of injuring the health of girls between the ages of fourteen and sixteen by hard study, I find the following: “I think study improves their health very much. I am sure great harm is often done by hasty recommendation to throw aside all study, when a temperate and wisely regulated mental diet is really

required. They will not do nothing, but if they have not wholesome, and proper, and unexciting occupations, they will spend their time on sensational novels and things much more injurious to health. Where I have heard complaints about health as being injured by study, they have proceeded from those who have done least work at college. Indeed, I do not know of any case of a pupil who has really worked, and whose health has been injured. We have had complaints in a few cases where the girls have been decidedly not industrious." In answer to the inquiry, whether a girl's mind has not a tendency to develop more rapidly than a boy's mind, and whether, in consequence, there is not some risk of its being overstrained, the reply is, "decidedly, if the teacher is not judicious; but supposing that sufficient time is given to exercise, sleep, and recreation, then there is no danger of its being overstrained by a teacher who does not give work that the pupil does not understand. For one girl in the higher middle classes who suffers from over-work, there are, I believe, hundreds whose health suffers from a feverish love of excitement, from the irritability produced by idleness, frivolity, and discontent. I am persuaded, and my experience has been confirmed by experienced physicians, that *the want of wholesome occupation lies at the root of the languid debility of which we hear so much after girls leave school.* I have been considering the question of health somewhat of late, and I have made up from different tables some statistics about literary ladies; from one source I find that the average age to which they live is over sixty-one, and from another sixty-eight, so that I do not think learning can injure their health. Harm is often done in this way: where a pupil goes to several

different teachers, one of these, ignorant of the amount required by other teachers, may give too much work, and this can only be kept balanced by care from the head teacher, who overlooks the whole."

In regard to whether girls from fourteen to eighteen are able to do as much work as boys of corresponding age, the experience is as yet too limited to give any ground for positive opinion. The presumption, based upon the difference in physical strength, is against it. Still, girls, on the average, at the best girls' schools, are now doing more work than the average of boys in the best boys' schools. But these girls have better care than the boys have, and none of them do the work of the leading boys, who are looking forward to university honors.

All agree that girls have not less mental aptitude, but no one, I am sure, would like to assert that it is safe to subject girls to as much intellectual pressure as may be safely applied to boys. One teacher of both boys and girls confirmed my own observation, that there is often some clog in the development of boys which, though less positive in its action and less productive of a crisis, induces a sort of physical torpor, which is not wholly attributable to rapid growth, as it often appears when the growth may be the very reverse of rapid; against this a boy may be pressed without much danger to his health, but not without liability to give him a distaste for study, thus showing that we are making a demand for an amount of mental force which he has not ready at hand to give. There is, however, but one opinion upon this point—that the least safe thing to do for girls at this nervously critical and mentally excitable period is, to allow them time to indulge and feed their fancies, or to grow weary of themselves; that mental work is as

healthful as food, but, like the food, needs careful regulation; and that the health of women would be vastly improved by increasing the school work in degree, and by continuing it beyond the present term, chiefly as a matter of employment to the women in the upper classes. Among the lower classes, it would be a means of enabling them to secure more sanitary arrangements in their homes, and, in general, of enabling them to get better results from their annual expenditures. The usual practice in Germany, by which Dr. Clarke confirms his theory, is not the usual practice in England, and there would be great unwillingness on the part of English people to accept it as a general rule. Experienced teachers, women physicians, philanthropic men physicians, and wise mothers, are, as I have said, more afraid of an undue development of the emotional nature in these critical years, than of overtaxing the intellectual powers; and it is doubtless true that while very few of the girls and women in the upper classes overwork, a very large number suffer in health from the absence of interesting and absorbing employment. In Germany and America the circumstances are different—in the former, girls have more domestic occupations, and in the latter we have to guard, not so much against the depressing influence of idleness, as against the temptation to social excesses, from which energetic school-work seems to be the best shield. But even here, in England, I have found a few thinking, active women who, judging from their individual cases, had come upon Dr. Clarke's theory for themselves, only, instead of limiting it to girlhood they would extend it through womanhood, calling these periods of repose the natural Sunday in a woman's life, during which, if rest of body and mind was indulged,

there succeeded a marked renewal or awakening of power—but this is an exceptional view in England.

Two movements are going on side by side in this country to improve the education of women. One aims to make the ordinary school-work more thorough, the other to extend this school-work into later years of life. In 1858 Cambridge University established a system of "Local Examinations" in various parts of the country, for boys or schools of boys who wished to avail themselves of this test for their work. There were two of these examinations, the "Junior Examination," for boys between the ages of thirteen and sixteen, and the "Senior Examination," for those between sixteen and eighteen. The effect of this spur upon boys and boys' schools was so apparent that the university, at the request of a large number of women interested in education, in 1863, opened these examinations to girls of corresponding ages, and it was the glaring defects discovered by these examinations that led the Royal Commission so readily to extend its inquiry to girls' schools. The number of girls' schools, and girls studying under governesses who avail themselves of these examinations, has steadily and rapidly increased, and the results have been such as to leave no doubt in regard to the mental acumen of girls as compared with boys. These Local Examinations subjected the girls to precisely the same examinations as the boys, but the subjects in which both boys and girls were examined did not follow the precise curriculum of Eton, Harrow, and Rugby; that is, the university, in making up its list of subjects for examination, instead of adapting itself to the long established lines of study for boys, conformed rather to the modern opinion in regard to the best system of education.

Out of this experiment in examining girls grew a movement to secure a higher education for women, which soon separated into two sections, the one subsequently embodying its views in Girton College, the other in the "University Examinations" for women above the age of eighteen. The two parties agreed upon these points—that intellectual development takes place in men and women in the same manner, and that the methods that would be best for the one are also best for the other; and that, while the methods at present made use of for girls are wholly inadequate, the standard methods applied in the education of boys and men are by no means in accordance with the best educational opinion of the time. But the friends of Girton College said, "Admitting these defects in the masculine system, it is, nevertheless, the existing system; it has precedent and popular sentiment in its favor; its standards are the accepted standards for educational measurement; and the education of women will be at a disadvantage, in inferior repute, so long as we test it by a different standard—that is, we can never get full recognition for the intellectual work of women till we test it by the standards accepted for men; and it seems to us that we shall advance the education of women most successfully by falling into the existing routine."

The other party said: "We will not waste our energy in crystallizing into a form that is not the best, and that evidently cannot long keep its place in the education of men; we will start upon a plan consistent with the most enlightened educational opinion, and by our results will secure favor for our methods, and respectability for our standards." Girton College, now located at Cambridge, holds simultaneous examinations with those of the uni-

versity, and uses the university examination questions. The number of its students is small, and they are for the most part those who are looking forward to teaching as a means of support.

By the second, and what seems to be considerably the stronger party, four years ago lectures were instituted in various parts of the country, to prepare women for the University Higher Examinations. The plan of these examinations and lectures is something like what I understand to be the plan at the German Universities. There is no definite curriculum connected with them. They cover a wide range of subjects, each candidate making her selection, and preparing herself for examination in one or more specific subjects, and, if successful, receives a certificate of proficiency in those, except that certain subjects must be passed before a certificate is awarded for others.

To meet a widely preferred demand, Cambridge University has recently opened these "Higher Examinations for Women," to men; and "mixed classes," as they are called, are now being formed. The university pledges itself to supply the lecturers, provided classes of a certain size are formed in towns sufficiently adjacent to be grouped together. Under this last extension of its educational advantages, the University proposes that, in each place, a lecture on one subject shall be held at some hour in the middle of the day most convenient for women to attend; and one on another subject shall be held in the evening, with reduced fees, for the benefit of the working classes. Each lecture is open to any one who will pay the fees; but, as a rule, the higher classes would go to the day lectures, and the lower classes to the evening lectures. To supplement these lectures,

which in each subject occur but once a week, in each of a group of three towns, what is called a "class" is held on a second day, when, by the payment of a small additional fee, any one can go for further instruction upon any point which he was not able to grasp from the lecture. The lectures recommend a course of reading, and suggest subjects for investigation, just as is done by the lectures in the university. These examinations, as I understand, are considered as severe as the examinations for the same subjects in preparation for the B.A. degree at the university. The plan is to carry systematic instruction in the branches of university education into all the large towns, and to keep it at a cost that can be afforded by women and working men.

I have spoken only of the Cambridge University Examinations; but, though Cambridge has taken the lead in this work, the other universities have followed along at more or less remote intervals, and the London University has, here as elsewhere, placed its standards above those of the others. The present system looks something like an itinerant university; but no one can predict just what it will become. All this work is simply experimental. Plans are adopted to meet the present exigency, and new ones are at any time engrafted. But a few strongly-set tendencies are unmistakable, old forms are giving way, education is working its way down below the rich, men and women are coming together in their intellectual work, and the notion of "finishing" an education sometime between twelve and twenty-three, promises to be forgotten.

The elasticity of this more German system, into which English education is drifting, will obviate the difficulty so much complained of in the English university system,

that of forcing all students, irrespective of the varying mental and physical powers, through a definite course of study in a definite period of time.

Opportunities for instruction are offered. Students choose the subjects, devote as much time to them as they like, present themselves at the annual examinations if they choose, and when they choose.

The university promises to provide good instruction, to test the thoroughness of the work of all who desire the test, and to award certificates of success to all who come up to its standards; and these certificates will doubtless eventually be able to sum up into degrees, or else degrees will lose their especial value, and be abandoned. Limiting the ages of the candidates for the several examinations, though seemingly a little arbitrary, aims to avoid encouraging too precocious advancement, while there is a willingness to make exceptions in favor of pupils who are shown to be exceptionably able.

I do not find, in the English schools, and certainly there is not in the universities, a rigid practice of giving daily marks for the work. The teachers lecture, and the pupils take notes.

In the schools these notes are carefully examined, and the pupils who give evidence of deficient knowledge of the subject, are sent to a leisure governess, for especial instruction. At the universities, the only tests are the examinations, and at the schools, the examinations are chiefly relied upon for promotions. This plan allows pupils of irregular power, and varying health, to admit these same irregularities into their work, without great prejudice to the total credit of their results. With these two systems of allowing choice in the number and kind of subjects pursued, and of testing the work by

examinations, rather than daily records, provision is made for the differences of power and aptitude between different students, and for the occasional variations in physical vigor, which are likely to occur with any except those who possess the strongest constitutions—and this, with the athletic habits and general care for health that pervades English life, is likely to prove a pretty good safeguard against excessive mental work for both men and women; though, of course, individual cases occur where, driven by ambition or necessity, one incautiously puts more strain upon his powers than they can bear.

The English sentiment in regard to the advisability of encouraging young women to pursue precisely the same course of study as young men, would be expressed in this way: "It is rarely advisable for any two young men to pursue an identical course of study. The chief aim of education is to develop the mental faculties, to enable us to observe accurately, and judge correctly; the practices that secure these results are various; one set of practices may be better adapted for the training of one mind, and another set better adapted for training another mind, and no one set will fail to give good results, if pursued with energy. In the choice, we are, as a rule, safest to follow the individual inclination. As yet, women have been so limited in opportunities, that they have had little chance to discover their mental inclinations, either as a class, or as individuals."

The statement would, I think, go no farther. The question of co-education has as yet scarcely come into the popular mind. Small experiments, prompted usually by convenience, have been made, so far as I have heard, with uniform success, and the practice is making its way into the higher education of the country. Women are

already admitted to the Political Economy class, and one or two other classes in University College, London; as I have said, the lectures and classes organized under the recent plan of Cambridge University, for carrying university education into the towns, are open to men and women in common; and the various governing bodies are now discussing the question of admitting women to degrees in London University, to both classes and degrees in Queen's College, Belfast, and to classes in Owen's College, Manchester, and a bill is likely to be introduced into the next session of Parliament, to empower all the universities to extend their privileges to women, if they desire to do it.

The time-honored precedents are at present against the plan, but the practice of these highest authorities will soon turn opinion in its favor. The lack of funds to educate women, the rapidly growing feeling that men and women are at present too much separated by social customs and differences in tastes, and the belief that it would promote a higher moral tone among men, are uniting to produce a strong current of interest and feeling in favor of the system. Young men at the English universities rarely overwork. Popular feeling, fashion, respectable sentiment—call it as one will—is all against considering health secondary to anything. A few evenings ago I chanced to be talking with a university young man, who was at home for the holidays. I asked, "About how many hours do your good students work?" The reply was, "Rarely more than seven. A few of the hardest reading men—those aiming at fellowships—who do not take more than two hours for exercise, work a little longer; and they work longer just before the examinations." When I smiled at the evident contempt

thrown upon the "two hours for exercise," he said, "You do not think two hours enough for exercise, do you?" In all the best English schools, either for boys or girls, the plan is to work with vigor, and play with vigor. There are hours enough for sleep to secure good rest; then work is arranged to give variety, and confined within moderate limits of time, so that if a pupil does extra work, he does it by extra intensity.

After leaving school, English girls in the upper and middle classes give more time to society than American girls do; that is, society is the regular evening occupation, and in the day-time there is little to do but to recover from the previous evening.

But society is relieved of a large part of the excitability that attends it with us. The wealth and social position of the family and the ingenious tact of mammas, as a rule, win the husbands, and the daughter needs only to be in sight. It is not at all rare to go to an evening party and know no one but the host and hostess, and as introductions are rarely given, one has only to look about and go home when she is tired. At a dinner-party she is told the name of the one who leads her to the table, but she is always at liberty to talk as little as she likes, and she offends the social taste if she talk very much. English mothers of this class have very little to do except to give birth to their children, and go through the established routine of dinners and calls. If there is any complaint respecting the work they have to do, it is of the deficit, and the inferior health of the women between their school-days and their wifehood is to be accounted for by the want of occupation and independence. They have no more to do, and no more chance to exercise their wills, than during the first six years of their lives.

After the early years of marriage the health almost uniformly improves, and by the time they are forty or forty-five, they have usually attained a ripe perfection of health, which gives them a physical superiority over the men for the remaining twenty-five or thirty-five years of their lives, and also over the women who have remained unmarried.

The sentiments that pervade, and the circumstances that control our life, and the habits they engender, are very different. It is not possible for us to have habits whose regularity shall so nearly convert them into instincts as is the case with the English. We have to make our lives out of the conditions about us, and these conditions change year by year. The opportunities for acquiring wealth and social distinction are so great that they stimulate us to great exertion.

Our schools give all classes an opportunity for education, and by associating the poorer classes with the wealthier, implant in the former, tastes for the life of the latter, and a keen ambition to attain it, and this imposes upon the latter the necessity of struggling to maintain their position. All our men are over-active; our girls are educated along with the boys, and they not only acquire equal mental power, but common intellectual tastes. Men and women are able to be, and are, the companions of each other.

Our girls have a longing for an active life not felt by the girls in any other country. Wives share the hopes, fears, and anxieties of their husbands. They are eager to gain wealth and friends as a means to improve their social position. They economize in the family expenditure; they employ few or no servants, and do plain sewing, dressmaking, and millinery. Education and a varied

experience gives our women a "faculty" for doing anything, and there is no national sentiment in the matter of either health or respectability to keep them from doing everything. As fast as the daughters grow up, they are drawn into this ceaseless activity. Besides the lessons there is house-work in the morning, and sewing till into the late evening.

We are a rich nation, but we are not a nation of rich individuals. Domestic service is expensive, and of poor quality, for no one is willing to occupy the position of a menial who can find anything else to do.

The intelligence of our women, combined with the necessity in our society of producing a good personal impression, together with the habit of applying their intelligence to the construction and arrangement of articles of dress, have developed among us a very high order of taste in these matters, and the skilled labor that can satisfy it, is necessarily very costly.

Our women spend all they can afford in buying these materials, and save, in using their own intelligence and hands in making them up.

Very few, in considering the work of our women, take into account the real brain-power expended in this triple combination of economy, taste, and execution. Emerson somewhere in his *English Traits* says, referring to the English aristocracy:—"It is surprising how much brain can go into fine manners."

It would be very pertinent to say of American women, "It is surprising how much brain-work can go into fine dressing," and our girls join their mothers in this worry and work at a very early age. Passing from work to society, the strain upon our women is no less. Social gatherings occur irregularly, have irregular hours, and an

irregular regimen of food, and every one feels a keen stimulus to be both agreeable and brilliant. English faces at a party look as they do at church, and as they do at Madame Tussaud's. Contrast with them the smiles, luminous eyes, and pretty cant or toss of the head of the carefully-dressed American woman, and think of the work to be done the next day.

In place of a health-seeking instinct in America, we have a feeling which says, "I do not mind how hard a strain I have, provided I can hold out till I get through it." We are too much employed to think much of the discomfort of moderate fatigue and ill-health. Neither have we sufficient feeling respecting the permanance of the family to lead us to plan for a succession of descendants. An American says, "I had rather have forty-five or fifty years of active, satisfactory life, than sixty or seventy years of a comfortable, dawdling existence;" and, if we look at the case only as it affects himself, we cannot especially condemn the reasoning, but when we consider the constitution that this overstrained life bequeathes to the children, it assumes a different aspect.

Being accustomed to see an attenuated, sickly physique in our leading and best-bred families, the eye is mis-educated; we establish a false ideal for women, and become comparatively indifferent to a fine physique in men. Men do not marry with a view of founding or continuing a family name, and their sentiment of gallantry inclines them to be fond of protecting a weak woman.

Irregular habits are to some degree a necessity with us, and the greatest misfortune is, that we get used to the irregularity, and take little pains to avoid it. We have some rules in regard to diet and digestion, but they

are for the most part practised only by those who have acquired ills, and are not very frequently applied in the rearing of children.

The extremes of climate, and our uninviting roads, discourage open air exercise, and comparatively few have much time to go out.

Our children do some more work at school than English children, and they have a good deal more of their time wasted in our system of text-books and "recitations," a word not known in England in the sense in which we use it, which requires that the able and conscientious pupils of the class shall look on while the weak and indolent ones are being drilled; which plan, judging from my own experience at school and college, I feel justified in saying, involves for them not only a waste of from one to three hours a day, but a fatigue fully or nearly equal to the same amount of time spent in study. We put great pressure upon class rank, the value of which is determined by the daily marks. This forces pupils into a very high degree of regularity in their work; at the same time it has most effect upon the most conscientious pupils; if it does not lead them to overdo in work, it is liable to make them overworry about the work, and girls suffer far more from this overworry than boys.

In considering the relation between the health of the country and the education, the few women who have had a university course of study need not be taken into account. Most of them have reached an age when people are allowed to decide upon their own habits, and, as a matter of fact, these habits have been determined by stern necessities, by the hard, money-getting circumstances that surround women, rather than by choice.

At Antioch College, with few exceptions, they were women who were looking forward to self-support, and who were borrowing the whole, or a part of the money required for their current expenses, on the promise of repaying it with the wages of their subsequent work.

Many of them were absent a part of the year, teaching, were giving private lessons, or were teaching classes in the preparatory school connected with the college; and, if a few hours of leisure were left after all this employment, they were likely to be spent upon extra studies; aside from this, they did their own sewing, and many of them boarded themselves. They often overworked, but it was the necessities of their lives that were driving them, and not the curriculum of Antioch College. However, if the English feeling respecting health, and the means of preserving it, prevailed in our country, these mistakes would less frequently occur.

Unquestionably our whole nation needs some escape from its exhausting activities. We need either less work, or some more skilful combination of the different varieties of work, that will secure us more rest, and, except in a small circle of wealth, our women, as a rule, need this rest more than the men. We need repose, freedom from anxiety perhaps, more even than freedom from work. How are we to get it?

We cannot have back the caste condition of society, nor would we desire it. We cannot stop the progress of our system of free education, nor would we be willing to do it. We cannot set aside the practice and belief in equality of education for men and women; men would not like it, and women would not permit it. There are many things that can be done that will conduce to the desired

result, and the best among them for women is, to organize women's work.

The education is not a mistake; the fault lies in this, that the industries of women have not kept pace with their advancing education. They have been exempt from bread-winning to a degree unknown in the old countries, and the average education is far higher than exists elsewhere among women. They have startled the world a little by attempting a few of the intellectual industries hitherto monopolized by men, and, though the opening of the professions, or, indeed, all lines of human industry, to women, is not to be undervalued, of almost infinitely greater importance is the application of scientific economical principles to the large sphere of work already in their hands, and which is remaining in a disastrously undeveloped condition, just because it is in their hands. The low rate of female wages leaves them the monopoly of it, and they dawdle along in the ways of their grandmothers, out of sight behind the advancing masculine industries.

It is surprising to foreigners that in the application of the division of labor principle to domestic work, we are actually behind them, that we still permit such excess of work and excess of waste in our domestic arrangements. Cooking and sewing, the two leading branches of domestic industry, are with them to a very large degree trades, while nursing and laundry-work are trades in a far greater degree than with us.

Upon this point of the organization of domestic industry, though one that I have long been considering, I can do no better than to refer to the suggestive article of Mrs. E. M. King in the *Contemporary Review* for December, 1873. The substance of this article was presented at the

last meeting of the British Association. The Right Honorable Mr. Forster occupied the chair, and at the close of the discussion remarked that he should not like to give up his private home. Now, it is not to be supposed that Royalty would at once give up its palaces to rush into the society of a set of co-operative homes, nor that Right Honorables with "large fortunes" would make close bargains in domestic service. The scheme at the outset would recommend itself only to those whose incomes did not provide an adequate supply for their wants on the present wasteful plan of domestic life, and who saw in this system a means to secure larger returns for their outlay of money, and it could advance in favor only as it fulfilled this promise.

Seeing a trustworthy principle of economy in the plan, the *Spectator* turned pale, and declaimed against the destruction of the time-honored English homes; and London builders began to consult Mrs. King in regard to the house arrangements for carrying out her plan.

There will be no difficulty in preserving the desired privacy for the family, though the wearying privacy of many English homes leads not a few to think it is not worth preserving in the English degree.

Adopt and apply the plan of which Mrs. King suggests an outline, press the division of labor principle in woman's work as far as it will go, and the wives and daughters who make our homes will not break down from overwork.

The readiest and surest corrective for the excessive greed of our girls for society is to carry on the system of co-education. This supplies a temperate gratification to the social appetites, induces girls to remain longer in school, and to do more thorough work, thus securing to them other sources of pleasure than social amuse-

ments and the companionship of friends. The process of co-education tends to develop a well-balanced character, and to put into it a trustworthy ballast, which American girls cannot afford to do without. For confirmation of this, one need only read the reports of any school judiciously managed on this plan, or he need only use his eyes in comparing the past school days with those of girls educated in the high schools and private schools of our Western cities. Of course girls of the present average habits and inherited tendencies must not be pressed up to quite the same degree of work that may be safely required of their brothers, who have fewer domestic demands upon their time, more out-of-door exercise, a freer style of dress, and, in general, healthier habits of life. Many a girl who takes especial care of herself—and, as a rule, the able girls do this—or who has especial care from her mother, may safely do what the best boys do without especial care.

But so long as girls require from one hour and a half to three hours a day, to be, or to develop themselves into, the conventional girl, and boys require only about one-third of that time to get themselves up into the conventional pattern for a boy, girls must either be superior to boys to begin with, or they must economize their power better, if they are able to do as much school-work in a year as boys; that is, if girls must consume power in all the ways that constitute the approved specialties of girls, they cannot do the whole work of boys without doing much more than boys do.

Whether the future has possibilities for girls that will give no occasion for this deficit of available power for school-work, it is impossible to say. Oberlin College and Michigan University report that the young women

are no more frequently absent from their classes on account of ill-health than the young men. But it must be remembered that the women are few in number, and in some important respects more above the average of women than the young men are above the average of young men. Especially in the respect of a prudent care, for their health their necessities have made them wise—and this will be the character of most of the women who go to college for some time to come. Our schools, too, show as high an average of work for girls as for boys, but this must not be wholly put down to equal resources. Girls, on the average, are more anxious for approval than boys are, and if work is assigned them, in spite of disadvantages they are quite as likely to do it as boys are.

Nor are we to suppose that the best average education for the present girls would show just the same average in direction as the best average education for boys.

Oberlin, the oldest experiment in co-education at college, arranges its plans with especial reference to the average differences between the quantity and direction of the school-work at present demanded for men and women. It has its "Ladies' Course," as well as its University Course. The young women are allowed to pursue the University Course, though out of the four or five hundred young women who are in attendance, those who have taken degrees give only an average of about two in a year. At Antioch there was a large range of optional subjects, and among them was Greek, which the Western young men were about as much disposed to omit as the young women. The curriculums of the Western high schools have also a wide optional margin.

The growing educational sentiment is setting aside the old idea that it is well for all boys to pursue the same line of study, independent of tastes, and past and prospective circumstances in life; and another still more pernicious notion is sure soon to give way, that boys and young men, of whatever physical and brain power, are to be put through a definite course of study in just the same time. No one thinks it much of a guarantee for a man's scholarship that he holds an A.B. or an A.M. degree. This only assures us that he has spent four years at some institution that has a right to confer these degrees. When our system of schools and colleges is sufficiently flexible to meet the varying needs of boys and young men, we shall not find that it lacks anything to adapt it to the varying needs of boys and girls, or men and women. Men furnish us with examples through the whole scale of physical power and mental aptitude, and so do women.

The best girls will at least have no difficulty in carrying on three subjects of study, while the best boys carry on four; and girls not only can, but as a rule do, remain longer at school than the boys. It would be well, too, to give more credit to the specialties of girls in the schools. I can think of nothing else that would conduce so much to the thorough and satisfactory study of music as to give it an optional place in our school curriculums.

Doubtless the best plan would be to give girls a moderate amount of home work along with their school-work—that is, to develop a united domestic and intellectual taste. With the habit once formed of making this combination of pursuits, we should be much surer of their continuing their intellectual cultivation through life. If this could be done, they ought, as a rule, to be able

to do more than men do in the last fifteen or twenty years of their lives.

The results of our experiments in co-education have so far indicated that there is no difference between the intellectual tastes of men and women. This I do not accept as final. The prevailing sentiment in society, that girls cannot do all that boys do, and that they are a little in discredit because they cannot, has given them an undue stimulus to prove their power by experiment; and it is well that they have done it, to silence the doubts. Moreover, the women who were looking forward to the higher places of intellectual industry occupied by men, had to test themselves by the standards established for their rivals. And the same may be said of all the money-getting pursuits for women, outside of the lines of domestic service and sewing; in order to get any ground, they have had to fall into men's ways, so that their work could be tested by men's standards. To prove that they were the equals of men, they have had to prove that they were the equals of both women and men; they have had to learn and to be all that other women know and are, and, in addition, to equal men in the points where men surpass women; while their masculine rivals are exempt from all the demands for time and thought bestowed upon the specialties of women.

When women can gain authority for their own standards—the right to work in a woman's way, tested only by the quantity and quality of their results, that is, by the value of their work to society—money-earning women will not break down in health any more than money-earning men do, nor will the total of their work appear smaller than the total of men's work. There is no intrinsic reason why women's work, done in women's way,

should have less commercial value and creditable recognition than men's work, done in men's way. Poems are in as good repute and sell as well as books of philosophy, and house decorators are as much in demand, and are paid as well as architects. The present industries of women are undeveloped; there is among them, as yet, no sphere for skilled, high-class work, and many of the industries that naturally belong to women have been developed by men, and are possessed by men. The wages of women are low, because there are too many workers for the range of work they are attempting to do.

The industries that are exclusively in their hands are almost wholly at a stage where intelligent labor is not required, and so few of the industries that have been developed by men are open to them, that, owing to the great competition, even the skilled work of women, as yet, commands but a low price. They want more work, and especially a larger amount of intelligent or skilled work. They must both organize and develop, by the application of the division of labor principle, the work they already have, and they must win from men a part of their work.

But they can make their way into the industries occupied by men, only by doing the work in men's way, and underbidding men in wages. When they once get undisputed possession, they can and do apply their own methods. Mr. Mundella's Bill, to which I have already referred, will, as is believed, if it become a law, put a great obstacle in the way of their progress. It is to the interest of the mill-owners to keep their machinery at work as many hours as they can, and if men will work ten hours a day, while women are prohibited from working more than nine and a half, men will be employed in

preference to women, even with the disadvantage of larger wages. But, fortunately, it is said, the women cannot be wholly driven out. In some branches of the work they do so much better than the men, that even if this reduction of hours should be enforced, the mill-owners will still find it to their advantage to employ women.

The women in these especial lines have already proved the value of women's work done in women's way. I believe women have also got a similar recognition in some branches of the watchmaking trade; and in teaching, they have already proved the superiority of their methods. They get forward slowly, because of the great strain required in using men's methods to get the gates opened to them, and Mr. Mundella's Bill would put an extra bar across the gates. The wages are kept low along the line of their advance, because an army of laborers follow along so fast in the rear. I have no fear but that women will stand a fair chance with men in the industries of the world, when they once get a free and open way into them, and learn to apply scientific principles as men do. Fine manipulation in a hand is fast coming to be as valuable a quality as strength.

To secure the changes that all wise or good feeling must desire for women, many things are needed; and as I have said, first of all, we need organization in domestic work, in order to reduce the quantity, to save waste in materials, and to develop a better quality of work, by making the different departments into trades or skilled industries—thus we must put our cooking under the care of chemists and physiologists, and in a variety of ways provide work for wives and daughters suited to their intelligence, and relieved of coarse drudgery. We

need women physicians, employed by the year, whose duty and interest it will be to keep the family in health, and thus avoid the occasions for curing them when they are ill; and here is the safeguard for our girls—a person familiar with both the home life and school life of the children, and whose interest would forbid her to yield either to the weak affection of the mother, or the thoughtless ambition of the teacher. The familiar conversations that would naturally spring up between competent women physicians on the one side, and mothers, children, and cooks on the other, would contribute vastly to the improved diet and general sanitary habits of the family; and open a way to more rapid progress in determining the relation between different varieties of food and peculiarities in the mental and physical powers and appetites. We need creditable wages, given in employments for women other than teaching, in order to save our schools from being the receptacle of all women who have occasion to earn money. We need some half-time system in our schools, to provide for the pupils who have less health or less time; and also to secure for them teachers from a higher class of families, who find all-day work uncomfortably exhausting or confining. We need to raise the scale of feminine wages, in order to invite the application of time-saving inventions in women's work, as they are now employed in men's work. We need a wider range of work for women.

As a means to all this we need, and as the result of all of it we shall get, a recognition of feminine methods and standards, as well as of masculine methods and standards. If the specialties in the culture of women are worth preserving, it is because they have value; many of them, I am certain, have real value, and others

have a current value, so that we cannot at present dispense with them—if they have value, when we have a free and well-adjusted labor market, they will command their price. For bringing about these changes, we must have well-educated, wise women.

Our women, in matters of dress, are more completely the slaves of fashion than the women in any other civilized country. This is due to the necessity they feel for making a good personal impression. Their family position does comparatively little, either for or against them. They marry, or get forward in life, chiefly by making themselves personally agreeable. When we give them other means of influence than this, when we secure to them industrial and political power, these personal considerations will diminish in importance, and their minds will naturally turn away from them.

There are many things awry, many things that need to be improved, but we must be wise in our methods.

We cannot exactly imitate the English, nor do I believe it is worth doing. The Malthusian chorus of political economists suggests the notion that a nation may be over-physical. We want health for ourselves, and healthy tendencies for our descendants. Beyond this, we want to send our surplus force to the brain.

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NONE can appreciate the weight attaching to the words of a distinguished member of an honored profession, as well as the younger members of that same profession. They know something of the toil needed to achieve a worthy reputation, and of the talent implied by the capacity for toil. They know how to discriminate between the careful opinions of mature and deliberate judgment, and the headlong assertions of rash busy-bodies and amateurs. They understand, because they feel, the inevitable esoterism that must persist at the kernel of all democracies, unless these degenerate into mere rabble and intellectual mob: they are the last, therefore, to maintain that one person's word is as good as another's; that common sense is competent to solve all questions; that freedom of thought means the right of all to think as they please. Knowing, on the contrary, the extreme complexity of all problems, and the facility with which the most upright judgment may become warped in meditating upon them, they are prepared to exact a long apprenticeship in thinking from those who assume the right to think in public, and a minute familiarity with facts from those who undertake to defend any opinion in re-

gard to them. Whenever a writer, by previous and just reputation, offers conclusive proof of such apprenticeship, familiarity, and ability to judge, his conclusions must be examined with care, and disputed, if at all, with respect.

Yet such examination is as essential to the interests of truth as is the just ascendancy that may be acquired by repeated success in the difficult task of investigation. Those who reject it as superfluous or impertinent, or who decry opposition as shallow obstinacy, are always those least competent to measure the weight of arguments on either side, and whose approval of authority must be as valueless as the dissent from authority certainly *may* be.

The singular avidity with which the press and the public have seized upon the theme discussed in Dr. Clarke's book on *Sex in Education*, is a proof that this appeals to many interests besides those of scientific truth. The public cares little about science, except in so far as its conclusions can be made to intervene in behalf of some moral, religious, or social controversy.

In the present case, a delicate physiological problem has become as popular as theories on epigenesis, spontaneous generation, or Darwinian evolution, and for an analogous reason. As the latter are expected to decide in the doctrines of natural or revealed religion, so the former is supposed to have a casting vote in regard to the agitating claims for the extension of new powers to women. On the one hand, the inspiration of scripture, on the other, the admission of women to Harvard, is at stake, and it is these that lend the peculiar animus and animation to the discussion. In both polemics, arguments are not accepted because they are demonstrated, but enlisted because they are useful; ranged with others recruited from the most distant quarters, with nothing in

common but the regiment into which they are all thrust, to be hurled against a common enemy.

A remarkable change has taken place in the tone of habitual remark on the capacities and incapacities of women. Formerly, they were denied the privileges of an intellectual education, on the ground that their natures were too exclusively animal to require it. To-day, the same education is still withheld, but on the new plea that their animal nature is too imperfectly developed to enable them to avail themselves of it. Formerly, psychology was widely separated from physiology, and the study of the mind began and ended with demonstrations of the immense gulf by which it was separated from the body. To-day, psychology has become a section of physiology, and mental philosophers busy themselves with searching out in all its details, the close dependence of the mind upon the body. Insanity has become an inflammation of the cortical substance of the brain: idiocy results from a foetal meningitis: genius is a form of scrofula closely allied to mania: in sleep, the brain loses blood, in intellectual excitement, attracts blood; in the illumination of the death-bed, or the delirium of drunkenness, the circulation through the brain is quickened; in torpidity, melancholy, stupidity, the circulation slackens and stagnates.

With this tendency, whose legitimacy we are certainly far from disputing, it is inevitable that the old doctrine of the mental inferiority of women should be defended, if at all, on a new basis; a basis organic; structural, physiological, hence incontrovertible; on an analysis, not of her reasoning faculties, her impulses, her emotions, her logic, her ignorance, but of her digestion, her nerves, her muscles, her circulation. It is inevitable, therefore, that

the two great functions of parturition and ovulation, of which the latter is peculiar in form,* and the former altogether peculiar to the female sex, should assume peculiar importance in all discussions about women—invariable, that to these should be attributed the inferiority of mental calibre or of mental achievement that few care more openly to maintain.†

A mysterious interest has indeed always attached to these functions. From the Mosaic law to Raciborski, from the denunciations of the school-men to the rhapsodies of Michelet, they have been invoked in every theory on the nature of women; that is, in every theory on the organization of society. In virtue of them, the woman has been considered, now unclean, now angelic, now touchingly (but irredeemably) helpless. In this connection, the association of ideas has been almost always too powerful and too varied to admit of a dispassionate examination of facts. Yet to-day, as already said, the old conclusions may be urged with even greater force than before, because apparently based exclusively upon such cool and impartial investigation.

The issue is certainly serious. From all sides surges testimony to the importance of physical conditions as the basis of mental and social life. According to many, it is

* The development of reproductive cells in special glandular apparatus at the period of puberty, is evidently not peculiar to one sex, but is a physiological fact necessarily common to both. The peculiarity in the female consists in the *greater degree* of periodicity in the complete development of such cells, in the periodical congestions of a secondary organ, the uterus, and in the loss of blood effected by these.

† Thus Herbert Spencer remarks that the mental development of women must be arrested earlier than that of men, in order to leave a margin for reproduction.

by the absence of a few grains of iodine from the water of drinking fountains, that the people of the Alps are turned into *cretins*. According to others, it is by the presence of a few grains of ergot in the bread, that the people of Tuscany lose their limbs in gangrene. Endemics of abortion depend on the impalpable vapors that arise from the quicksilver mines of Spain. So delicately poised are the forces of life, that an apparent trifle suffices to entirely turn the scale. It is therefore not *a priori* improbable, that the marked peculiarities of physical organization that distinguish the female sex, should determine a radically different mode of mental existence, and exact radically different conditions of mental activity.

The whole question, however, is not one of probability or of possibility, but of fact. Hence, the last persons capable of judging in the matter, are those who have been vividly impressed with those circumstances that furnish, or may be made to furnish, food for the imagination. Of these, Michelet is perhaps the type, but certainly many of the reviewers who have been occupied with Dr. Clarke's book, must be ranked in the same class. Would it be disrespectful to Dr. Clarke's far better informed judgment and technical knowledge to suggest, that he himself does not seem to be perfectly free from the influence of the glamour that invests the study of physiological peculiarities in women, wherever these can be made to tell upon any social or moral relations? Dr. Clarke does not indeed affirm, with Michelet, that women are essentially diseased. "*La femme est une malade.*" Where Michelet leaves to the healthiest women but a single week of every month for normal existence, Dr. Clarke believes that one week out of the month alone requires any special precautions, and that,

with decent care at this time, "an immense amount of work" can be accomplished in the remainder. He is careful to say, and even to repeat, that the intellectual labor to which ~~such disastrous results~~ are attributed, is not in itself incompatible with the nature of the woman, nor, even when improperly pursued, can it be considered as the sole cause of the delicate health of American girls. Dr. Clarke indeed guards his every assertion with a care and precision that is worthy of imitation by those who draw such large deductions from his book. When, however, all illegitimate inferences have been set aside, and we come to the propositions really and categorically maintained, we find the following:

1st. During the catamenial period, *i.e.*, during one week out of every month, a woman should abandon intellectual or physical labor, either because she is already incapacitated for it, or because she will be so ultimately, if she does not take the precautionary rest.

2d. A large number of American girls become affected with amenorrhea * or menorrhagia † solely on account of excessive mental exertion at such periodical epochs of incapacity.

3d. It is possible to educate girls properly, only by regularly intermitting their studies at such times, and by "conceding to nature her moderate but inexorable demand for rest during one week out of four."

4th. Consequently, it is chimerical to attempt to educate girls with boys, whose organization requires no such periodical intermittence.

5th. If sufficient precaution be observed during the first years of adolescence, and the establishment of men-

* Absence of menstruation.

† Excessive menstrual hemorrhage.

stration, such excessive care will become unnecessary when the constitution is fully formed, *i.e.*, after the age of eighteen, nineteen, or twenty years.

In regard to these propositions we wish to try to show—that the first contains a certain exaggeration of fact: that in the second a certain sequence of phenomena has been attributed to the wrong cause, and that much more important causes can be demonstrated: that in the third, a precaution needed for many has been unduly generalized for all: finally, that the fifth proposition entirely annuls the inference contained in the fourth.

We believe the exaggeration of fact to be two-fold, that is, first, in regard to the number of girls to whose health the menstrual period makes any sensible interruption. Second, in regard to the duration of such interruption, among the majority even of those who are indeed obliged to submit to it.

Dr. Clarke himself admits that the susceptibility he describes in a certain number of cases, is not universal, but he claims that this is the rule, and the reverse the exception. Such a claim can only be substantiated by an appeal to relative statistics, which are well known to reverse many conclusions drawn from general impressions of facts. Statistics are reliable only when compiled on a large scale; but in an inquiry of this nature, a few contributions from various sources are not useless. Among twenty persons, not considering themselves invalids, of whose cases I have taken notes, in six only, had menstruation ever been the cause of any suffering whatever. The ages of the persons questioned ranged from eighteen to thirty, but the inquiry referred to the entire menstrual life. Several among these young ladies had attended mixed schools, and had never been compelled to absent

themselves for a single day. Several had been engaged for three or four years in the study of medicine; some, for a much longer period, had engaged in its practice.

Among the six exceptions, one had been healthy until twenty-one, and then had suffered from ovaritis, so that, although engaging in the work of a healthy woman, she should really be classed apart. One was subject to epileptic convulsions, and may therefore be fairly ruled out for the same reason. The remaining three were in good, even robust, general health. In two, pain was experienced for two days, and a certain diminution of capacity for mental exertion, which, however, had never been sufficient to necessitate its interruption. One of these cases was a woman of thirty, who had been married for ten years without child-bearing. In the third case on the list, pain had never lasted more than six or twelve hours, and had been very greatly diminished during four years that the young lady had engaged in constant medical study. Finally, in the fourth case, the early years of adolescence were marked by quite severe dysmenorrhea, the pain only lasting, however, twelve hours. Between twenty-five and thirty, the pain disappeared, but the menstruation became menorrhagic (excessive). This was the only case on the list where no constant intellectual exertion had ever been made, but where the nervous system had been subjected to the strain of much moral emotion and anxiety. The girl belonged, moreover, to a family in which uterine disease was almost universal among the female members.

While at first glance, therefore, it would appear that the proportion of women invalidated by menstruation was nearly as high as one-third, closer inspection shows that among these cases selected at random, the proportion

is only one-fifth or one-sixth, if the calculation be confined to persons who had received much intellectual training.

Among these cases, moreover, there is not one in which the period of suffering is as long as would be indicated by Dr. Clarke. Six, twelve, forty-eight hours is the outside limit. If extended beyond this, or even if very severe during this time, there is always reason to suspect actual disease of the uterus or ovaries, and the cases must be excluded from considerations only applicable to persons in average health. From this point of view, the week of rest demanded by Dr. Clarke, is as excessive as the three weeks' disturbance so imaginatively described by Michelet.

But it is true that the standpoint in Dr. Clarke's book is somewhat different from this. He scarcely alludes to the presence of pain in menstruation, because this is presumed, when existing, to itself constitute a sufficient warning against over mental exertion, indeed, to render such exertion impossible. But the warning in question is directed against a more insidious accident, that may occur without pain, and which is more easily and imprudently defied. This imminent danger is hæmorrhage, or an increase of the physiological flow to such an extent that the vitality of the patient is drained as from an open vein. The constant repetition of such hæmorrhage may lead to uterine congestions, or even to amenorrhœa, *i. e.*, entire absence of menstruation. But it originates in functional disturbance, in exhaustion of the nervous system by intellectual exertion. On account of the imminence of this danger, the period of real incapacity for mental effort lasts much longer than conscious discomfort is likely to do—lasts, indeed, as long as

the physiological afflux of blood to the uterus—which, by the means described, may at any moment become excessive.

Dr. Clarke alleges ~~but one kind~~ of proof of this assertion. He relates a certain number of cases, interesting in themselves, but whose histories are lacking in many important details, where healthy girls, whose menstruation was at first perfectly normal, became, after two or three years' study at school, liable to monthly hæmorrhages, so excessive that their health was completely undermined. No organic cause for such disorder could be discovered. By interruption of study, rest, amusement, travel, the hæmorrhages were diminished, the health restored. In several of these cases, however, resumption of study on the old plan was followed by the immediate return of all the previous accidents, and often the constitution was entirely ruined.

We think that this argument might be exactly paralleled by the following, which should prove whisky-drinking to be an efficient* cause of yellow fever. A physician might select twenty cases of men, personally known to him, who had lived twenty and thirty years in New York or Boston, and never had yellow fever. During this time they had taken little or no whisky, but afterwards, removing to New Orleans, they fell into the habit of drinking, and, at varying intervals from that date, caught the fever, and in many instances, died. Therefore, fever was due, at least in these cases, to the newly contracted habit of drinking whisky.

—A and —B = —C — A + B = C. Therefore, C = A.

* I use the term efficient in a technical sense, as meaning all-sufficient to produce the given effect, without the intervention of any other cause.

Hamerton, in his little book on the intellectual life, accuses women, even the bright and intelligent among them, of a "plentiful lack" of intellectual curiosity. If their attention is attracted to a phenomenon, they rarely inquire as to its cause. If an assertion is made, they accept it with enthusiasm or repel it with indignation, but rarely analyze the conditions upon which the assertion is based. This remark seems justified, though perhaps not exclusively among women, by the total absence of curiosity that has been shown in regard to the physiological facts in question. The assertion that nervous excitement, produced by intellectual work, is capable of affecting an apparatus apparently so remote from the organ of the intelligence as is the vascular system of the uterus, certainly implies some most interesting physiological facts and a mechanism the reverse of simple. Into these facts and this mechanism it behooves all to inquire, who assume the responsibility of either accepting or rejecting Dr. Clarke's theory and the deductions that have been made from it.

This theory concerns exclusively one class of uterine hæmorrhages, those, namely, which may be traced to the influence of the nervous system. Before analyzing such influence it is important to notice two other causes of menorrhagia, that are very frequently present in just such cases as Dr. Clarke describes. These are prolonged sedentary position, and deficiency of physical exercise. Either may determine anemia, or impoverishment of the blood, a condition which alone is sufficient to induce excessive menstrual flow.* But, in addition, each has a

* "Menorrhagic chlorosis" of Trousseau.

special action more direct. By long continuance of a sedentary position the equilibrium of the circulation is disturbed, the blood is driven from the limbs to the internal organs and the dependent portions of the trunk, hence to the pelvis; but almost equally to the head, that is hanging down over the school-desk. Hence, the uterine hæmorrhages, that are necessarily confined to girls, are paralleled by the nose-bleeding, common to girls and boys, and very frequent in such circumstances. The cramped position of the chest interferes with respiration; the bowels are generally constipated, and both conditions again favor congestions of the visceral organs, including the uterus, but not confined to it. To deficiency of physical exercise is due, besides the disturbance in the equilibrium of the circulation, first, a loss of heat that should be evolved during the chemical processes of muscular action; second, a loss of stimulus to the spinal cord, which has, therefore, less power to control ganglionic action. This latter, therefore, becomes irregular, and the consequences of this irregularity will be presently described. The influence of these two conditions—cramped sedentary position, and deficiency of muscular exercise—either sufficient to induce uterine hæmorrhage, must, therefore, be eliminated, before such accident can be attributed to any other cause less simple and direct. The first criticism to be addressed to the “statistics” contained in Dr. Clarke’s clinical chapter, is, that this necessary elimination has not been made, and one possible cause arbitrarily selected out of an entire group of known causes.

As far as may be gathered from his book, Dr. Clarke’s theory may be thus formulated. Two intense nervous actions cannot, without detriment, be sustained at the

same time by the same organization. The mental labor demanded by school studies on the one hand, and the physiological process of menstruation on the other, are each connected with intense action of different parts of the nervous system. They are, therefore, incompatible with each other; and from the attempt to sustain them simultaneously, results, first, the imperfect accomplishment of each; second, the general exhaustion of the overburdened nervous system. To this exhaustion is to be attributed the uterine hæmorrhages upon which Dr. Clarke insists as the accident particularly liable to be induced by any continuous, *i. e.*, non-intermitting, system of education.

For non-medical readers it is important to develop the ellipsis and explain the facts upon which, if anywhere, this theory is based.

The nervous system, though in many respects a unit, consists of two great sections, called respectively, the ganglionic system, and the cerebro-spinal; the latter formed by the brain, the spinal cord, and the medulla-oblongata, that connects them; the former, constituted by smaller masses of nervous matter distributed in three ways: First, in a double chain lying on each side of the spinal cord, from the upper part of the neck to the pelvic cavity that terminates the trunk. These masses are called especially the sympathetic ganglia. Second, in so-called plexuses, occupying different positions in the cavity of the trunk, and standing in especial relation to various organs; the solar or celiac plexus to the stomach, liver, and spleen; the two renal plexuses to the kidneys; the mesenteric plexuses to the intestine; finally, on each side of the pelvis, the hypogastric plexus to the bladder, uterus, and ovaries—the so-called genito-urinary

organs. Third, besides these principal ganglia exist others, much more minute, imbedded in the muscular walls of certain organs—as the heart (intro-cardiac ganglia), the intestine (intestinal ganglia).

Each of these nervous masses contains nerve-cells as well as nerve-fibres, and is capable of generating nerve-force. Each, therefore, acts like a minute brain; and, in fact, the entire ganglionic system of nerves is analogous to the nervous system of certain among the lower animals—the crustacea and mollusks. These possess neither brain nor spinal cord; their nerve-centres, instead of being concentrated in a cranium and vertebral canal, are entirely disseminated through the cavities of the trunk, as are the visceral plexuses in vertebrated animals. In these, however, the addition of a brain and spinal cord to the original rudimentary nervous system, powerfully modifies and controls the action of the latter. The degree of control is variable, according to the relative predominance of the one or the other; and this predominance varies, not only according to different species of vertebrated animals, but also according to different individuals, in that which presents the most conspicuous capacity for individual variation—the human species. Up to a certain point, increased development of the cerebro-spinal system, attended by an increased development of the osseo-muscular framework of the body, is also accompanied by greater elaboration of the ganglionic nerves supplying the viscera, upon whose efficient action the nutrition of this frame depends. But beyond a certain point in the ascending scale, the exactness of this correlation ceases. The muscles and bones are smaller; yet the structure of the cerebro-spinal organs, especially the brain, becomes more elaborate; and hence the con-

control exercised over the functions of the ganglionic system is more complete, although the relative size of the two systems is not much changed.

Such control or predominance is manifested in the following ways: First. The functions of animal life, presided over by the cerebro-spinal system, become proportionately more important than those of vegetative or nutritive life, carried on by the ganglionic. That is to say, the acts of locomotion sustained by the spinal cord and the nervo-muscular apparatus, and the intellectual acts of the thought and will, sustained by the brain—are relatively more prominent than are the acts of digestion, respiration, circulation, etc., dependent on the functions of the ganglionic nerves. Second. These latter functions are themselves effected with more regularity and more force, when the activity of the cerebro-spinal system predominates over that of the ganglionic. Within certain limits, this is so true, that human beings possess over lower animals a superiority, not only of intellect, but of capacity for digesting various articles of food; and of maintaining their temperature in more various states of the external atmosphere. Third. Finally, the actions of the cerebro-spinal system, intellectual and muscular, are more regular and powerful when not liable to interruption from the operations of the ganglionic nerves, and the visceral functions presided over by them. When the boa-constrictor digests, he falls into a state of torpor that exceeds in degree, but not in kind, the drowsy rumination of a cow chewing her cud. Such animals are slaves to their nutritive functions, by which those of the brain and spinal cord may at any time be, as it were, oppressed and overwhelmed. The capacity for independence increases with every rise

in the hierarchical scale of vertebrates, until it culminates in man—able to think and talk over his dinner; to manufacture heat in his limbs while drawing blood to his cerebral hemispheres; to sustain in complete unconsciousness innumerable delicate and complicated chemical metamorphoses in all the tissues of his body, while concentrating every conscious effort of his mind upon equally delicate processes of thought and will.

The peculiarities that, when coarsely emphasized, serve to distinguish different species of animals from one another, are repeated in more subtle gradations, as varieties among the different classes, and even different individuals of the human race. Here may be found, at least, faint echoes and distant reminiscences of facts that stand out in bold relief throughout the animal kingdom. The classification of sex is certainly one of those that offer an interesting opportunity for such comparison, especially in regard to the relations existing between the operations of the ganglionic, and those of the cerebro-spinal system. As the authors who have asserted the complete subordination of the brain to the instincts in woman, have thus, perhaps unconsciously, reduced her to the anatomical level of the crustacea; so those who, like Dr. Clarke, insist on the incompatibility between cerebral action and the process of ovulation, imply a predominance of ganglionic activity in women that must render them the physiological inferiors of the animals or individuals in whom no such incompatibility exists.

Were such opposition between cerebral and ganglionic functions only noted when a rhythmical intermittence was introduced into the latter, and were such rhythm observed

only in the phenomena of menstruation, it might indeed be possible to fix upon women a peculiar mark of physiological inferiority, almost sufficient to amount to a stigma. But rhythmic movement is characteristic of all physiological actions—of the beating of the heart, the secretions of the stomach, the congestion of the spleen, the circulation of the brain, quite as decidedly as of the ripening of cells in the ovary. The tidal waves described by Michelet have become the exclusive theme of his eloquence, mainly because his attention was not attracted to any but those connected with the more obvious phenomena of menstruation. But many tidal waves rise and cross each other in shorter or longer cycles—waves of pulse and of temperature, of sleep and wakefulness, intermittences of secretion and excretion. In regard to the latter, it is noticeable that an intermittent excretion, as of bile or urine, is provided for by a continuous secretion, and that the same is true of the excretion upon whose rhythm an erroneously exceptional emphasis has been laid—that of the menstrual fluid. Here, as elsewhere, the intermittent phenomenon is preceded by long-continued cell growth—effected by precisely such processes of cellular assimilation and metamorphosis as take place in the elements of the liver and the kidneys. The cell growth in question is effected in the ovaries; the final stage of the process, the rupture of the containing cell or ovisac, and escape of the ovule, is attended by a concentration of nervous activity in the ganglionic masses sending nerves to those organs—analogueous to that which occurs in the solar plexus at periods of digestion; the fall of the ovule is itself analogueous to the shedding of epithelial cells in the gastric follicles; the afflux of blood to the utero-ovarian veins, analogueous to

the periodical congestion of the gastro-splenic vascular apparatus. Only, in this last case, the congestion results in the elaboration of a fluid secretion, the gastric juice; in the utero-ovarian plexus, where no secretion is required, the blood itself is discharged. It is difficult, with these facts, to understand the assertion that, "Periodicity is the grand (*i. e.* exclusive) characteristic of the female sex."

In normal conditions, the process of digestion and of menstruation are both accomplished without invading the consciousness of the individual whose body is the theatre of such extraordinary phenomena. Various abnormal conditions raise the one or the other to the sphere of consciousness—various stages in their evolution. Consciousness of nutritive functions is always painful, and digestion, quite as well as ovulation, may become a process most disturbing to cerebral tranquillity and efficiency. The longer duration of the latter is compensated by the more frequent occurrence of the former. The ovaries are decidedly active during at least fifteen days of every month; the stomach, during three or four hours after each meal, or from nine to twelve hours a day. As a matter of fact the digestive function is much more often the occasion of conscious discomfort, than is the function of ovulation. Whenever it becomes so, the dyspeptic approaches the condition of the reptiles or ruminating animals, in whom the process of digestion so absorbs the powers of the nervous system that all other modes of its activity are suspended. But such a condition is universally regarded as an evidence of disease, nor could any considerations concerning the complexity and importance of the ganglionic nerves of the stomach, or the intermittent character of digestion, convert the misfortune of the dyspeptic into a physiologi-

cal type for the race. At the most may it be admitted :

1st. That in civilized communities dyspepsia is a very common disease. www.libtool.com.cn

2d. That dyspeptics require rest of mind and body to facilitate the laborious process of digestion.

Cæteris paribus, these same propositions may be held of those suffering from abnormal modes of activity in another part of the ganglionic system—that connected with menstruation. A third proposition is, moreover, common to both, namely, that repose of the cerebro-spinal system is not required throughout the entire period of ganglionic activity, unless in exceptionally morbid cases. Thus, the process of digestion occupies from three to five hours, but an hour's repose after dinner is generally sufficient to avert discomfort. Similarly, the process of ovulation continues over fifteen days—menstruation lasts from three to six—but even in the cases that demand rest, six to twelve hours is usually enough, and more than enough.

It is noticeable that a slighter disturbance of normal conditions is needed to render digestion painful than to cause painful ovulation, that is, pain preceding the menstrual flow. Pain in menstruation, which is much more frequent, is dependent upon other conditions than the activity of the ovaries, and lasts a very much shorter time than does either the function of ovulation, or even than the uterine congestion secondary to it. Outside of actual uterine disease, the pain at this moment is most often dependent on uterine cramp, itself excited by a spasmodic contraction of blood-vessels that interfere with its circulation. As these remarks are addressed to non-medical readers, a word of explanation is here necessary.

It has been shown by experiment that the sudden ar-

rest of the circulation in muscular fibre is sufficient to induce in the latter violent contractions. Thus, the cramps of the legs in cholera patients are due to the stagnation of blood in their muscles. These cramps are even more easily induced in the muscular fibre of the viscera—the unstriped, involuntary muscles—such as exist in the intestine, bladder, and uterus. Anything that will cause a sudden contraction of the blood-vessels in the uterus will, therefore, by cutting off the supply of blood, cause the muscular fibre of the uterus to contract in painful cramps. The small blood-vessels are themselves provided with circular muscular fibres, whose contraction necessarily draws the walls of the vessels together, obliterates their canal, and shuts out the blood. This contraction is effected by stimulation of the fine nerves, called vaso-motor, that are distributed to these muscular fibres, and which are derived from the sympathetic ganglia, that form part of that same ganglionic system from which the nerves of the ovaries and other viscera are supplied. The utero-ovarian blood-vessels derive their nerves from the hypogastric plexus, which, formed by branches from both sympathetic ganglia and spinal cord, is the exclusive source of the innervation of the uterus and ovaries. The ganglionic nervous excitement coincident with the maturation of the ovule and the congestion of the uterus, is easily communicated to the vaso-motor nerves of the latter organ. At the very moment, therefore, that the uterine blood-vessels are dilated, and blood is being exhaled into the uterine cavity, an excessive stimulation of the vaso-motor nerves may cause the blood-vessels to contract; the flow is then temporarily arrested, the circulation in the uterus disturbed, and its muscular fibres thrown into cramps.

Or the opposite event may occur. As the stimulation of the vaso-motor nerves causes contraction of the blood-vessels, so their exhaustion or paralysis causes relaxation of these same vessels, consequently, over-distension with blood; and, if the door to hæmorrhage be once opened by the existence of the menstrual nîsus, an excessive flow of blood.* Such vaso-motor paralysis may depend on one of three circumstances:

1st. The original stimulus may be excessive, and hence necessarily followed by reaction.

2nd. Schiff has shown that galvanization of a cerebro-spinal nerve causes a dilatation of the blood-vessels in the vicinity, as if the vaso-motor force were over-powered by the excessive stimulation of the controlling nerves. If excessive action of the brain or spinal cord be analogous in its effects to galvanism of a spinal nerve, it might be supposed to cause vaso-motor paralysis and hæmorrhage.

3d. In general exhaustion of the nervous system, both of its ganglionic and cerebro-spinal apparatus, the vaso-motor nerves suffer with the rest, and the blood-vessels lose their tone in consequence. It is to such exhaustion that Dr. Clarke especially attributes excessive uterine hæmorrhage in young girls, and, as already said, he refers the exhaustion to a single cause, namely, to the attempt to impose on the nervous system two actions of equal intensity, contrary to the fundamental law that an intense evolution of nerve-force in one part of the organism necessitates repose in the remainder.

* For it is known that vaso-motor paralysis is not of itself sufficient to induce hæmorrhage, unless the tension of the blood-current be coincidently raised. See Bouchard, *Pathogénie des Hæmorrhagies*.

Independently of the three conditions where excessive menstruation is connected with vaso-motor paralysis, a fourth may be found directly in the excitement of the ovarian plexus of nerves. This evolution of nerve-force which accompanies the maturation of the ovule, is the immediate cause of the afflux of blood to the utero-ovarian vessels. The effect upon the latter is probably due to the spinal nerve-fibres contained in the plexus, and upon which the ganglionic excitement acts like the galvanism in Schiff's experiment, already described. Direct stimulation of the vaso-motor nerves, alone, as has been said, contracts the blood-vessels. Stimulation of the spinal fibres associated with them exercises the contrary effect. An excessive stimulation of those fibres which enter into the ganglionic masses, would have an effect similar to that of excessive stimulation directly addressed to the cerebro-spinal system, and the blood-vessels would be not only dilated, but paralyzed.

Among the conditions, therefore, which may, by inducing either pain or excessive hæmorrhage, render menstruation an abnormal process, and incompatible with active exertion, three are directly connected with the ganglionic system of nerves, the fourth indirectly, by the possible influence upon them of the cerebro-spinal. The first are excessive activity of the ovarian nerves, derived from the hypogastric plexus; paralysis of uterine vaso-motor nerves, as a secondary result of this excessive action: exhaustion of these same vaso-motor nerves, as an element of general nervous exhaustion. The last theoretical condition would be, excitement of the brain or spinal cord, in a manner analogous to what may be determined by a galvanic current, and followed, therefore, by the same consequence—paralysis of vaso-motor

nerves, and excessive dilatation of the blood-vessels.

The two first conditions among these four are most easily induced when the activity of the ganglionic system is habitually predominant in the organism, or when this activity is habitually irregular. This irregularity, marked by vaso-motor spasm, uterine cramp, and pain, represents the lowest degree of disorder, which, if long continued, passes to the next—of vaso-motor paralysis, accompanied by excessive hæmorrhage; and finally may, as Dr. Clarke has pointed out, be followed by paralysis in the ovarian plexus itself, with consequent cessation of ovulation, and amenorrhœa, or absence of menstruation.

This habitual predominance or irregularity of the ganglionic nerves implies, as has been seen, a relatively deficient innervation or generation of nerve-force in the cerebro-spinal system. It could not, therefore, be ascribed to excessive activity of that system, except in the cases where this has been pushed to the point of complete exhaustion. It is, in fact, a matter of common observation, that hysterical and anemic women, in whom disordered menstruation is most frequently observed, are conspicuously destitute of habits implying either cerebral or spinal activity—that is, they neither think much, nor take much physical exercise.

The last two cases, however, of cerebro-spinal excitement or exhaustion, may be supposed to imply a predominant activity of the cerebro-spinal system.

Inquiry into the effects of cerebro-spinal excitement is rendered extremely complicated on account of the following facts:

1st. Experimental excitation, by means of galvanism

or mechanical irritation, causes different results when applied to spinal nerves, to different parts of the spinal cord, or to different parts of the brain. Galvanism applied to a spinal nerve, determines, it has been said, dilatation of blood-vessels, and increased secretion in glands. But galvanism applied to the spinal cord in the neck, causes contraction of blood-vessels. Mechanical irritation of other parts of the spinal cord, on the other hand, causes vaso-motor paralysis and dilatation of blood-vessels. This is especially true of that part lying in the loins, and which contains a peculiar nervous centre, that stands in special relation to the uterus and ovaries, and is involved in many of their diseases, either as a cause or effect. Systematic galvanic irritation of the brain has been little attempted, until in some very recent experiments; but its effects are already known to be most various, according to the part to which it is applied. The brain is not a single organ, but rather a collection of organs, differing from one another in function even more than in situation, and among them only some are really concerned in the production of thought.

2d. In the medulla oblongata exists a nervous centre called the vaso-motor centre, because of its close relations with the vaso-motor nerves. Stimulation of this centre causes contraction of the blood-vessels. Severing the same part causes paralysis of the vaso-motor nerves and dilatation of the blood-vessels. The conditions of the brain that have been most clearly shown to influence the circulation, are those that can be proved to take an effect on this vaso-motor centre. If, as is probable, different forms of cerebral action induce or depend on different cerebral conditions, or involve different sections

of the cranial masses, this effect would necessarily be different, and the influence on the circulation vary accordingly.

3d. No experimental proof has hitherto been obtained that stimulation of the cerebral organs lying above the vaso-motor centre, and which include those possessing the function of thought, ever paralyzes this centre; but, as it is only by such paralysis that cerebral conditions can induce dilatation of blood-vessels, it must follow that no *experimental proof* at present exists that stimulation of the brain ever does cause such dilatation—that is, ever does become a cause of hæmorrhage. The *clinical* facts for such a supposition are those in which the occurrence of an emotion is followed by flushing of the face, acceleration of the pulse, hot or cold perspirations, phenomena all indicative of dilatation of the blood-vessels, with temporary paralysis of their nerves and of their vaso-motor centre. It is not proved, however, that the emotions capable of causing these effects really result from a stimulation of the brain. On the contrary, they are generally accompanied by diminished activity of that cerebral function that most certainly does depend on such stimulation—the function, namely, of thought.

Now, since the power of thought and the power of the vaso-motor centre are equally paralyzed under these circumstances, it is more probable that the phenomena which most nearly resemble those of stimulation of the brain are either confined to some special part of it, whose activity is in antagonism to the rest, or else are really phenomena of exhaustion, and therefore come under another category. But if these do not, no facts exist to prove that stimulation of the intellectual func-

tions of the brain is in itself capable of producing vaso-motor paralysis—that is, of becoming a cause of hæmorrhage; or, in other words, stimulation of the brain cannot be likened in its effect to galvanic stimulation of a spinal nerve. But if stimulation of the brain does not paralyze, it must increase the tonicity of the vaso-motor centre, and hence the force and regularity of the circulation. Up to a certain point, these characters do indeed increase, with increase of pressure in the cerebral blood-vessels. They increase also during intellectual operations, unattended by emotion, in which a similar increase of pressure must take place, on account of the afflux of blood to the cerebral hemispheres, when these are aroused to activity.

These facts already indicate a radical difference between the nature of the cerebral actions involved in emotion and in thought. From them also we should infer in all cases where vaso-motor paralysis was apparently traceable to excess of cerebral activity, either *that exhaustion had already occurred, or that the activity was not intellectual but emotional*. In the first case, we should be immediately brought to our fourth possible condition for uterine hæmorrhage, dependent on modifications of the cerebro-spinal system. It is admitted, as the result of many experiments and pathological observations that need not here be quoted, that exhaustion of certain parts of the brain and spinal cord may induce vaso-motor paralysis, and that, if a cause for hæmorrhage is already in operation, a passive flow of blood may be indefinitely increased. Such a course is the menstrual crisis, without which even the vaso-motor paralysis is usually unable to

determine uterine hæmorrhage.* In connection with it, physical exercise, pushed to the point of exhausting the spinal cord, and the peculiar centre in its lumbar portion, or mental effort so excessive and prolonged as to exhaust the brain, and the general vaso-motor centre, might become causes of menorrhagia.

It is evident, however, that if such exhaustion had been produced previous to the menstrual epoch, the effect would be precisely the same as if the morbid causes operated only at the time of menstruation. From this point of view the precaution suggested by Dr. Clarke, of intermitting intellectual effort during the menstrual period, would be inadequate whenever it was not superfluous. But in Dr. Clarke's theory this period has a peculiar influence in rendering morbid conditions that at other times are innocuous. This, in virtue of the law already quoted, that the evolution of force at one centre of the nervous system is incompatible with an evolution of equal intensity at another, since it diminishes the sum of resources distributed to the nervous system as a whole. Hence, relatively to the amount of power left in the brain, the same exertion becomes very much more fatiguing, and may easily lead to exhaustion with all its consequences.

Nothing seems more simple than this proposition when thus stated. But all physiological problems are complicated by the element of quantity—circumstance which almost indefinitely limits our power of making absolute assertions. The comparison already made between the

*The "uterine epistaxis" of malignant fevers are evidently foreign to our subject, as also the hæmorrhages of subinvolution, or of the menopause. The hæmorrhages from anemia are, on the other hand, so frequent, as to explain the majority of such cases as Dr. Clarke's.

process of digestion and that of menstruation should suffice to show that there is no absolute incompatibility between the evolution of nerve force at the ganglionic centres and at the cerebro-spinal. For if so the process of digestion would necessitate such absolute torpor of the brain and spinal cord as certainly would be quite incompatible with the exigencies of civilized life. There is a certain alternation between the periods of activity of the two systems, but this varies in infinite gradation; from the digestive torpor of the savage, analogous to that of ruminating animals, up to the unconscious digestion of healthy men of temperate habits and marked intellectual and physical activity, to whom all hours of the day are nearly equally suitable for exertion. As previously said, up to a certain point, the incompatibility diminishes with every increase in the development of the cerebral system.

But again, the evolution of nerve force required by ovulation should not normally be comparable in intensity with that effected in cerebral or spinal action. Whenever it is so the activity of the ganglionic system must be in excess, or that of the cerebro-spinal system must be deficient. It is true that among the women of highly civilized societies, one or both of these conditions very frequently exist, but it is then as truly abnormal as is the dyspepsia and spleen—equally prevalent.

Although, for certain purposes, it is necessary to consider the ganglionic and cerebro-spinal system together, as parts of a single apparatus, it is important also to remember the boundaries that lie between them. It is much easier, by intense muscular exertion, that necessitates evolution of force in the spinal cord, to render the brain incapable of function, than to do so by intense

action of the ganglionic nerves, whose connection with the brain, though real, is much less direct. Were it not so, life would be much more precarious than it is, and advance in ~~civilization~~ impossible; because the necessarily incessant activity of the nerves involved in nutritive processes would too largely impair the action of the brain. The effect on the brain of a really irresistible and predominant activity of the nerves involved in the reproductive organs, is to be studied in the lower animals, and in phenomena that, fortunately, are rarely to be observed in healthy individuals of the human race. Still less can such confessedly morbid predominance be considered as a peculiar liability of the female sex in this race. A singular tendency exists in many quarters, and is strongly manifested in Dr. Clarke's book, to assume that considerations pertaining to sex and to the functions of reproduction exercise such an enormous influence upon one sex, and none at all upon the other. Since the discovery in 1827 of the ovule or female reproductive cell, there can be no question of the complete physiological equivalence and analogy between the essential organs of reproduction in the two sexes. The period of their development, the influence of such development on the entire nutrition of the body, the irregularities of nutritive or of cerebro-spinal action, that may be caused by irregularities in such development, are also completely analogous. It is only the organ of gestation that is peculiar to the female—the organ of maternity—the function that, although resulting from sex, transcends sex and belongs to the race. In a double sense is the uterus secondary to the ovaries.*

* Meadows observes: "It is not the ovary which is an appendix to the uterus, but the uterus which is an appendix to the ovary."

For its physiological action, both in menstruation and in pregnancy, is the direct consequence of ovarian functions, and closely dependent upon them; and the period of its prominent activity does not come until after the action of the ovaries has been completely established; that is, the period of maternity is, or should be, consecutive to the period of adolescence, and the work of gestation only entered upon when the work of ovulation has long been thoroughly accomplished.

The analogies have been much overstrained that exist between the menstrual epoch of an adolescent girl and the pregnancy of an adult woman. They are illustrations of a general physiological law that in some cases might be called a caprice of nature, in virtue of which the rudiments of a process that is to be effected at a future epoch are sketched out during an epoch already existing. The afflux of blood to the uterus during the rupture of the ovisac, cannot be shown to be useful by any effort of teleological physiologists. It predicts, however, the afflux that will be necessary at a future pregnancy, in precisely the same way as the growth of the lungs in the foetus predicts the future necessity for respiration, or the formation of ovules in the ovaries of the new-born girl, predicts the future necessity of a reproductive apparatus. But to impose on the girl the precautions necessary to the mother, is one way to enfeeble and prematurely age her. In the same way is the child enfeebled by premature considerations in regard to sex that do not yet exist, and the adult woman so often treated as old as soon as she has borne children, which should be a proof not of age, but of maturity.

From the preceding considerations we may, we think, conclude:

1st. That unless the brain and spinal cord *had been already exhausted or on the point of exhaustion previous to the menstrual crisis*, this alone would be insufficient to exhaust them. www.libtool.com.cn

2d. That the degree of exhaustion in the cerebro-spinal system, necessary to determine vaso-motor paralysis, is very great, and much transcends that likely to be induced by the mental exertion required in the ordinary curriculum of a girl's school.

3d. That therefore, when vaso-motor paralysis, as indicated by uterine hæmorrhage, has occurred apparently in consequence of such mental exertion, it is really due to some other conditions existing with this.

Of these we have already insisted upon two—sedentary position and deficiency of physical exercise.

Authors have less frequently analyzed the effects of another circumstance so often accompanying the intellectual exertions of school life, namely, the morbid emotional excitement that is incident either to the period of adolescence or to the injudicious educational *régime*. To precisely appreciate these effects, it will be necessary to push a little further the analysis already commenced, of the mode of activity exhibited by different portions of the brain during the evolution of thought or of emotion.

Among all the obscurities that overhang this subject, a few facts are, nevertheless, demonstrated. The first that concerns us is the existence of the vaso-motor centre, whose situation and functions have been already described. The second is the localization of the function of thought in the circumvolutions of gray matter on the surface of the cerebral hemispheres—fact that we have already assumed to be sufficiently demonstrated. The third class of facts include those, also insisted upon, that

indicate a peculiar influence of the emotions upon the circulation and the vaso-motor nerves. In some cases these are stimulated, and the blood-vessels spasmodically contract, the cheek pales, the hands and feet grow cold, chills creep down the back—even nausea may occur from interference with the circulation of the brain; or else the cheek flushes, the temples throb, the heart beats more rapidly, when, from temporary paralysis of these same nerves, the blood-vessels are suddenly dilated.

These phenomena indicate that either the anatomical seat or the mode of generation of emotion, is in closer connection with the cerebral vaso-motor centre than is the seat of ideas.

From this positive stand-point we may be permitted to cautiously venture a little further, in the direction of a theory for the precise localization of the organs of emotion.

It is well known that at the base of the brain are collected certain masses of nervous matter, that constitute nervous centres or cerebral ganglia, that are in very intimate connection, on the one hand, with nerves of special sense, as the optic* and olfactory,† on the other with nerves of general sensation and motion.‡ To this intricate part of the brain, these centres, converge the nerve-fibres collected in the spinal cord and medulla oblongata, and from them radiate other fibres that pursue a divergent course, and finally terminate in the gray matter of the cerebral hemispheres. Thus, the brute impressions brought from the periphery of the body, are conveyed to special foci of concentration, thence to be transmitted to the gray matter at the surface of the brain, and become material for thought. Conversely,

* Corpora quadrigemina.

† Corpora striata.

‡ Thalami optici and corpora striata.

impulses generated in the nerve-cells devoted to the elaboration of thought, pass through these same intermediate stations before they acquire sufficient consistency to affect the motor-nerves, and, through them, the muscular osseous apparatus of the body. Before a sensory impression can become a thought, or a voluntary impulse express itself by motion, each must be converged toward these centres, whence it afterwards radiates, along divergent fibres, directed now above, to the surface of the brain, now below, on a longer course, to the surface of the body.

Luis has suggested, therefore, that these intermediate stations of cerebral organs constitute peculiar centres in which crude nervous impressions sustain a primary elaboration before passing to the surface of the brain. Further, that the generation of emotions, which differs in so many respects from that of ideas, is especially connected with these centres as distinguished from the cerebral hemispheres lying above them. This idea is based on the following facts:

1st. The nervous masses in question are well developed in animals in whom the cerebral hemispheres, or organs of intellection, are comparatively rudimentary; and in these same animals, while little or no capacity for abstract reasoning exists, the instincts and feelings attain individuality and intensity.

2d. The emotions stand in much closer relation to sensation and movement, than do the operations of thought. The latter, indeed, necessitate immobility, and, if sufficiently intense, diminish the power of sensation; they seem to indicate a concentration of nervous action upon organs unconnected with motility or sensibility. On the contrary, movements of some kind are the first result of emotions, of which each is expressed

by a characteristic gesture, and these increase in violence with the intensity of the feeling. A powerful emotion, as well as an absorbing thought, may, it is true, annihilate or transform sensation; but this is explicable by the fact that the strongest emotions are excited by ideas. Hence, on the hypothesis, the impression radiating downwards to the emotional centres from the cerebral hemispheres, would counteract a sensory impression radiating upwards from them, by a literal interference analogous to that observed in opposing waves of sound. But as the direction of the impression generating emotion coincides with that of the motor impulses, the latter would not be counteracted, but reinforced.

3d. Conversely, sensations of various kinds, transmitted to these centres from different parts of the body, are as effective as ideas in generating or modifying emotional conditions—often, indeed, much more so. The hypochondria of the ancients, the dyspeptic melancholia of the moderns, the infinite varieties of hysterical sensibility, are all well-known illustrations of this undisputed fact. The elastic consciousness of well-being that emboldens the volition of certain individuals, as distinguished from the timid apprehensiveness that constantly depresses the powers of others, is connected, not with any view of external conditions appreciable by the intellect, but with a vast multitude of vague bodily sensations, of which each alone fails to make a distinct impression upon consciousness.

4th. An impression made on one part of the sympathetic system is easily communicated to another, and to the ganglionic masses of the visceral plexuses, already described. Hence the rapid effect of many emotions upon the processes of digestion; hence the epigastric

response to the emotion of fear, which led Bichat to localize this feeling in the solar plexus lying behind the stomach. In a precisely similar manner may the effect of emotion be distributed to the ganglionic nerves of the kidneys, uterus, and ovaries, leading to the flow of urine that terminates a paroxysm of hysteria, often suppressing menstruation, by contraction of uterine blood vessels, or causing an excess of menstrual hæmorrhage, from an excessive excitement of the ovarian nerves during the menstrual crisis. None of these effects are observed after a simple act of thinking, unattended by emotion.

5th. Probably on account of such an influence upon the vaso-motor nerves, the blood vessels, and, consequently, the processes of nutrition, the evolution of emotions is attended with much greater fatigue than is that of thought. The fatigue that may follow a prolonged intellectual operation is, moreover, distinctly localized in the head, and exists in various degrees, from simple inability for further attention, to decided sensation of weariness, or even pain. But the fatigue experienced after excessive emotion, especially if this be of a depressing character and accompanied by tears (which imply vaso-motor paralysis in the lachrymal glands), is generalized all over the body, and is, moreover, very much more often followed by headache, or by symptoms of cerebral congestion or anemia, than is the act of thinking, except in persons morbidly predisposed. When nervous exhaustion is observed after prolonged mental effort, one of two other conditions, or both, has nearly always co-existed, namely, deficiency of physical exercise, or presence of active emotion, as, ardent ambitions or harassing anxieties. In a few cases, the mental effort itself, by the afflux of blood determined to the

brain, or the excessive activity imposed upon its elements, becomes an efficient cause of disease. But in these cases there is either an original imperfection in the organization of the nerve tissues, or the mental effort has been of that exceptionally intense nature of which none but a few minds are capable. Finally, in these cases, the resulting disease is seated in the brain or spinal column.

This latter remark is of great importance for our purpose; for it tends to show that diseases produced elsewhere within the range of the ganglionic system of nerves—as the menstrual hæmorrhage, that we are especially considering—must be due to some other nervous act than that of thought.

From the foregoing considerations, we believe, may be again inferred, first, that the radical difference which exists between the cerebral operations that result in thought, and those that accompany the evolution of emotion, probably depends upon the fact, that in the former central nervous action remains more or less localized on the surface of the cerebral hemispheres, while, in the latter, the great ganglia lying at the base of the brain, and hence nearer the vaso-motor centre, are called into play; second, that the effects of such action are more rapidly generalized throughout the nervous system, and, by causing the dilatation of the blood-vessels in the manner described, exhaust the central nervous system in a twofold manner, by a disturbance of its circulation, and by a direct depression of its nutrition, when the modifications of the circulation exaggerate the nutrition elsewhere. Repeated excitement and consecutive paralysis of the vaso-motor nerves, therefore, serve as the most efficient means of draining off the force of the cerebro-spinal nervous system. And

it has been seen, that a depression of its power is followed by an exaggerated and irregular activity of the ganglionic system, to which are due most of the phenomena observed in hysteria and in ordinarily nervous women. These are in many respects different from those observed in men suffering from so-called nervous debility, for the reason, that in them the ganglionic system of nerves is less prominent, and its irregularities of action therefore less marked, when the control exercised by the cerebro-spinal system has been diminished. If the vaso-motor centre of the brain is only influenced when the ganglia at the base are called into activity, and if their activity coincides with emotion, and not with thought, whose organ is much more remote, in the cerebral hemispheres, it should follow that emotion, and not thought, should most easily influence the vaso-motor centre, and be followed by peculiar modifications of the ganglionic system and of the circulation. This supposition is confirmed by the occurrence of many vaso-motor phenomena that commonly follow emotion, but are rarely observed after even prolonged thought. It is not, therefore, stimulation of the intellect, but excitement of the feelings, that can be shown from physiological data to have an injurious effect upon the vaso-motor nerves of the uterus, or the ganglionic nerves of the ovaries, or, in other words, can be concerned in the production of uterine hæmorrhage. To be just, however, it must be admitted, that still another view is possible. For it might be affirmed: first, that in women communication of impressions between different parts of the nervous system was so rapid, that the limitation of activity to a particular part of the brain was impossible; in other words, that the distinction between thought and emotion was

effaced, because any action set up at the surface of the cerebral hemispheres, invariably called the emotional centres into play; or, second, it might be said, that the original organization of the cerebral tissues in women was so imperfect, that a slight amount of activity was sufficient to exhaust them, and hence become a cause of hæmorrhage by the mechanism previously described.

Neither of these assertions is made by Dr. Clarke, but it is certain that one or both of them might be made in regard to a large number of women. To these, however, severe intellectual exertion would be injurious, not only if performed during the week of menstruation, but if performed at all. Nervous excitement during the intermenstrual period, is quite as likely to be followed by pain or excessive hæmorrhage at the next menstruation, as if it had been sustained at the critical epoch itself. Nature generally provides for a portion of this contingency, by rendering such women little capable of mental exertion, and little ambitious for it. But, though they be kept in the most complete intellectual quiescence, the condition of these unfortunates is scarcely improved. Withdrawn from the serene and powerful movement of intellectual life, they are left to all the agitations of their ganglionic nerves; impressions, unfelt by others, raise storms of feeling in them, that actually ravage their nervous system; efforts that but slightly fatigue stronger organizations, are completely exhausting to theirs; health, indeed, is only possible to them while they may be sheltered from exposure, saved from exertion, and carefully screened from excitement and shock.

The method, therefore, suggested by Dr. Clarke for enabling young girls to master Latin and Greek without sacrifice of their health, seems to us to be addressed to

the wrong element in the group of supposed causes. In the cases related by Dr. Clarke, there is nothing to show that the menorrhagia was occasioned by study during the week of menstruation, rather than during the three weeks that preceded it. Nor that even then, the true cause of disease was to be found in the intellectual exertion of mastering the school text-books, rather than in the moral excitement due to competition, haste, and cramming, or the close confinement necessitated by prolonged school hours, and unhealthy sedentary habits out of school.

The complexity of causation in such instances may be well illustrated by the following case, that I select on account of its great resemblance to the type described by Dr. Clarke.

A young girl of sixteen consulted me on account of menstrual hæmorrhage so excessive as to induce complete exhaustion, bordering upon syncope. She had menstruated for two years—during the first, in quite a normal manner—but during the second, had become subject to these menorrhagic accidents, since residence at boarding-school. It would have been easy to decide that the disturbance was directly due to the severity of the mental efforts exacted by the *régime* of the school. But on further inquiry it appeared: first, that the mother of the girl had always been subject to menorrhagia, and it is well known that this often occurs exclusively as the result of hereditary predisposition. Second, that just before the entrance to school, and the disturbance of menstruation, the girl had been living in a malarial district, and had suffered from malarial infection, which is again a frequent cause of menorrhagia. Third, that the studies pursued at school were unusually rudimentary for a girl of sixteen, and indeed, below the

natural capacity of her intelligence, had this been properly trained. But the hours of study were so ill-arranged, that the pupils were kept over their books, or at the piano, nearly all day, and even in the intervals allowed for recreation, no exercise was enforced. It was therefore frequently neglected, and the girl, with hereditary predisposition to menorrhagia, increased by malarial infection, and also by certain rheumatic tendencies, was allowed to expend upon elementary text-books an amount of time, attention, and nervous energy, that would have been deemed excessive for the most valuable intellectual pursuits.

All physicians are aware of the frequent dependence of menorrhagia upon anemia, not only acquired, but congenital. The existence of anemia, or of an imperfect elaboration of the blood and vascular system, previous to the occurrence of the first menstruation, is a possible condition of menstrual disorder that must always be very carefully eliminated before any other cause be assigned. It is, moreover, extremely frequent. Others exist, but are more rare—as peculiar congenital predisposition to hæmorrhages, with or without true hemophilia*.

With such causes (anemia, rheumatism, malarial infection, hereditary predisposition), the observance of rest during the menstrual week would be quite ineffectual so long as the *régime* of the other three weeks remain uselessly unhygienic. If the menstrual crisis finds the uterine blood-vessels already deprived of tonicity through nerv-

* Hereditary disease, dependent on an imperfect development of blood vessels, and characterized by a remarkable tendency to bleed from any blood-vessel that accident may have opened. This disease is nearly confined to men, but the women in the same families often suffer from profuse menstruation.

ous exhaustion or other cause, hæmorrhage is as likely to occur as if that tonicity were only exhausted at the epoch of menstruation. In the cases described by Dr. Clarke, the cure was effected, when at all, not by an intermittence of study, which does not seem to have been tried, but by its complete cessation, together with that of all the conditions by which it was accompanied.

Again, therefore, it may be said, that wherever such intermittence is not superfluous, it would be inadequate for the purpose for which it is designed.

But this conclusion may seem to be much more severe, and, to those interested in the education of girls, much more disagreeable than that formulated by Dr. Clarke. We firmly believe, however, that truth never can be disagreeable when it is really understood in all its bearings and all its consequences, and conversely, that any proposition framed with a view to supposed desirableness rather than veracity, is almost certain to lead in the end to consequences quite undesirable. We will not, therefore, try to decide whether it may be more agreeable to believe that the health of adolescent girls requires general and permanent supervision, or that all responsibility may be discharged by confining them to a sofa and a novel for one week out of every four; to believe that a certain number of women, as of men, are always unfit for intellectual exertion, or that all women are inevitably rendered so unfit during one quarter of their lives at times unknown to outsiders, and which, therefore, may be at any time; to believe that the increased delicacy of women in civilized societies depends on a cultivated predominance of their ganglionic nervous system and emotional functions, or on the excessive stimulus of the cerebro-spinal system and on intellectual cultivation.

More useful than such discussion is the consideration of the methods that might be proposed, instead of that suggested by Dr. Clarke in the third proposition we have formulated from his book. Dr. Clarke's method is to provide regular intermittences in the education of girls, "conceding to Nature her moderate but inexorable demand for rest, during one week out of four." The method that we believe to be suggested by the foregoing considerations would be more complex, but, we think, at once more effectual and less inconvenient. It may be stated in the following formula: "Secure the predominance of the cerebro-spinal system over the activity of the ganglionic." Since the activity of the cerebro-spinal system may be roughly * divided into a twofold direction, intellectual and muscular, this predominance is to be secured by assiduous cultivation of the intellect as compared with the emotions, and of the muscles of the limbs as compared with the muscular fibre of the blood-vessels. In other words, the evil effects of school competition, and of the emotional excitement natural to adolescence, are to be combated by a larger, wider, slower, and more complete intellectual education than at present falls to the lot of either boys or girls. And the dangers incident to the development of new activity in the ganglionic nervous system by the functions of the ovaries, the dangers of irregular circulation, vaso-motor spasm and paralysis, are to be averted by systematic physical exercise, that shall stimulate the spinal nerves, quicken the external circulation, and favor the development of muscles at the moment that their activity threatens to be overpowered.

* For we purposely leave out of sight innumerable facts in regard to its influence on nutrition, temperature, etc.

The effect of systematic training on the spinal nervous system, and on the bones and muscles dependent upon it, has been often enough described. Far less attention has been given to the equally positive development that can be secured for the brain, under the influence of prolonged and systematic exercise of its functions. An immense increase of functional capacity is possible, even without marked anatomical alteration; but even this is observed under circumstances that seem to indicate that it is rather the effect than the cause of changes in function. Retzius (Muller's Archives, 1845, p. 89*) observes that the female cranium varies in size much more than the male: "Female crania of the higher and middle classes are in general much smaller relatively than is the case among the peasants, a fact which probably depends on the different mode of life and occupation. The skull of the Norway female peasants is as large and strong as that of the men." Welcker himself makes a somewhat analogous observation in regard to the crania of different races, the differences between the sexes being more marked in proportion to the civilization of the race—that is, to the degree of specialization of education, and mental occupation. He gives the following table:

CRANIAL CAPACITY.

	WOMAN.	MAN.
Asiatic Caucasian.....	1	1.27.
European	1	1.17.
Mongols.....	1	1.13.
Malays.....	1	1.08.
Americans	1	1.08.
Negroes.....	1	1.07.

* Quoted by Welcker, *Untersuchungen über den Wachsthum und Bau des Menschlichen Schädels.* Halle, 1862.

Besides the prominent fact upon which Welcker insists, this table indicates two others. First, that the anatomical difference in the higher races is too little to explain the general difference in intellectual achievement really observed between the two sexes of these races. Second, that the difference is not in precise proportion to the maximum intelligence attained by the race, but to the social inferiority and subjection of the women; for the Asiatics (Hindoos) stand highest on the scale, the Europeans only second; and the excess of the first over the second, in regard to the point in question, is greater than the excess of the Europeans over the other races named.

The general fact that, beyond certain well-defined limits, the activity of the cerebro-spinal system and its relative predominance over the ganglionic, is to be determined dynamically rather than anatomically, is insisted upon by Laycock (*Méd. Times and Gaz.*, 1862). This writer observes that the large, slowly-nourished brain of a lymphatic man, frequently evolves much less intellectual force than does the smaller, perhaps more compact, brain of another, in whom the circulation is more active, and the nutrition probably more elaborate.

These facts, and many others that might be quoted, are pertinent to our subject, on account of the influence exercised over the ganglionic centres by the development and functional activity of those of thought. Stimulation of the cerebral hemispheres is one of the most powerful means of counteracting paralysis of the vaso-motor centre, with all its consequences. Habitual activity of these centres—implying, psychologically, habitual activity of thought, physiologically, a more active local circulation—is therefore the best method at our disposal for permanently

counteracting tendencies to irregular action in this centre, in the emotional ganglia lying in its vicinity, and in the vaso-motor nerves dependent upon it.

A method of such general supervision does not in itself forbid the co-education of girls and boys; for from this more general point of view, the health of the latter during adolescence really requires precisely the same precautions as that of the former. Attention is less frequently drawn to the precautions required in the case of boys, mainly because such precautions are more frequently observed in regard to them. But besides, girls arrive at the period of adolescence already enervated by the senseless training of their childhood, on which distinctions of sex have been obtruded long before they are established by nature. Finally, since peculiarities relating to the sexual organs are inherited, if at all, from the parent of the same sex,* the germs of uterine diseases acquired by mothers too frequently exist in daughters, ready to be developed at the earliest opportunity.

As a matter of fact, therefore, the existing generation of girls, especially in New England, too often possess a delicacy of organization greater than that of their brothers, and demanding a special supervision and watchfulness, best bestowed when they are educated apart. For the reasons already detailed at length, we think that such supervision does not necessitate periodical intermitence of study, except in special cases, that constitute a decided minority among the whole. It does necessitate, however, the more difficult task of providing for adequate rest and exercise during every day of the month. It necessitates a more rational system of study, a more

* Lucas. *Traité de l'hérédité.*

profound training, a more intelligent view of the real character of intellectual life, and of the exercises required to develop it. It necessitates a concentration of intellectual effort into four or six hours out of the twenty-four, instead of a useless diffusion of intellectual peddling over ten or twelve. It necessitates an extension of the term of years allowed for education, and the giving up the fashionable notion that a girl is to be "finished" at seventeen or eighteen, while her brother continues to pursue his studies until twenty-two or twenty-five. It necessitates, finally, the most careful individual adjustment to each different case, and to all its peculiarities, mental, moral, and physical—quite as frequently, therefore, necessitates the education of girls apart from one another as apart from boys.

But this necessity is not permanent. Dr. Clarke himself admits that if the one precaution upon which he insists be observed during the first years of adolescence, it will become unnecessary when the constitution is formed. But neither Dr. Clarke nor his reviewers seem to see that this admission annihilates the only objection made by him to the co-education of the sexes. For that is especially demanded as the only means by which women may be enabled to enjoy a technically superior education, as distinguished from the primary and secondary, and such education does not begin until eighteen. A university education is too expensive to be duplicated in any state; it moreover represents the collective intellectual force of society, and as such cannot rationally be cut in two. Indeed, as such, cannot logically exclude women from men's schools, which are thereby left as imperfect and incomplete as would be the new universities to be constructed exclusively for women. During the neutral period of

childhood, girls and boys should be educated together, because, as sex does not, properly speaking, exist, it is absurd to base any distinctions upon it, and the attempt, like all absurdities, is liable to lead to really disastrous consequences. During the period of adolescence or of the formation of sex, it is well to establish a separate education, during which the character of each may be defined and consolidated. This separation is needed by the moral and the physical training rather than by the intellectual. Were it, as is usually assumed, necessary for boys to exercise and for girls to sit still, the need of separation would be much less than it is, for the boys could be sent to the gymnasium while the girls remained in the school-room. But systematic exercise is even more necessary for the latter than for the former, because they are likely to take it spontaneously. These exercises must differ in kind and in intensity from those performed by boys, and for this and other reasons, are best pursued alone.

The moral differentiation of the sexes requires separate education, for analogous reasons. Moral differences, though less marked than physical, are more so than intellectual, and any system of education that might be supposed to efface these, would be an injury to society, that requires, not uniformity, but increasing complexity, by means of increasing variety of character among its members. Thus the education of adolescent girls should include certain training in the care of children, and other duties that either permanently, or for the time being, must fall to them and not to boys. But a more important moral reason for separate education consists in the desirability of prolonging as late as possible, the first unconsciousness of sex. At this age the stimulus derived

from co-education, acting upon imperfect organizations, is liable to be other than intellectual—liable to excite emotions equally ridiculous and painful from their prematurity, and therefore to increase the very danger most to be averted from this period of life—the excessive development of the emotional functions and organs of the nervous system.

But, by the age of eighteen, the reasons against the co-education of the sexes have ceased to exist, and imperative reasons in its favor have come into play. The first we have already indicated. Unless the education of girls be continued beyond the conventional retiring-point of eighteen, and unless they be permitted access to the State Universities, they cannot participate in the highest intellectual education of the race. This cannot be carried on by private teachers, in isolated classes, under uncontrolled authorities. It must be public, national, supreme—for it represents the collective intellectual force of the nation; it is the work of society, and fits for society; and the social influences presiding over its instruction are as important as is the technical knowledge conveyed in its system. Only the best minds should be employed in its service, and in any State these are not sufficiently numerous for the wants of indefinitely multiplied schools.

But, further, if girls may be educated, and better educated, apart from boys, it is scarcely possible to give women an intellectual training apart from men, certainly in the present generation. What may be lost to men by exclusion from the intellectual companionship of women, may perhaps be beyond the scope of our present subject to inquire. But the loss sustained by women, who, shut up in female academies, attempt, or pretend to make

the attempt, to obtain a "college education," is conspicuous beyond possibility of cavil. The same peculiarities that render women, as a rule, less original, are justly said to make them more receptive, more malleable, more exquisitely adjustable to the least variation of external circumstance, or difference in the intellectual calibre of their associates or masters. Their own intellects are quickened to activity or repressed into torpor, by influences that would have little effect upon the less impressionable, more self-poised minds of men. These facts, upon which great emphasis has often been laid, should only lead to one inference, namely, that the education and intellectual capacity of women is likely to remain at the point, or advance to the degree at which men may consider it desirable for it to exist; if, therefore, certain conditions are seen to favor this advancement to an extraordinary degree, and others to retard it in a manner as extraordinary; if, in addition to results already achieved by the increased education of women, others far greater may be foreseen, when that education shall have become really equal to that now accessible to men; it becomes imperative to concede the conditions in question, unless some equally imperative counter indication can be shown to exist. Reasons of an entirely different order exist, we think, in the fact that at this age the sexes naturally seek each other's society, as much as they avoided it before. It is difficult to see why this tendency requires to be counteracted, except on some monastic principle that is an unconscious "survival" from the middle ages. Thwarting this tendency leads often to immorality in the one sex—to languor, and mental, moral, and physical debility in the other.

Dr. Clarke places his counter indication almost exclusively in the supposed necessity for a periodical intermit-

tence in the intellectual work of women, that could not, therefore, be brought into harmony with that of men. But, as we have seen, Dr. Clarke himself admits that such necessity is scarcely imperative except under the age of eighteen or nineteen, and the period of study for which co-education is really desirable, indeed, necessary, does not begin until that age. Moreover, Dr. Clarke draws his examples, not from students who have been educated at mixed schools, but from those who have attended ordinary girls' boarding-schools; so that no proof is adduced of any special influence of co-education, unless the general statement that "co-education is intellectually a success, physically a failure," can be considered as such proof, which we do not believe. Since, according to Dr. Clarke's own argument, the argument does not apply to the particular point of controversy upon which it has been made to bear with most force, it is superfluous to return to our own reasonings, whereby we believe to have shown that the dangers signaled, though they exist, menace the minority and not the majority; that they are then attributable, not to mental exertion, but to the coincidences of mental exertion as at present conducted; that they are to be averted, not by a single *manteuvre*, but by a general system of training, that should include, instead of excluding, special attention to intellectual development; that the results of such training would remain, after the consolidation of the physical health and the termination of the period of growth had rendered further training unnecessary; whereas, the peculiar precaution suggested by Dr. Clarke, would rather tend to create a habit of body that would persist throughout life, to immense inconvenience.

MARY PUTNAM JACOBI.

UNIVERSITY OF MICHIGAN.

“RECOGNIZING the equality of both sexes to the highest educational advantages,” for four years the doors of the University of Michigan have been “open to all students.”

“The University is organized in three departments, as follows: the Department of Literature, Science, and the Arts; the Department of Medicine and Surgery; the Department of Law. Each department has its Faculty of Instruction, who are charged with its special management.”

Eager to avail themselves of the advantages here offered in such a “broad, generous, and hospitable spirit,” a number of women from different parts of the country have matriculated, and are or have been pursuing studies in common with students of the other sex.

During the four years three women have graduated from the Literary Department, four from the Law, and twenty-one from the Medical. At the present time there are in the first department above mentioned, fifty women; in the second, five; and in the third, thirty-eight.

Of those in the Law and Medical Departments I can say comparatively little. The general impression is, that they have endured the work quite as well as the men; and it is a fact, that a number of the women who

entered the **Medical Department**, with four lectures per day to attend, and all the work of the laboratory and dissecting-room to perform, have steadily improved in health from the time of entering until leaving; while those who were well at the beginning of their college work, have in no case suffered a deterioration of health from their intellectual labor. One of these women, Miss Emma Call, of Boston, graduated last year, the first in her class.

Thus far the women-graduates from this department have generally taken positions in their profession which they are filling with usefulness, if not with honor; and in which, as far as powers of endurance are concerned, they are showing themselves able to compete with male physicians. There seems to be an impression prevalent among them—and perhaps it is not peculiar to their sex alone—that the physician should be the physiological educator as well as the healer of the race, that his or her duty is to teach people how to use the “ounce of prevention” as well as the “pound of cure,” and that, through the mutual labors of the two sexes, more than in any other way, is to be brought about the long-desired, and much-needed, health reform.

Although it may yet be too early to form an estimate of the effect of this system of “identical co-education” upon the health of the women who have graduated from this University, we believe that there has been only one case of protracted illness, and there is no reason for asserting that this was caused by intellectual labor—at least, in this institution, since the lady was here only six months—having taken her previous course elsewhere—and is a graduate from the Law Department.

Of those who have graduated from the Literary De-

partment, we have positive information that as yet they have suffered no "penalties" from their "severe and long-continued mental labor," and they were, on graduating, as well as on entering. One woman who matriculated with the present senior class, took the whole course in three years, went forth in better health than when she entered, and is at present the principal of the High School at Mankato, Minn., while another is still prosecuting her studies, and contemplates taking a course of law.

In regard to those at present in the Literary Department, it is impossible to get at any statistics as to excused absences, which will show the average attendance of one sex as compared with that of the other, and from which inferences can be deduced in regard to the health of the women-students; for the university authorities—not having dreamed that there was a "new natural law" to be revealed, which should assert that the course of "identical co-education" is conducive to health and usefulness for the one sex, and to premature decay and the hospital or cemetery for the other—have not preserved the records of excused absences. The professors assert that non-attendance upon recitations, on account of ill-health, has been no greater on the part of the young women than of the young men, and that in many cases, the attendance of the former has been better than that of the latter; yet there is nothing, perhaps, except personal acquaintance and observation, which can reveal the true condition of the present health of the women of the Literary Department of Michigan University, and the manner in which it has been affected by the intellectual labors they have undergone.

In the present graduating class, there are eight women

who have been, at all times during the college course, as well as an equal number of their classmates, or the same number of women in any pursuit in life. One of these, who is not only ~~the 'picture of health,'~~ but who is perfectly healthy, was only sixteen years of age when she entered. Two other young women, who have ranked with the first of their class in scholarship, and who have been in excellent health during the entire course, with the exception of slight illnesses in their freshman year—not caused by study—who are now among the most healthy of their class, have, in addition to their college work, nearly defrayed their expenses by teaching during the vacations, by giving private instruction after study hours, and by working in various other ways. They have not, in this fourth year of almost double duty, any lurking disease which threatens to impair or to destroy their usefulness in the future, and they are as strong, ambitious, and happy as when they entered.

One who entered the class in its sophomore year, and who intended to graduate with it, was obliged to withdraw on account of her health; but those who know her best cannot assert that this was caused, either directly or indirectly, by her intellectual labors, or that, under the same conditions, the same results would not have followed from any kind of work. She was, and had been for a long time before entering, in a very bad state of health, and was utterly unfit for study.

Thus far, the health record of the women of this class has compared favorably with that of the men, and there is, at the present time, no physiological reason why it should not thus continue even 'down to old age.'

The class of '75 had, on entering, eleven women. Of these, one has died, an apparently healthy girl, who

passed from us in the second year of her college life, shortly after her return in the autumn. We do not know the cause of her sickness, but we do know that it was not the result of overtaxed mental powers, since it occurred but a little while after the long vacation of the summer, and the disease was one which had carried off a number of members of the same family in former years, viz., typhoid fever, alike unsparing of age, sex, or condition. With this exception, this class has been remarkably healthy, and with but a slight exception is, at the present time, perfectly so. Their attendance on recitations has been uniformly good, above the average of the classes, and they have done excellent work. Of these, two were sixteen years of age on entering, one was twenty, and the others varied in ages between sixteen and twenty. Concerning one of the former, President Angell had some misgivings when she entered, as she did not seem to be very strong; but she is now in her third year in the University, and her mother informed the president not long since that the health of her daughter had improved since she came to Ann Arbor, and that the nervous headaches by which she had been formerly troubled had entirely disappeared.

Among those who matriculated with the class of '76, were seventeen young women, two of whom were in poor health at the time, and physically unfit for work. One was ill for some time last winter with rheumatism, and compelled to suspend her labors, and the other was obliged to leave college. The former is now teaching, and will probably return, and the other has resumed her studies, but is far from being well. One of the number, who is from the Sandwich Islands, was sick four weeks with inflammation of the lungs; but her

brother, who is one year in advance of her, was also sick in his freshman year with the same disease, the only difference being that she was ill four weeks, and he, seven.

As a class, the 'sophomore girls' are in even a better physical condition in the middle of this their second year, the hardest year of the course, than they were at the beginning of last year. One of them, with charming *naïveté* asserts that she was 'miserable' when she entered, and her father sent her to the University to 'see if she wouldn't get well;' and she 'has been getting well ever since.'

The average attendance of the young women of this class upon recitations, is also fully equal to that of the young men, judging from the stand-point of the professors; and in the classical sections it has been better.

In the present Freshman class, there are also seventeen young women, most of whom are under twenty years of age; as also are most of those of the other classes on entering. Of those in this class there is little to be said, as they have been with us but a few months. They appear to be well and strong. Many of them are graduates from the high schools of the State, and a large proportion from the Ann Arbor High School. In regard to his graduates, Professor Perry, the Superintendent of Schools in this city, gives the following statistics in regard to sixteen young men and nine young women who graduated last year:

	BOYS.	GIRLS.
Attendance.....	.96	.96.
Scholarship.....	.85	.88.

It is a fact that thus far the women of Michigan University have demonstrated a principle of Dr. Tappan's—

a former president of the University—that brain-work is good for the health. If the seeds of future disease have been in some mysterious manner implanted in their systems, it is in no sense apparent except to the imaginations of those who are least acquainted with our girls. The points which I wish to establish are these: that their health has been as good as that of their class-mates; that those who were in a proper condition on entering have in no respect suffered a deterioration of health from their intellectual work; that of those who were not in a proper condition for this or any other kind of work, and have been obliged to withdraw from college, there have been only two—a no larger per cent. than the records of the young men would show; that although we have lost one by death, they have lost several; and that the ordinary brain-work required of the intelligent, ambitious students of Michigan University, if they are prepared in all respects for it, is conducive to health. Too much attention cannot be given to the importance of a thorough preparation. With it, students who were not especially strong, have gone on with constantly improving health; without it, even the strongest have felt that the burdens imposed by their studies were heavy—and this is true of one sex as well as of the other.*

I quote also from the editorial of the college paper, which is conducted entirely by the young men, to give the view from another stand-point, where, in speaking of “college girls,” the writer says: “They pertinaciously keep their health and strength in a way that is aggravating, and they persist in evincing a capability for close and continued mental labor, which, to the ordinary

* See President Angell’s testimony in the Appendix.

estimator of woman's brain-power, seems like pure wilfulness. They have, with a generally noticeable peculiarity, disappointed the most oracular prognostications." The general verdict of those outside the university is, that "the girls are holding out remarkably well."

And perhaps it may be asked, "What are our habits of life?" Possibly the best reply may be given in the words of Hamerton, from *Intellectual Life*, where in speaking of Kant, he says: "In his manner of living he did not consult custom, but the needs of his individual nature." Thus is it here. Our healthiest girls are those who have come from healthful homes, from wise and judicious parents, who, having instilled into their minds the true principles of right living, have not hesitated to send them forth to the university where the experiment of co-education is being tried, feeling that they would adapt everything to the needs of their individual natures, and they are showing themselves to be so doing. Sometimes sisters come together, sometimes a brother and sister, and in a few instances the parents have come here to reside during the college course of their children.

But the habits of the young women are generally regular. They indulge in little party-going, or dissipation; they have work to do, and to it they give their best strength. As a rule, they dress healthfully, are not ashamed to show that they can take a long breath without causing stitches to rip, or hooks to fly; they do not disdain dresses that are too short for street-sweeping; they have learned that the shoulders are better for sustaining the heavy skirts than the hips, and they are finding that, especially in this climate, healthful though it

is, one must be prepared with suitable clothing for all the exigencies of the weather.

Their study-life is quiet and happy. Their rooms are in private houses, usually rented in suites of two, with plenty of light and ventilation, and with bright, pleasant furniture. The people with whom they live are very kind, and take a great interest in the young strangers who come among them. They board either with the family, or in clubs,—as most of the young men do, and with them; and somehow there is among them little of that false appetite for indigestible food, usually so prevalent among young women who are at a boarding-school, or living away from home.

There are no regularly prescribed study-hours, and there is no regularly prescribed exercise. Most of the young women have rooms some distance from University Hall, to which they are generally obliged to go two or three times a day, so that they, of necessity, have considerable walking—in which some of those here have shown remarkable powers of strength and endurance.

In fact, there is nothing prescribed for the student, except lessons; the only authority which the university assumes is intellectual authority, and nothing is compulsory except attendance upon recitations, and a proper attention to the prescribed work.

Perhaps the principal cause for the good health of the young women, and their ability to endure the work they have entered upon, is the fact that they have an aim in life beyond the mere fact of graduating from a great university; they believe that there is a future before them, in which they are to do a woman's work, in a manner all the nobler and better for the advantages of this higher education, and as they advance toward its

opening portals, the step becomes firmer, the form more erect, the eye more radiant; they believe, also, that the divine call has come for woman to be something more than the (clinging vine, or the nodding lily;) that delicacy is a word of mockery when applied to health, a word of beauty when applied to cultivated perceptions, and refined tastes.

They enjoy their work; they have the confidence of their professors, the esteem of their classmates, and the love of one another. Their work is to them more attractive than the charms of society; their Greek and Latin more entertaining than the modern novel; their mathematics no more intricate than the fancy-work which used to be considered one of the necessary things in a woman's education; and most of them have minds of their own, with a good supply of common sense.

But perhaps, after all, little can be inferred for the future from the result of four years of co-education in Michigan University, from the intellectual and moral standing of the women who are at the present time students here, or from their physical well-being. We do not assert that there can be; we do not draw inferences, we present facts. We are fully aware that the problem of co-education is in the first stages of its solution; that it will require at least a generation to solve it fully; that faith is not fruition, nor belief, certainty in this experiment, any more than in any other; that while the women who are here at the present time are earnest, conscientious, and high-minded, those who come after them may be far different; and that even those who go forth in these first years may break down at the first stroke of future work, even as some of their brothers have done; but we do assert that,

as far as Michigan University is concerned, educating a girl in a boy's way has thus far been proven to be better than any girl's way yet discovered, and there has appeared no reason why the good effects should not continue.

We are sometimes made to feel, in a manner intended to be humiliating, that we are trespassing upon ground foreign to our natures, in thus seeking the higher education in a domain which has hitherto belonged, almost exclusively, to man--but in all cases this has been done by those outside of our university; and while we know that they who thus speak and write are those who consider themselves the best friends to woman in the spheres to which they would limit her, we also know that all true friends of progress are friends to the highest culture of man or woman. We know, too, that for the manner in which we obey the dictates of our natures, implanted there by 'One who is mightier than we are,' we alone are accountable.

We know the barriers, real and fancied, which are supposed to stand in the way; the arduous toil upon which we enter, the responsibilities which we assume; but for all this, the woman of Michigan University goes forth brave, earnest, and loyal to the dictates of duty; she expects to do work in life as a woman whose womanliness has been but intensified and glorified by these four years of co-education; whose health shall be all that Nature intended it should be, and who will, in the truest sense possible, strive

"To make the world within her reach
Somewhat the better for her living,
And gladder for her human speech."

SARAH DIX HAMLIN.

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MOUNT HOLYOKE.

THE Mount Holyoke Female Seminary was opened in 1837. During the thirty-six years ending July 3, 1873, it has graduated one thousand four hundred and fifty-five young women.* Its founder aimed to provide a permanent institution, where the best advantages should be offered at a moderate expense, and whose entire culture should tend to produce, not only thorough students and skilful teachers, but earnest, efficient, Christian women. Accordingly, its course of study has always given prominence to the solid rather than to the showy, omitting mostly what are termed ornamental branches, and devoting the more time to studies which give mental discipline. There is no preparatory department. In order to enter, pupils are required to pass examination in English Grammar and Analysis, Modern Geography, History of the United States, Mental and Written Arithmetic, Elementary Algebra, Physical Geography, Latin Grammar and Latin Reader. The course of study was originally arranged for three years, but since 1862 requires four. No pupils are received under sixteen years of age, and none are admitted to the senior class under eighteen, while the

* According to the Report of the Commissioner of Education for 1872, Packer Institute had graduated six hundred and twenty-eight women, and Canandaigua eight hundred. No other female institutions report more than six hundred, and only two others more than five hundred.

majority are considerably older. The age at the time of graduating averages something over twenty-one years. None are received as day-scholars.

The amount of intellectual labor required is about six hours a day; that is, two recitations of forty-five minutes each, and four hours and a half spent in study. As a rule, only two studies are pursued at a time. There are but four recitation days in the week, a fifth being devoted to composition and general business. The day of recreation is Wednesday, an arrangement which is somewhat unusual, and might not be convenient for schools composed in part of day-scholars. Here, however, the holiday interposed in the middle of the week serves to lessen the danger of too protracted application to study, and makes the last two recitation days as easy as the first.

The health of the pupils is under the care of the lady physician residing in the family. She is assisted by a teacher who superintends the diet and nursing of invalids. Besides the frequent suggestions in regard to the care of health, which the Principal addresses to the school, special instructions are given by the physician to her classes in physiology. The pupils are particularly cautioned against exposure of health by insufficient protection of the person from cold or dampness, by running up or down stairs, or by sleeping in unventilated rooms. All are required to retire before ten P.M., and advised to choose an earlier hour as far as practicable. Daily outdoor exercise, for at least half an hour, is required, except when inclement weather or ill-health may prevent. Light gymnastics are practised by all except individuals who have been permanently excused by the physician. All are directed, however, to abstain from gymnastics at certain periods, as well as from long walks, or severe

physical exertion of any kind. It has not been found that regular and moderate study at such times is injurious to girls in ordinary health. The pupil is always excused from lessons if she finds herself unable to study, which of course may often be the case with those of delicate and excitable temperament, or unsound health.

It is generally known that the ordinary housework of the seminary family is performed by the young ladies, under the supervision of the teachers and matrons. But so many erroneous ideas have prevailed in regard to the amount of labor required of each pupil, that it seems necessary here to repeat explanations often given before.

Each young lady spends, upon an average, one hour a day in domestic work. The length of time varies a little, according to the kind of work; the more laborious or less agreeable tasks being proportionately shorter than the light and easy ones. The time occupied varies thus from forty-five to seventy minutes a day. On the Sabbath, only about half an hour's work is required, while on Wednesday an additional half hour is necessary. Usually one keeps the same work for a term or more, unless some interference with recitations, or other personal reason, makes a change advisable. Pupils are excused from their domestic work whenever their health requires it, the place being temporarily supplied from a sort of reserve corps, who have no regular places of their own.

The benefit to the health, of having a little daily exercise in doing housework, was one of several considerations in view of which this plan was originally adopted. This opinion is supported by long experience, and has also the sanction of high medical authority. Dr. Nathan Allen of Lowell remarks in his essay upon *Physical*

Degeneracy, page 16, "No kind of exercise or work whatever is so well calculated to improve the constitution and health of females as domestic labor. By its lightness, repetition, and variety, it is peculiarly adapted to call into wholesome exercise all the muscles and organs of the body, producing an exuberance of health, vigor of frame, power of endurance, and elasticity of spirits; and to all these advantages are to be added the best possible domestic habits, and a sure and enduring foundation for the highest moral and intellectual culture."

Pupils often remark a decided improvement in their health under the combined influences of moderate and systematic mental labor, judicious exercise, both out of doors and within, and regular hours for eating and sleeping. It should not be forgotten, however, that among any three hundred girls, there will be many slight ailments in the course of a year, if not some cases of serious illness. Being at best inexperienced, as well as excitable and impulsive, girls are liable to expose their health in a thousand ways, notwithstanding all that careful mothers or teachers can do. Mere physical robustness is of far less account in carrying one through an extended course of study than prudence and good sense. Many a girl possessing these traits, though naturally delicate, has not only completed the Holyoke course with honor, but has found herself all the better able to meet the duties of more laborious years, on account of the systematic habits and practical efficiency acquired here. It is much better not to begin the course earlier than eighteen, on account of the greater maturity then to be expected, not only of the physical constitution, but also of the judgment, on which the preservation of health so largely depends.

The following statistics show the comparative longevity of graduates from Mount Holyoke Seminary, and from a number of colleges for young men. In each case they include a period of thirty years, closing generally with 1867, or within a year or two of that date. They were originally compiled early in 1868, and embraced all the classes which had then graduated at Mount Holyoke. The war mortality is excluded in every case where it was separately stated in the college Triennial, as indicated below.

	GRADUATED.	DECEASED.	RATE PER CENT.
Mount Holyoke Seminary.	1,213	126	10.39
Amherst.....	1,199	*135	11.26
Bowdoin.....	1,012	*120	11.85
Brown.....	972	120	12.34
Dartmouth.....	1,639	276	16.83
Harvard.....	2,326	*268	11.52
Williams	1,215	123	10.12
Yale.....	2,883	387	13.42

* Exclusive of war mortality.

The following table shows what percentage of the graduates of each decade had died at the close of the thirty years.

	MT. HOLYOKE.	AMHERST.	BOWDOIN.	BROWN.	DARTMOUTH.	HARVARD.	WILLIAMS.	YALE.
Graduated in First Decade.....	243	327	342	315	589	591	297	904
Deceased.....	54	71	71	69	153	123	49	201
Percentage.....	22.22	21.71	20.76	21.90	25.97	20.81	16.49	22.23
Graduated in Second Decade.....	447	391	281	306	524	777	435	943
Deceased.....	55	49	36*	40	88	107	59	127
Percentage.....	12.30	12.53	12.81	13.07	16.79	13.77	13.56	13.46
Graduated in Third Decade.....	523	481	389	351	526	958	483	1,036
Deceased.....	17	15*	13*	11	35	38*	15	59
Percentage.....	3.25	3.11	3.34	3.13	6.65	3.96	3.10	5.69

* Exclusive of war mortality.

As these statistics were compiled immediately after the close of the period embraced, there must have been, in every case, some deaths not then ascertained, which subsequent Triennials include. For example, the Amherst Triennial of 1869 makes the number graduated during the thirty years ending in 1867, 1,203; deceased to that date, 152 (besides deaths in the war); percentage of mortality, 12.63. In like manner the record of Mount Holyoke, revised early in 1870, makes the number of deaths during the above period 139, and the rate per cent. 11.46. This, however, does not materially affect the comparison, in regard to which it was remarked by Dr. Nathan Allen, in the *Congregationalist* of June 23, 1870, "This Seminary shows a better record than all the colleges except Williams." Dr. Edward Hitchcock, of Amherst, in the *Springfield Republican* of May 2, 1870, also says: "By these results we learn that it becomes those to be careful who state that all female schools are injurious to the health of their students. For here is one which, in attainments of scholarship, general discipline, and religious culture, has ranked among the highest, and yet its health-influence holds out better than in gentlemen's schools of kindred grade."

A lady physician formerly connected with this Seminary, speaking of customs of modern society which have impaired women's powers of endurance, remarks: "The most pernicious of these customs is certainly improper dress, viz., tight lacing, long and heavy skirts dragging from the hips, and the great weight of clothing upon the lower portion of the back; also, insufficient covering of the lower extremities." The present physician attributes perhaps the greater part of the ill-health from which young ladies suffer, to these errors in dress. Another

fruitful source of evil, for which parents are largely responsible, is the supplying of school-girls with quantities of rich pastry, cakes and sweetmeats, which are eaten, of course, between meals, and often just before going to bed. In one instance a young lady, previously in perfect health, in the course of two years made herself a confirmed dyspeptic, simply by indulging night after night in the indigestible dainties with which she was constantly supplied from home. This is her own view of the matter in looking back.

The following words from the two lady physicians who have been longest connected with the Seminary, give the results of their professional experience there :

Extracts from the letter of Dr. (Belden) Taylor, formerly physician at Mt. Holyoke Seminary :

“ In regard to regular study producing pain, hæmorrhage or irregularity, I do not think these disturbances are caused so much by application to study as by want of care and prudence at the menstrual period, and of fresh air and exercise during the interval. * * * I think that labor, both mental and physical, should be diminished at the menstrual period, for at this time the ovaries and uterus are intensely engorged, and the nervous system is in an unusually excitable condition. Do not understand me that girls should be excused from all physical labor, but only that they should not undertake unusually hard work, and should avoid long walks, giving themselves as much rest as possible. * * * I do not think, however, that any of these things should debar a woman from pursuing a regular course of study, only let her exercise care and prudence at the menstrual period. It is not uncommon for this function to be arrested by any great change

of circumstances, as when a girl leaves home and goes to school, where there is almost an entire change of habits. Many cases came under my observation while at the Seminary, among the junior class (first year), of suppression or irregularity for three or six months, all then proceeding regularly without medical interference. I think women suffering from ordinary female troubles are benefited by regular exercise; for a want of proper exercise affects injuriously the general health, thereby increasing the uterine disorder. If a girl with any *great* female trouble should enter the Seminary, her troubles would be increased, not from the regular work, but by going over the stairs."

Letter from Mrs. Arnold, of Milwaukee, formerly Dr. Homer, physician at Mt. Holyoke Seminary in 1860-64:

"A large number of cases of irregularity in the form of suppression, were always met with during the first year, especially the first months of that year. Often the health was not seriously affected, and the trouble would right itself or readily yield to mild remedies. Had this derangement been caused by hard study in the pursuance of a regular course, it would have been most common among pupils in advanced classes. The fact that it was not, shows that it must be accounted for in some other way. Neither do we need to look far. There is change of circumstances, of employments, of diet, of sleep; often of climate, many coming from a distance, and, more than all, coming from quiet homes to dwell in such a large family, where there is enough of novelty and excitement to keep them constantly interested—perhaps I should say absorbed—in new directions. It is common for change to produce like results elsewhere, as well as in

school life, especially during the early years of womanhood. Again, those thus affected are quite as likely to be the dull or inattentive as the studious.

“Cases of excessive or painful menstruation were far less numerous, and had their origin also in other causes than hard study.

“As to the effect of regular brain-work upon those already suffering from diseases peculiar to the sex, I do not recall any cases where the mere matter of intellectual labor had any effect to increase the trouble. Other circumstances connected with school life might aggravate such complaints, *e. g.*, much going over stairs, but a temperate application to study, even of the sterner kinds, by giving occupation to the mind, I consider highly beneficial.

“The great cause of diseases incidental only to the female sex is to be found in want of sensible, intelligent thought, and an unwillingness to act in accordance with the convictions such thought would bring. The follies and frivolities of fashionable life slay their thousands where hard study slays its one. Tight-lacing, I believe, was never more prevalent than at the present time, and its victims are a host. * * * This matter of dress, so difficult to be reformed, has a very large share in making women weak and helpless.

“Of course, it cannot be denied that many young women come out of school with broken health. Do not young men also? The fact that so many girls are enfeebled by the course pursued with them from their very infancy, easily accounts for their broken health, without attributing it at all to study. It cannot but be apparent to any one, that a feeble, sickly girl or boy is unfit to attempt a severe course of study. Again, girls are often

in such a hurry to 'finish,' that they overdo, and suffer the consequences in after life.

"It has long been my opinion that we are in danger of pushing the 'graded school system' too far. There should be more latitude allowed, more optional studies in all our schools. The question may be asked, Does not this system bear equally upon boys and girls? If so, why do girls suffer more in health? I affirm, not because of the difference physically, but because the custom of society shuts the girl up in the house—to her books, if she is conscientious, and she is more likely to be so than her brother—while the boy is turned loose, to have just as good a time as if he were at the other end of his class. * * * When we attempt to compare the ability of the two sexes to endure the strain of continuous mental work, there are many circumstances to be considered, many things that are not as they should be. If women were trained from their infancy as they might be, and as they ought to be, there would be no need of arguing. But so long as the present fetters of fashion and custom are submitted to, the question will remain unsettled."

Such is the testimony from Mt. Holyoke.

MARY O. NUTTING.

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OBERLIN COLLEGE.

DR. CLARKE'S experience and success as a physician give him a right to speak, and that with the tone of authority. He has spoken, and in such clear and unmistakable words that all must hear, the startling truth, that American women are sickly women; that proofs of this fact are not confined to any class or condition, but that "everywhere, on the luxurious couches of Beacon Street, in the palaces of Fifth Avenue, among the classes of our private, common, and Normal schools, among the female graduates of our colleges, behind the counters of Washington Street, on Broadway, in our factories, workshops and homes," pale, weak women are the rule, and not the exception. This is the one permanent impression which the book makes. It is for this reason that we are thankful. It matters not that the presenting of this fact was not the author's main object. It matters still less, that he failed in his object; for, if his theory had been a true theory, and he had succeeded in convincing the world of its truthfulness, he would have benefited but a small class of our American people. Only a few women, comparatively, are found in our colleges and higher schools of learning.

Man often means one thing while God means another. Luther meant to reform the Roman Church—God meant to reform the world. Dr. Clarke meant, as he tells us in his preface, to excite discussion, and stimulate inves-

tigation, with regard to the relation of sex to education; but he has excited a discussion, and stimulated an investigation, that, unless Ephraim is wholly joined to his idols, will not stop until a reform has been wrought in our whole social system. Not only in our colleges and universities, but in our lower grades of schools; and—as he has taught us that the head is not all, but the body a good deal—in our food, in our times of down-sitting and uprising, in our hours of retiring, in the ventilation of our churches, public halls and private homes. We are at last to understand, what it is so hard for an American to understand, that to wait is sometimes as much a duty as to work.

Dr. Clarke meant to prove, that co-education, in the popular signification of that term, for physiological reasons, is an impossibility. He succeeded, as he thinks, theoretically, but failed, as he confesses, practically, for the want of sufficient data. What he indirectly proved was of much more vital importance, because it affects the whole nation; that, for physiological reasons, American women, and consequently the American people, cannot live at this high-pressure rate, which means death. The universal interest which his book has awakened, the rapidly following reviews and criticisms, the numerous essays which have since been published, on the same and kindred subjects, show that thinking minds were already working their way to definite conclusions and expression on this now most important of all subjects—how to give back to the American woman the bloom and physical strength, the elasticity and fresh old age which are hers by the right of inheritance.

No one will deny Dr. Clarke's statement, that, with the best of opportunities, she does not in these respects

compare favorably with her trans-Atlantic sisters. But we are not willing to admit that the strength of the German *fräulein* and English damsel must be purchased at so great a sacrifice as the giving up of all systematic study, and consequently of all higher intellectual development.

The "sacred number three," which we are told "dominates the human frame," dominates also the whole being. There is the physical, the moral, and the mental; and we are not to cast such a reflection upon the Author of our being, as to suppose that the proper development of the one must be at the expense of the other. If God demands more of woman's physical nature than of man's, he has wisely provided for it, within that nature. Faith in his benevolence leads us to this conclusion. It is just as true, that where much will be required, much has been given, as that where much has been given, much will be required. When woman learns the laws which govern her physical nature, and has the courage to live in accordance with those laws, it will be found that she has strength to be a woman, a Christian and a scholar. It is just as true in her case as in man's, that proper brain activity stimulates physical activity.

There are many sickly girls to be found in our schools, but they are often sickly when they come to us; often, too, under the seeming garb of health, the seeds of disease are already germinating, and it is time, not study, which brings them to the surface.

When mothers are able to send us strong, healthy girls, with simple habits and unperverted tastes, we will return to them and the world strong, healthy women, fitted, physically and mentally, for woman's work.

It is continuous education, not co-education, which Dr.

Clarke really condemns; but every teacher knows that continuity of effort is essential to sound mental development, and that this off-and-on method, which he seems to recommend, would destroy all order in the school, and make all work in the class-room impossible. If, then, his theory—that for physiological reasons girls cannot endure continuous study—is the true theory, not only our colleges and universities ought to remain closed against women, but all our schools for girls over fourteen years of age ought to be closed also, and the pupils sent home, to receive such instruction as they can from private teachers, at such times as their bodies can afford to lend time to their heads.

We say *ought*, and we mean what we say; for we are not “so professionally committed to a dangerous experiment” as to insist upon it, if once convinced that it is dangerous; neither are we “urgent reformers, who care less for human suffering and human life, than for the trial of a theory.” Dr. Clarke believes, “if the causes which have brought about the present ill-health of American women continue for the next half century, and increase in the same ratio as they have for the last fifty years, that we shall cease to be an American people.” We believe it, too; but we do not believe, as he does, that the chief causes of this ill-health are to be laid at the doors of our seminaries and colleges. We believe that more girls are benefited than are injured by the regimen of a well-regulated school, and our belief is founded upon years of observation. The number is not small, of girls, who have come to us pale, nervous and laboring under many of the ills of which Dr. Clarke speaks, to whom the regularity which must be observed in a large school, but, most of all, the stimulus of sys-

tematic brain-work upon the body, has proved most sanitary.

The mother of one young lady placed her under our care a year and a half ago, saying, as she did so: "My daughter has always been frail. I greatly fear she will not be able to endure regular school work. Send her home at any time, if convinced that her health suffers from school discipline." While her health has been steadily improving, she has been able to gain an enviable position in her class. One of her professors said that he had never heard more finished recitations than hers. This is only one instance, where we might give many, of the quickening influence of brain-work upon the body, and we have often heard the same testimony given by other teachers.

Of course, we do not claim that sick girls ought to study, any more than sick boys, or that there are, at the present time, as many girls who can endure hard study, either spasmodic or continuous, as boys. We accept the fact, that American women are sickly women; we only protest against the false theory that makes our higher schools responsible for the fact.

In Dr. Clarke's chapter upon co-education, we read that "this experiment"—meaning co-education—"has been tried in some of our western Colleges, but has not been tried long enough to show much more than its first-fruits, viz., its results while the students are in college; and of these, the only obvious ones are increased emulation, and intellectual development and attainments."

Wondering how long it must be tried before it ceases to be an experiment, we read on a few pages, when we are told that "two or three generations, at least, of the female college graduates of this sort of co-education, must

come and go before any sufficient idea can be formed of the harvest it will yield." Is it not rather dangerous to wait two or three generations for the result of an experiment, when it affects so important a question as our national life? But what if the experiment has been already tried? What if we can show by actual figures that, in addition to the increased intellectual development and attainments, time has proved that there has also been physical strength "to stand the wear and tear of woman's work in life?" If we can have intellectual development and physical activity combined, is it not a thing to be devoutly wished? If there is any other conclusion to be truthfully reached, than the one which obliges a woman to feel that, for the good of the race, she must content her longings after knowledge with only a few crumbs from the rich banquet which is spread temptingly before her, why put her faith in the justice of God to such a test?

It is this conclusion, and conclusions like this, spoken in the tone of authority, which have sometimes made weak women "speak of their physical organization with half-smothered anathemas," and led them "to be ashamed of the temple" which an all-loving, and, let us also add, an all-wise Father, has built for them.

If, in the place of this conclusion, against which all a woman's instincts rebel, we may truthfully teach her that there is no antagonism between her body and her brain, and that, for the good of the race, she ought systematically to develop both, we remove all stumbling blocks from her way, we lighten her burdens, we make her brave to endure, because our teachings correspond with all her preconceived ideas of justice and benevolence.

It was this view of the subject, rather than any belief in the modern theories of woman's sphere, that led the founders of Oberlin College to open her doors to women. She has tried the experiment for nearly two generations. Her last annual catalogue contained the names of over one hundred students, whose fathers' or mothers' names can be found in some earlier catalogue. Let us see with what results; for these are the data which Dr. Clarke says we must have, before we can reach any definite conclusion.

Oberlin has graduated, as shown by her last Triennial Catalogue, published in 1873, 579 men and 620 women. This does not include the 426 men from the Theological Seminary. Ninety-five women have graduated from the full classical course, and received the first degree in the arts, 525 from the "Women's Course." But lest some should conclude from this name, that it stands for a diluted curriculum, suited to the weakened condition of woman's brain, or rather, her body—since we have it upon the best authority that her brain, under the most powerful microscope, shows no inferiority to man's—we will add, that the trustees of the college, at their last annual meeting, discussed the question of changing the name, and conferring a degree upon those completing this course, as Michigan University confers a degree upon those completing its Latin Scientific Course. The subject was referred to the Faculty, to be reported upon at the next Commencement.

Now, what of these 620 women, to whom Oberlin has given the privileges of a higher intellectual development? How have they stood the "wear and tear"? Surely they have been put to the test, for few of them have led inactive lives. Their names are to be found as

teachers in our common schools; in our high-schools and seminaries, from Mexico to the woods of Canada; from the Pacific Coast to the Atlantic; in our lists of missionaries, both in the home and foreign field; as professors in Female Medical Colleges; as founders of asylums and homes of refuge, and as leaders in all benevolent enterprises.

Now it is a law of nature, that where there is an imperfect development there is a tendency to early decay. If, then, the evils of continuous education for girls be as great as Dr. Clarke thinks, we should naturally expect to find more deaths among the Alumnae than among the Alumni of Oberlin. We turn again to the Triennial, and count the starred names. There are 60 among the former and 59 among the latter, making the per cent. of deaths for the female graduates, 9.67; for the male graduates, a little over 10. But it should be mentioned that there were no women in the first class, so that, as near as may be, the rates of mortality are the same. The number of deaths among the 95 women who have graduated from the full classical course, is 10, making the per cent. 9.5.

We see nothing here "to excite the grave alarm," but we do see something "to demand the serious attention of the community." If the question, whether girls can endure continuous education—which really means whether they shall be educated at all beyond the mere rudiments and polite nothings—is to be decided, such facts as these, to those who are honestly looking for the truth, mean more than pages of theorizing.

But some one says, tell us of the health of these 620 women. How many are hopeless invalids, dragging out "tedious days and still more tedious nights"? The

limits of this essay would preclude the possibility of giving the individual history of each, even if it were known to us; but because facts here are worth so much more than general statements, and because Dr. Clarke says it is data that must decide this question, I have concluded to give the individual history, so far as known to me, of the Class of '56. Not because there is anything peculiar in its history, but because it is my own class, and I therefore know more about it. I take the names in alphabetical order, and call the roll:

The first answers from Buffalo, where, as a minister's wife, she finds ample opportunity to exercise all her powers. She reports good health.

The second is unmarried, and a teacher. For some years she has been working among the freedmen's schools at the South. When I last saw her, some five months since, she appeared the embodiment of good cheer and sound nerves.

The third was for eleven years a teacher in a private seminary in New York. A part of that time she had the entire charge of the school. During the whole time she lost but two months from sickness. She is now in good health, and enjoying home life.

The fourth does not answer to any roll-call here. She came to us clad in mourning. Consumption had robbed her of a mother and sister, and we always felt that her hold upon life was slight. The years added somewhat of strength and elasticity, and we hoped against hope. She married soon after graduating, and moved to the South. When the war opened, she and her husband were obliged to flee; hunted from county to county and from State to State, they at last crossed the Ohio. No sooner had her feet touched her native soil, than, turning

to him who was her all, she said—Go. She lived to see the war closed; but the watching and the waiting had been too much for her. The old family enemy claimed its victim. www.libtool.com.cn

The fifth, in reply to the question, "What are you doing?" answers: "Bringing up my boys. When my husband is away, besides attending to home duties, I have charge of his business, receiving and paying out large sums of money." She might have added, as I know, that she was general city missionary without pay; that, when there was no man to fill the place, she was Sabbath-school Superintendent, church organist, or leader of the choir, and that many a poor girl had had her sentence in the police court lightened through her timely intervention. I need not say that she is not an invalid.

The sixth, a dignified wife and mother, I have not seen for three years. At that time she entered no complaint of poor health.

The seventh has been constantly employed in teaching. Once during the seventeen years the state of her health demanded a lengthening of the ordinary vacation. She gave herself to out-door exercise, and, when able to walk ten miles with perfect ease, she returned to the school-room. She reports herself to-day as well, and offers as proof, that during the last year she has not lost a single recitation from ill-health.

The eighth I have heard from, from time to time; first, as a successful teacher, then as a successful housewife, never as an invalid.

The tenth was for many years a most earnest teacher. It is over a year since I heard from her. She was then well.

The eleventh is Preceptress of the Normal School at Ypsilanti, Michigan. She is known throughout the State as one of its successful educators. I heard her read last week a most interesting paper, before the State Teachers' Association. She looks as if continuous education and continuous teaching had both been good for her. When asked what she thought of Dr. Clarke's book she laughingly answered, "Look at me."

The twelfth answers from Illinois: "I am in good health, and so are my six boys. The two oldest are almost ready for college. They will, of course, go where their mother went. I am daily thankful I studied at Oberlin."

Away from the plains of Kansas comes the cheering words of the thirteenth: "A troop of merry children; good health, and a happy home."

The fourteenth writes: "Why do you ask if I am sorry that I studied at Oberlin? It is the subject over which my husband and I can grow enthusiastic at any time. My health impaired there? *No*. We hope to send our daughter soon."

The fifteenth we have not heard from for some time. We only know that as a minister's wife her life has not been an idle one. Ten years after graduating she was in ordinary health.

The sixteenth. Again we hear no response. "In Memoriam" is written over her grave.

The seventeenth lives in Mississippi. She was well when visited by some of our Union boys during the war. I have no later report to give.

The eighteenth certainly does not count herself an invalid; and

The nineteenth, who was, as a school-girl, the very

personation of energy, looks forward to years of useful labor.

We are told that we must not look at the blooming class on graduation day for the effects of co-education. We have not. We have waited seventeen years. Have we found anything there to frighten even a physiologist?

The theory of Oberlin has never been identical co-education, except in the class-room. There "boys and girls are taught the same things, at the same time, in the same place, by the same faculty, with the same methods, and under the same regimen." But she has never held, practically or theoretically, "that boys and girls are one, and that the boys make the one," or that "boys' and girls' schools are one, and that that one is the boys' school." In all those general regulations which affect both sexes, she remembers that half her children are girls: and the modifications which have consequently been made in ordinary college rules and customs, are found to be just as good for boys, and often a positive advantage. No early bell calls to chapel prayers, but, when the recitations are over, all assemble for devotional exercises. There is no standing during these exercises, and the result is quiet, and an addition both to "the stock of piety," and "the stock of health." Oberlin furnishes no pleasanter sight than this daily assembling of its thousand students for evening prayers.

Even in her architecture, simple and unpretending as it is, there is a recognition of the fact that girls are not boys. With one exception, there are no recitation rooms on the second floor; and, while the dormitories for boys are four stories high, Ladies' Hall has but two flights of stairs.

There is no effort made to excite an unhealthy emu-

lation. Prizes are never offered, and ranking of classes is unknown. A record is kept by each teacher, of the daily recitations in his department. If the average of any student is found to be unsatisfactory, he is informed of the fact, and an opportunity given him either to prepare for a private examination, or quietly to withdraw from his class.

The Women's and Men's Departments are entirely distinct, the one being under the supervision of the Faculty, the other of the Ladies' Board. This Board of Managers is at present composed of nine ladies, who live in Oberlin, and, with the exception of the lady Principal, are none of them teachers in the college. To them the trustees of the institution have confided all questions touching the discipline, health, and general welfare of the girls. In doing this, they were, no doubt, actuated by the common-sense view, that women know best what women need, and that, therefore, a Board of Managers composed of experienced women and mothers would frame wiser laws for the government of girls than young tutors, or even gray-haired professors, with the best of intentions, could possibly enact.

To the women who have composed this Board, especially to those who were members during the early days of persecution, much of the success which has attended the experiment of co-education at Oberlin is due. The President of the Board, Mrs. M. P. Dascomb, has been identified with the interests of the institution almost from its founding, and was for seventeen years Principal of the Ladies' Department. A sketch of her life may be found in *Lives of Eminent Women*. But an impress of her life is left not only in the characters of the 620 women who have graduated, but in the thousands

who have studied for a limited time at Oberlin. She is to-day as energetic, as enthusiastic, as untiring in her devotion to sound education as when we first knew her twenty-two years ago. Her elastic step has yet promise in it. Her cheerful outlook upon life has the quickening influence of a June sunshine after a May shower. Many in that last day will rise up and call her blessed.

It will be seen, from what has been said, that Oberlin, outside the recitation-room, has two distinct codes of rules, one for the girls and one for the boys. They differ widely. Boys are prohibited from smoking and drinking—no such restrictions are placed upon the girls. Experience has shown that late study-hours are injurious to the health of girls—and we have never seen it stated that they were good for boys—consequently, girls are required to retire at ten o'clock. "Now," says some one, with finger upraised, "if boys can study more hours than girls, they must accomplish more work, and have better lessons; then the boys are wronged by making them recite with the girls." In answer, we say, the simple fact is that they do not have better lessons; and, in proof, we ask any one to examine the class-books of Oberlin for the last ten years. There are as many available hours for study between sunrise and 10 P.M. as any one, boy or girl, can use to advantage.

In the Ladies' Hall there is an experienced nurse, whose duty it is not only to care for the sick, but to look after the general health of all. Special instruction upon various subjects is given the girls in the form of weekly lectures, or familiar talks, in which health, and how it may be preserved, is a leading topic.

Dr. Clarke, in great perplexity, asks doubtfully "if there might not be appropriate co-education?" We an-

swer that there has been, for forty years at Oberlin. Not in just the sense, perhaps, in which he uses the term; not in so appropriate a way as it might have been, or, we hope, will yet be, when an improved condition of her treasury shall enable her trustees to carry out their wisely-perfected plans. But, notwithstanding the mistakes of inexperience, and the restrictions of poverty, the result has been, on the whole, satisfactory—at least, those who have tried it do not hesitate, in after years, to send back their own children.

No “inherent difficulty in adjusting, in the same institution, the methods of instruction to the physiological needs of each sex” has been found. It should not be overlooked, that there is a large Preparatory Department, composed of hundreds of boys and girls, in connection with the college, so that the experiment at Oberlin has not included a small number. Last year there were in the various departments 1,371 students, 648 of whom were girls.

The excuse of sickness for an absence is never questioned. This is well-known by every girl in the school; and yet we have never heard a Professor in the College, or a teacher in the Preparatory Department complain that girls were oftener absent than boys. The Professor in Physiology has kindly sent me the following:—“An examination of my class-book, in all my recitations for the last five years, shows but a very slight difference in the average number of absences from recitations, for all causes, excused and unexcused, of women and men, viz.:—for each man, 35.31, for each woman, 36.76.”

There is another fact which ought to be mentioned. Many of the girls who have completed a course of study at Oberlin have, at the same time, supported themselves.

This they have done mostly by teaching, which has left them little time for rest or recreation even during the short vacations.* Of course this would have been impossible, if the expenses here were as great as in our eastern colleges; but reduce them to the lowest minimum, and, at the present rate of women's wages, the meeting of these expenses in addition to regular college-work is no slight consideration. Is it any wonder if some who might endure the one, fail under the weight of both? Several years ago, some benevolent Quaker ladies of Philadelphia gave a few hundred dollars for the benefit of this class of girls, and within the last few months others have added to the sum. It is now proposed to secure a permanent fund of \$10,000, the interest to be used in helping those who are helping themselves.

Noticing one other point, we are done. There is an intimation by our author, that boys educated in schools like Oberlin become effeminate, and girls masculine.

If such men as our United States Geologist, whose enthusiastic devotion to science has led to the exploring of the head-waters of the Yellowstone, and the opening with its rich treasures of the great Northwest—and if our representative in Congress, who voted against the salary bill and the retroactive clause, are specimens or effeminate men, the country can endure more of them.

If Mrs. Bradley, who years ago went to Siam, and, besides her numerous public duties as a missionary, has found time to carry on the education of her own children, sending back her sons, one of them, at least, fully

* In the classes which graduated last year there were thirty young women; nineteen of these wholly or in part met their own expenses.

fitted for college, and, now that her husband has been taken from her by death, still hopefully continues in the work—if Mrs. Coffing, who has so recently taught all Turkey that a rich nabob cannot force even a poor girl into an unwilling marriage ; and that, in that country of harems, a woman has rights which the government is bound to respect—are masculine women, the world—humanity says, Give us more such women.

We have presented these statements not because we have any desire to enter into a controversy, but because we believe they are facts which thinking parents and teachers will be glad to know. If they have any bearing whatever upon this question, they go far towards proving that women are able physically, as well as intellectually, to meet the demands of any well-regulated college.

ADELIA A. F. JOHNSTON.

Oberlin, Ohio.

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VASSAR COLLEGE.

INQUIRIES regarding the health of Vassar students, particularly as to "whether it improves or degenerates under the stimulus of regular and continued brain-work," and regarding the sanitary regulations of the college, are inquiries of interest and importance to every one who is thinking—and who is not—about improved methods of education for women.

The pronounced and very advanced position that Matthew Vassar, the Founder, took, in relation to what he considered a vital necessity in true education, the judicious combining of physical training with high intellectual culture, and which he incorporated into his scheme for giving "a fair chance for the girls," was, in itself, almost a challenge to all the world to ask these questions, and to scan critically the replies to them which the institution should make, as years should go on, and give adequate opportunity for the testing of the founder's theories.

As might be expected, Mr. Vassar provided especial advantages for the thorough establishment and maintenance of a system of physical training. He placed the great building that was to be the college home of many women in the middle of a farm of two hundred acres, lying upon a beautiful plateau, so that pure air, unobstructed sunshine, good sewerage, an abundant water

supply, quiet, freedom from intrusive observation in outdoor sports or employments, and varied encouragements for active and healthful recreation, were all made possible. He was careful that the provision for the heating and lighting of the building should be generous, and that there should be no lack in the arrangements for the supply of suitable and well-prepared food. He built a commodious gymnasium and riding-school, and experienced instructors were put in charge of both those departments of physical culture; and, agreeably to his views and plan, one of the instituted professorships was that of Physiology and Hygiene, whose incumbent was also appointed resident physician, and given general supervision of the sanitary arrangements of the household.

This brief sketch gives the prominent features of the plan by which the founder and his associated trustees and faculty hoped to solve the problem of providing for the liberal education of women, and at the same time promoting their healthy, vigorous and graceful physical development. The following extract from President Raymond's Report to the United States Commissioner of Education at the Vienna Exposition, on "Vassar College; its Foundation, Aims, etc.," shows what creed underlayed the arduous labor which the solution of this problem involved: "Recognizing the possession by woman of the same intellectual constitution as man's, they claimed for her an equal right to intellectual culture, and a system of development and discipline based on the same fundamental principles. They denied that any amount of intellectual training, if properly conducted, could be prejudicial, in either sex, to physical health or to the moral and social virtues. They believed, in the

light of all experience, that the larger the stock of knowledge and the more thorough the mental discipline a woman actually attains, other things being equal, the better she is fitted to fill every womanly position, and to perform every womanly duty, at home and in society. At the same time, they could not but see that there are specialties in the feminine constitution, and in the functions allotted to woman in life, and they believed that these should not be lost sight of in arranging the details of her education."

To give an idea of some of the complications and perplexities which beset the infancy of this educational enterprise, I cannot do better than to quote at length from President Raymond's Report above named. I think that his testimony, which is that of an experienced and observing teacher, is of great value, especially upon the point of the ruinous lack of system that has so generally obtained in the education of girls:

"In September, 1865, the institution was opened for the reception of students. A large number, between the ages of fifteen and twenty-four, from all parts of the Union and from Canada, applied for examination, and about three hundred and fifty were accepted. A respectable minority of these, say one-fourth or one-third, had been well taught—a few admirably. But of the great majority, it could not be said with truth that they were thoroughly grounded in anything.

"In the ordinary English branches, had the same tests been applied then that are applied now, one-half the candidates would have been refused. In these branches the advantage was notably with those who had been taught in the graded public schools, particularly of the larger towns and cities; and none appeared to less ad-

vantage than those on whom the greatest expense had been lavished in governesses and special forms of home or foreign education.

“ In the more advanced studies, the examinations revealed a prevailing want of method and order, and much of that superficiality which must necessarily result from taking up such studies without disciplinary preparation. Such preparation seemed not to have been wholly neglected; but in a majority of cases it had been quite insufficient, and often little better than nominal. Most of the older students, for instance, had professedly studied Latin, and either algebra or geometry, or both. But the Latin had usually been ‘ finished ’ with reading very imperfectly a little Cæsar and Virgil; and the algebra and geometry, though perhaps in general better taught, had not infrequently been studied in easy abridgments, of little or no value for the purposes of higher scientific education.

“ One thing was made clear by these preliminary examinations: that, if the condition of the higher female education in the United States was fairly represented by this company of young women, with a great deal that was elevated in aim, and earnest in intention, it was characterized by much confusion, much waste of power, and much barrenness of result, and admitted of essential improvement.

“ An inquiry into their plans for future study revealed as clearly their need of authoritative guidance and direction. There was no lack of zeal for improvement. Almost all had been drawn to the college by the hope of obtaining a higher and completer education than would be afforded them elsewhere. Indeed, the earnestness of purpose, assiduity of application and intelligence

to appreciate good counsel, which have, from the beginning, characterized the students as a body, are a noticeable and encouraging fact. But their reliance at first was largely on the adventitious advantages which the college was supposed to possess for putting them in possession of their favorite branches of knowledge and culture. Of the real elements and processes of a higher education, and of the subjective conditions of mental growth and training, comparatively few, either of the students or their parents, appeared to have any definite idea. There was no lack of definiteness of choice. Tastes and inclinations were usually positive; reasons were not so plentiful. That the young lady 'liked' this study or 'disliked' that, was the reason perhaps most frequently assigned. If its force was not at once conceded, she strengthened it by increased emphasis, declaring that she was 'passionately fond' of the one and 'utterly detested' or 'never could endure' the other. Practical studies were greatly in vogue, especially with parents; 'practical' meaning such as had an immediate relation, real or fancied, to some utility of actual life, such, for example, as that of chemistry to cooking, or of French to a tour in Europe. Appropriateness for the discipline of the faculties, or the equipment of the mind for scientific or philosophical investigation, might not be appreciated as practical considerations at all.

"The deepest impression made by these preliminary examinations on those who conducted them was this; that the grand desideratum for the higher education of women was *regulation*, authoritative and peremptory. Granting that the college system for young men, coming down from an age of narrow prescription and rigid uniformity, needed expansion, relaxation, a wider variety of

studies and freer scope for individual choice, there was evidently no such call in a college for women. In the field of '*female education*,' without endowments, without universities or other institutions of recognized authority, without a history, or even a generally accepted theory, there was really no established *system* at all; and a system was, of all things, the thing most urgently demanded. That it should be a perfect system was less important than that it should be definite and fixed, based upon intelligent and well-considered principles, and adhered to, irrespective of the taste and fancies and crude speculations of the students or their friends. The young women who, all over the land, were urging so importunate a claim for thorough intellectual culture should first of all be taught what are the unalterable conditions of a thorough culture, alike for women and for men, and should be held to those conditions, just as young men are held, whether they 'like' the discipline or not. The rising interest in the subject of woman's education, which so signally marked the recent progress of public sentiment, required a channel through which it might be directed to positive results. If Vassar College had a mission, was it not, clearly, to contribute something to that consummation?

"To the task, therefore, of reducing to order the heterogeneous medley before them, the Faculty set themselves with all earnestness. Many have wondered why there should have been any delay in doing this—why a collegiate course was not at once marked out and the students forthwith formed into corresponding classes. The reason will appear on a moment's reflection. It is easy to build a college on paper. To produce the real thing requires a variety of material, prepared and shaped for

the purpose. There must not only be buildings and apparatus, books and learned professors, but there must be *students*—students who have passed through a preparatory process which requires not only time, but certain moulding influences of a very definite character; and it will not be found easy—at least, it was not found easy eight years ago—to get together four hundred young women, or one-fourth of that number, so prepared.

“One fact, however, the Faculty discovered, which went far to counterbalance all their discouragements. It was this: the most mature, thoughtful, and influential of the students perfectly apprehended the situation, knew what they needed, and earnestly sought it. They were really in advance of the men of years and experience, with whom the decision rested. With the quick insight of intelligent women—or, rather, with that exact discernment wherewith the sufferer of an evil takes its measure, fixes its locality, and presages its remedy—they had worked out the solution of the problem; and they watched with the deepest solicitude the settlement of the question, what the institution was to be. Modestly, but firmly, earnestly, and intelligently, they pleaded for the adoption of the highest educational standard, avowed their readiness to submit themselves to the most rigid conditions, and exerted a powerful influence to diffuse right views among the more intelligent of their fellow-students. It soon became evident that here was the vital nucleus for the future college; and around that nucleus the elements gathered with decisive rapidity. Before the close of the year, the Faculty found themselves supported in their desire for a full and strict collegiate course by a strong current of sentiment among the students themselves. The brains of the institution were

enlisted on that side; and it was manifest that henceforth the best class of students would be satisfied with nothing less. The *controversy* was at an end. What remained was to make the idea a reality.

“But it was not until the close of its third year that the institution fully attained a collegiate character. During these three years the Faculty had been carefully studying the conditions of the problem before them, ascertaining through an extensive intercourse with students, parents, intelligent educators, and through other channels of information, the nature of the public demand, and gradually maturing a permanent course of study to meet as far as practicable its conflicting elements.”

The lack of method and discipline that characterized the mental habits of the assembly of young women who gathered here, was even more evident in their physical habits, and the effort to counteract the results of injudicious food, dress, social excitement, etc., seemed for a time almost hopeless. But, as order began to be evolved from the original chaos of the educational elements, a corresponding improvement was seen in the hygienic *morale*; and year by year this has made steady advance, keeping pace with the constantly improved standard of scholastic attainment.

Those who have had large experience as teachers will readily understand how the disappointment and irritation that so many of these students felt, both as to their mistaken notions regarding their previous education, and their vague and irrational ideas about what they would accomplish in a brief residence at this new Woman's College, acted unfavorably upon their health. In not a few instances there was induced an abnormal sensitiveness, which made it well-nigh, sometimes entirely, impossible

for them to remain in such a large household. This, added to the usual homesickness of young people making their first essay in independent living, and the absence of regular and definite duties, made a peculiarly trying ordeal for the first few months. Then, all the while and everywhere, beside and beyond these general disturbing influences, there were found the special and individual lack of any sound hygienic theory and practice, and a persistent antagonism to the sanitary regulations which were made obligatory. That the time for sleep should begin early, and be uninterrupted for eight hours, was a rule stoutly resisted and habitually disobeyed by many a pale-faced, nervous girl, who, when remonstrated with, had invariably at her tongue's end, "At home I have always studied as late at night and as early in the morning as I pleased, and it never hurt me!"

Numbers of little, stunted, dyspeptic girls "couldn't see any sense in making such a fuss if they didn't go regularly to meals:" these it was not easy to convince that no good brain-work could be done on a diet of toast and tea, or crackers soaked in a paste of vinegar, molasses, mustard, pepper and salt, or confectionery and pastry. They "hated" beef and vegetables, and brown bread, as well as stated hours for partaking of such simple rations.

Those who came here with suitable clothing could have been counted on one's fingers. The gospel of good apparel according to Miss Phelps and Mrs. Woolson had not then been preached; and, although the testimony of plain, every-day doctors, and of learned medical professors was that they had labored earnestly for many years to persuade women to wear flannel underclothing and thick-soled shoes, Fashion's frown had deterred the

mothers from accepting the advice, so what could be expected from the daughters but a following of the same customs, and an increased tendency to rheumatism, neuralgia, congestions, and other besetments of low vital force?

These statements give a glimpse of the work which came to the resident physician in this houseful of young people, and also of some of the obstacles that prevented the early establishment of a satisfactory regimen. But progress was all the while making in the right direction, though there were many failures and discouragements; and, best of all, there was the same nucleus that President Raymond speaks of, viz., a group of intelligent, conscientious students, who, once having learned physiological truths, accepted them as guides in daily living; and from this group emanated an influence that was felt, to a greater or less degree, by even the youngest and most frivolous.

Gradually it became disgraceful to have hysterics, or to give other marked evidence of a want of self-control: a good appetite that was regularly appeased by plain, nutritious food came to be regarded, first, as not unladylike; second, as quite proper; and last, as a desired blessing: thin walking shoes, insufficient clothing, squeezed-up waists, and the like, grew in disfavor till they were stamped "vulgar," and the careful gymnastic drill, with its appropriate light, warm, loose dress, taught to many their first lesson of physical freedom.

To Elizabeth M. Powell (now Mrs. Henry Bond, of Florence, Mass.), who was the first Instructor in Physical Training after the gymnasium was built, and who for five years pursued her admirable method with more and more success, the college is greatly indebted for the

thorough respect which that department has always commanded, and for its harmonious co-operation in the primary business of these students in science and literature.

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Just as the courses of study became more definite in aim and requirement, as the work of each class was more clearly marked out and adhered to, and as the intellectual life responded to the impulse of a reasonable and steady demand, so was the physical life strengthened. By the close of the third year we could not but be as much encouraged by the advance of hygienic sentiment and practice among the students, as we were by their commendable progress in liberal culture; and both seemed to us largely and fairly attributable to the systematic methods which, one by one, had been patiently wrought out from the original confusion, and as patiently fitted into an efficient working-plan.

So far as I am able to judge, no one thing here has done more to counteract the hereditary or acquired tendency of many young women, to disorders peculiar to their age and sex than the opportunity for pursuing, quietly and continuously, with a definite aim and certain purpose, well-arranged courses of study.

I can recall numbers of instances of girls who came to us weak, indifferent, listless, full of morbid whims and uncontrolled caprices of mind and body, who gained in this bracing atmosphere of happy, sustained industry, such an impetus toward real health that they forgot aches and discontents, and went home ready and eager to do their share in the world's work.

Every one knows that uncongenial, badly-planned, disconnected, or purposeless effort fatigues, worries, and weakens both body and mind: is it difficult to believe

the converse—that thorough, methodical, and helpful activity stimulates and strengthens.

To these general statements, I add the following particulars respecting the last three classes. I have divided each class into three groups, designated respectively “Good,” “Fair,” “Delicate,” according to the condition of health in which the individual students entered upon the college curriculum.

CLASS OF 1871.

Entered in good health.....	14
“ “ fair “	5
“ “ delicate “	2

Of the fourteen “good,” thirteen graduated in as good health; one in much deteriorated health.

Of the five “fair,” all left improved, as did also the “two delicate.”

CLASS OF 1872.

Entered in good health..	18
“ “ fair “	9
“ “ delicate “	1

Of the eighteen “good,” all left in as good or better health.

Of the nine “fair” all improved, and the one “delicate” had ceased to make that distinction necessary; she was promoted to “fair.”

CLASS OF 1873.

Entered in good health.....	19
“ “ fair “	14
“ “ delicate “	12

Of the nineteen “good,” fifteen left as well as they

came. Two took the course too young, and felt the undue strain in diminished general strength. Two deteriorated in health.

Of the fourteen "fair," five left in essentially the same condition; nine improved.

Of the twelve "delicate," five left in the same condition; seven improved.

It is scarcely necessary to say that every year the same old battles with bad habits in dress, diet, exercise, sleep, and work, have to be fought; but the enemies are not so numerous, and the allies of health and common sense are always gaining in numbers and strength; so the prospect for ultimate and complete victory improves. Perhaps the greatest obstacle that we find to the consummation of our scheme for intellectual training, is the pressure made by students, and even more strongly by their parents, to take the work while they are too young.

Fifteen is the minimum age at which any are admitted, even for the preparatory classes; but no girl of fifteen has the poise, the *settledness* of nerve and muscle and brain to enable her to bear uninjured the immense strain that the mere living in such a great family necessitates. It is almost impossible for any one who has not tried it to understand this; and parents listen with a polite, incredulous smile, when I explain why I think it unwise for their bright young daughters to attempt here the not difficult Latin, mathematics, etc., of the preparatory years. We—the parents and I—agree perfectly that the girls can do the work easily enough, but they, the parents, can not see the difference which is so clear to my mind—as, after these eight years, it could hardly help being—the difference that it will make to the girls whether they do the work in the small classes of

the home school, and surrounded in their leisure hours with the freedom and repose of the accustomed family, or in the large classes that are here necessary, and amid the inevitable excitements, outside the recitation room, of a constant residence in a household of five hundred.

Again and again I have seen these young students, for, of course, they enter despite my protestations—everybody wants to see the folly of everything for himself—I have seen them succumb to the unwonted nervous tax within a few weeks; others bear up for months, many get through the year and go home to spend their summer vacation in bed—"Vassar victims" all, whose ghosts haunt the clinical records of doctors from Texas to Canada, from Maine to California, and whose influence makes, so far as it is felt, against woman's chances for liberal education; for these failures are counted as natural effects of study, of mental labor which the female organization cannot endure!

I have no doubt that, for a respectable minority of these fifteen-year-old girls, life here, with its absolute regularity of hygienic regimen, is less disadvantageous than the mixture of school and "society," in which they would be permitted to dissipate their energies at home; but that does not alter the fact that the vital needs of immaturity, physical, mental, and moral, cannot be most wholesomely met amid conditions so artificial as must obtain in a great educational establishment.

With those who enter more advanced classes at an immature age—fortunately, they are very few—the case is still worse, for, in addition to the nervous tax to which I have alluded above, they attempt woman's work with

a child's strength. The result is inevitable—a stunted, unsatisfactory womanhood, the penalty for the violating of Nature's law of slow, symmetrical development, is not to be escaped. www.libtool.com.cn

Dr. Clarke's *Sex in Education* puts this point well, and perhaps the little book may be forgiven its coarseness and bad logic, if it succeeds in awakening the consciences of parents and teachers with regard to this phase of the school question, a phase which bears with equal pertinency upon a fair chance for boys and for girls.

When women begin at eighteen or twenty the earnest business of a collegiate course, for which they have slowly and thoroughly prepared while their physical organization was maturing in happy freedom, and when they give to this higher intellectual labor the strength and enthusiasm that are at that age of all the life preëminent and most perfectly balanced, then we shall know what educated woman is, and learn her possible capacities in all that makes for the noblest humanity.

I do not undervalue what Oberlin, Antioch, Mt. Holyoke, and other schools have accomplished for woman's higher education. I would not willingly be ranked second to any in according to them the esteem and honor which their work richly merits; and among Vassar's own Alumnae are already many who give gracious promise of what may be hoped for, nay, fulfilled, when the good seed now sowing all over this broad land shall come to glad fruition.

Meanwhile, Vassar is doing what she can to promote the health and usefulness of American women, by giving to her students the wholesome stimulus of regular, organized activity, which has for its definite aim their

preparation for the serious duties of life—duties which trained faculties carry with steady poise, growing strong under the burden, but which press with sad and crushing weight upon unaccustomed powers.

ALIDA C. AVERY.

Poughkeepsie, N. Y.

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ANTIOCH COLLEGE.

OF the men graduates of Antioch, $13\frac{1}{2}$ per cent. have died; of the women graduates, $9\frac{3}{4}$ per cent. This of course does not include the war mortality or accidental deaths.

Three of the men are confirmed invalids. No woman graduate is such.

Of the woman graduates, three-fourths are married, and four-fifths of those were, two years ago, mothers, the families varying from one to six children. Only one-half of the remaining fourth are graduates of longer standing than 1871.

It is proposed to make out statistics which shall show the comparative health of those women and men who have been here two years and upward, as it has been suggested that possibly only the stronger could bear the strain of the whole college course, and that the weaker ones dropped out by the way. It is perfectly safe now to assert that this is not the case.

* * * *

Yellow Springs, Ohio.

LETTER FROM A GERMAN WOMAN.

FEBRUARY 6, 1874.

DEAR MISS BRACKETT:

I gladly comply with your request to give you such information as I possess concerning the education of young girls in Germany. What I have to say is, however, more particularly applicable to the southern portions of that country.

Girls generally attend the public school from the age of six or seven to eleven, where they occupy themselves with the more elementary branches; afterwards they are placed in a seminary or "*Institut*," in which they remain until sixteen or eighteen. The German girl of that age, if not a member of the titled aristocracy, is seldom taught at home, except in music, and perhaps in drawing; private instruction being indeed too expensive even for the best families; neither is she sent to a boarding-school, if a moderately good day-school is at all accessible.

In my school days neither Latin nor Greek were taught, and only the elementary branches of science; from reliable sources I hear that the present curriculum is nearly the same. But in all schools the girls were thoroughly drilled in German, French, Rhetoric, Composition, Arithmetic, History, and in the History of Literature. English and Italian were optional. The hours extended from nine till twelve, and from two to four or five, no other intermission being allowed—which seemed often rather hard. One and frequently two hours were spent in needle-work, which time was utilized

in the practice of French and English conversation with an experienced teacher. The girls prepared their lessons at home, and recited sitting. Their attendance was expected to be *uninterrupted*, and was usually so, even through the critical period of development, except in cases of suffering and trouble, and these were not frequent. I remember but little complaint of headache and weariness—back-ache seemed unknown. And yet these girls worked hard, many of them very hard. Some began to teach when only sixteen, or even younger, and while still pursuing their own studies. They went out generally in every weather, and at all times, month in and month out.

Now, why did they not break down? Why do we find comparatively few invalids among the educated German girls and women? Are there no other causes at work than a somewhat different climate and, occasionally, a more phlegmatic temperament; or is it because the studies of the modern languages and history, the endless practising of *études* and sonatas, the stooping wearily over some delicate embroidery, is less taxing to the nervous system than Latin and Greek, and the working out of algebraic problems? I am not prepared to say. But grant that a small part of the solution can be found in this difference, there are yet other and deeper causes at work. One of them is that the young German girl, while at school, makes study her sole business. She goes to no parties, visits no balls. She does not waste her hours of sleep or leisure in putting numberless ruffles on her garments, so as to surpass her mother in elegance, nor does she promenade up and down the avenues and flirt with young gentlemen. Her amusements are of the simplest. A walk, or an hour spent in a public garden in her mother's

company ; occasionally a concert or an opera, which never lasts later than nine or half-past nine ; some holiday afternoon, a little gathering of young school-friends, to which gentlemen are not admitted ; once or twice a year, perhaps, after she is fifteen, private theatricals or a *soirée* ; where she appears in a simple dress, dances under her mother's care, and returns home at eleven o'clock. In this way she manages her strength and husband's her forces for study.

Another cause of her better health is the great physical care taken at the critical periods of the month ; although, as I have previously said, she continues her studies during these days, if without suffering ; I must add, that on the other hand she abstains from all physical exercise like gymnastics or dancing-lessons, protects herself most carefully against cold and wet, sleeps perhaps a little longer in the morning, and instead of taking a walk, lies down for an hour through the day. A party or ball at such a time would be looked upon by the mother with horror, and considered by the girl herself as a great impropriety. The care of her health is at all times, of importance to German women. I have, for instance, very rarely seen them walk in bitter-cold winter weather in a so-called cloak, which left the abdomen entirely unprotected.

A third cause of the German girl's being better able to work with impunity than her American sister during the years of development, which in South Germany begin at the age of fourteen, may be found in the simpler and much more sensible way in which she is brought up while still in early childhood. A German mother does not bedeck her little daughter of four or eight years with flounces and sashes half as heavy as herself, and then

show her off in a parlor full of admiring friends; nor send her to a children's ball, where, with a young prodigy of the other sex, she imitates her elders in flirtation. Instead of coaxing the wilful darling into obedience by the promise of candy, utterly disregarding of future dyspepsia, she brings her to reason by more efficient, if less agreeable expedients. The child is encouraged to play with her dolls, and to find pleasure in flowers and child-like amusements, as long as possible. Thus she grows up with simple tastes, although a little awkward and shy.

And, on the other hand, the mother herself finds her chief pleasure at home, and does not dream of planning amusements for each night of the week, but keeps comparatively early hours, even in the city; takes a great deal of exercise in the open air, and thus remains generally strong and healthy after her nursery is well filled.

Now I do not say that the German education comes up to the ideal. Far from it, indeed! The German girl might, with profit, go more deeply into the wonderful mysteries of science, just as her American sister is supposed to do; counterbalance her somewhat too poetical tendencies by the severer pursuit of mathematics, and find delight in the beauties of Latin and Greek authors, if such should be her sincere desire. Nor can I see any objection to the pursuit of medical, and other higher intellectual studies, by the few whose enthusiasm and natural gifts fit them for it.

All this the German woman will safely accomplish, if she retains the simplicity of her manners and tastes, a quiet, undisturbed mind during the years of early youth, the while not forgetting to preserve the priceless gift of health.

That this desirable consummation will be better and more safely reached by an adequate separate education, which can take into account woman's peculiar physical organization when necessary, rather than by co-education, no one, I think, can predict. Thus far, the idea of co-education has not penetrated the German brain, and the German woman is too shy and modest to think of downright, decided competition with man.

Whether the radical changes in education now progressing in this country, and still in the future for Germany, will yield valuable fruit, and conduce to better the condition of women, it seems to me, experiment rather than theory, must show.

I am with sincere respect, yours truly,

MRS. OGDEN N. ROOD.

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SEX IN EDUCATION.

THERE has recently appeared a collection of essays on the subject of girls' education, which, for the reason that it has excited so much attention, cannot here be passed by without special notice. It is seldom that any book arouses so much criticism; and, withal, so much earnest opposition as this has provoked, and seldom do the newspapers so generously open their columns to discussions so extended on the merits and demerits of any publication. The author is a physician of high repute in the city of Boston, Dr. E. H. Clarke. With regard to the criticisms on it, the general observation may be made, that where the writer is a man, praise is more generally bestowed than in those cases where a woman is the author, though there are very marked exceptions, the bitterest criticism of a large number in my possession being written by a man. Women, from their standpoint of women, very generally unite in disagreeing with its premises, and from their standpoint as reasoning beings, they are unable to accept its conclusions, the premises being granted. And these adverse criticisms, these indignant protests, are not solely from teachers, but also from mothers, from those who have never taught, and the most candid and dispassionate

one of all, from a woman in no wise connected with schools, either public or private.

But even supposing that they were all from teachers, does that fact, www.libtodd.com.cn except under a very narrow view of human nature, render them any the less valuable? Does one profession blind the eyes more than the other? Even in the narrowest view possible to the teacher, is it not for her interest that her pupils should be healthy? How can mental work be satisfactorily done without physical vigor? If it be objected here that some teachers are interested only in present results, unmindful of future consequences, I enter a counter statement that the same is true of some physicians, and bar the line of argument which would compare the poorest teachers with the best physicians.

The profession of teaching is not thus narrow in its views; is not so led by present and temporary motives. Its members are not working for glitter and show in the few years of school life; they do not aim at showy displays at the risk of permanent injury. They work not for to-day, but for all time and for eternity. Their greatest reward is in seeing the development of mind, the correction of false habits, the strengthening grasp of thought, and the growth of character. Are they any less desirous than the physician that the delicate instrument which puts the soul in communication with the external world, and by means of which it must be developed, be in perfect tune? Do they desire any less earnestly than he, that they may assist in forming from the effervescent girl-life of America a gracious womanhood, fully able to bear any strain which active life may bring, rejoicing to become in due time true wives and real mothers? Is the future of American women any less dear to the teaching profession than to

the medical profession? Do they "care less for human suffering and human life than the success of their theories?" Are not the teachers seeking truth as well as the physicians? Are not they, to use the simile of one able critic, also attentive at their watch-towers of science and experience? A woman who has been teaching for many years, and has been all the time associated with large numbers of growing girls; who has been intimately acquainted with their habits and their health; has held their confidence, and has watched them carefully day after day, not unfrequently being called on for direct medical advice as well—has had an opportunity for acquiring a fund of practical knowledge on the subject which is available to no man, even though he be physician. It were well to be just. Let the teachers have credit at least for intelligence and honesty as well as the physicians.

Does any one assert that Dr. Clarke does not blame the teachers? We answer, as we shall show more fully in another place, that any reflection on what is known in technical language as the school "system" of any country, is a reflection on the teachers of those schools. If any one doubts the power of the teachers as a body to mould the internal arrangements and details of the schools, the school records of more than one city will furnish him with cases where the teachers have forced upon the committee and the schools, measures by them judged necessary, text-books of which they approved, and their candidates for vacant places, till their power and influence will appear no longer doubtful.

The book does not ostensibly on its title-page claim to be a work on co-education, but none the less is that the subject considered from first to last. In the preface,

the author remarks in an apology for plainness of speech: "The nature of the subject which the Essay discusses, the general misapprehension both of the strong and weak points of the woman question, *and the ignorance displayed by many, of what the co-education of the sexes really means*, all forbid that ambiguity of language or euphemism of expression should be employed in the discussion." The italics are ours, but the words are Dr. Clarke's; and unmistakably show that the main drift of the book is to stem and if possible to turn the tide of popular conviction which is opening our colleges, new and old, to students, without regard to sex.*

Again, the volume is divided into five parts, as follows, to quote the table of contents:

- I. Introductory.
- II. Chiefly Physiological.
- III. Chiefly Clinical.
- IV. Co-Education.
- V. The European Way.

Part I. asserts that there is a difference between men and women; accuses woman of neglecting the proper care of her body; demands her physical development as a woman—not forgetting, however, on page 24, to call attention to co-education as a great and threatening danger.

* The statistics of the Bureau of Education, circulars 3 and 5, show that there are at present in the United States no less than forty-six colleges open to both sexes; and as we go to press, word comes that the London University, Queen's College, Belfast, and Owen's College, Manchester, England, are seriously considering the propriety of the measure for themselves.

Part II. is, as it claims to be, physiological, and presents nothing new to the student.

Part III. contains an account of seven exceptional cases of diseased action which have come under the writer's observation; a few more from another physician, and ends with this sentence :

“The preceding physiological and pathological data naturally *open the way to a consideration of the co-education of the sexes.*” The italics, as before, are ours.

Part IV. considers the subject of co-education, already prejudged.

Part V. is merely of the nature of an appendix, which attempts to show that in Europe the whole matter of woman's health is carefully watched.

If the one object of the Essays is not to stay the spread of co-education, we confess ourselves unable to discover what it is. In this effort lies its only possible unity, its *primum mobile*, its one clearly defined object from beginning to end.

The argument reduced, may be fairly stated thus : Boys are capable of sustained and regular work ; girls are not so capable—therefore they cannot be educated together (provided the standard is kept up to the standard best for boys) without injuring the girls.

Admit, then, for one moment, the premises, and grant that our boys and girls are to have separate institutions of learning. Every one sees, at one moment's reflection, that it would be impracticable to take any account of the occasional necessary absences from class recitation in the general arrangements of our school, composed only of girls. The programme must be arranged, even in that case, for regular work, and each individual must take

her own time for absence, and must make up the class-work, which, of course, must go on during her absence, as best she may. The trouble still remains, unless, carrying out Dr. Clarke's argument to its only logical conclusion, we abolish class recitations entirely, and supply each girl pupil with her own particular governess, who can accommodate each day's work to the varying capacities of her pupil and herself. I repeat, that this is the only logical result possible, if we accept Dr. Clarke's premises and conclusions. We shall find in France a country where the girls have always been educated in this way, or in convent schools. But shall we find in France a country where the proportion of births to the number of nubile women is greater than in our own? And shall we find in France a country where the general type of the race is degenerating or improving? It will be replied that other causes are at work to produce the result in France. The statement is granted; but have we then sufficient grounds for asserting justly for America, that "to a large extent the present system of educating girls is the cause of their pallor and weakness," or that "woman's neglect of her own organization, though not the sole explanation and cause of her many weaknesses, *more than any single cause*, adds to their number and intensifies their power?" (The italics are again ours.)

We return to our statement, that the governess system is the only system which can result as the logical outcome of the book in question. But this, America is not likely to accept. We ask, then, it being evident that in any school the regular work must go on, though two or three be absent, what difference it would make in the practical result, whether the sixty or seventy present were

all girls, or but half of them girls and half boys? Supposing that the President of a university were told, on the entrance of a student, that he would probably be absent twenty or thirty days during the entire scholastic year, and he were asked whether it would be possible for the youth to perform satisfactorily the work of his class under those conditions, does any one doubt what his answer would be? So far on the practical side of the question.

But when it is asserted that co-education is fatal to the health of our women, more is implied than appears on the surface; for, in reality, co-education and higher education for women are almost synonymous terms. If, at this moment, the gates of all the high schools and colleges open alike to both sexes, were closed to the girls, where, except at one honored institution, could they turn to obtain a really thorough and all-sided education—such an education as a young man would be satisfied with? And who will assert that even Vassar College is to be, for a moment, compared to Harvard and Yale in respect to its facilities for acquiring a rounded education? One may strike at co-education, and, at the same time, assert that he demands for woman the highest development of which she is capable—that he is only desirous of securing to her “a fair chance;” and yet he cannot deny that he deprives her of all chance, if his effort against co-education should succeed.

As has been said, all criticisms on schools and school systems are criticisms on the teachers, for it is they who constitute and determine the school. If pupils are made to stand during recitations, it is because the teachers of the school desire it; but in a somewhat large daily observation and intimate acquaintance with public schools

of all grades, and in different sections of the Union,* I have yet to see any high or normal school, or, indeed, any oldest class in a grammar school, in which the pupils stand during recitation. In the lower grades they stand or sit, as the teacher requires. I should say that in a majority of cases they will be found standing, but, at the same time, it should be borne in mind that in the lower grades the recitations are much shorter, as a general rule not exceeding ten or fifteen minutes. In the older grades the pupil is almost universally expected to rise to answer his question, and sit as soon as it is answered. Leaving out the point of formal courtesy to the teacher—a matter not to be lightly treated in its far results on character—it is assumed, even in a physiological point of view, that the momentary change of position is better for bodies not yet matured than the constant sitting posture.

I would not for one moment be understood as asserting that much unreasonable work is not demanded of the pupils in the public schools of the country, or as defending the often excessive and unseasonable work. I most emphatically record my protest against the custom of public exhibitions, and the unnatural excitement which is oftentimes kept up to stimulate the susceptible thought-machine of the child and youth into abnormal activity.

* My professional work has lain in Grammar, High and Normal Schools in Massachusetts, city and country; High and Normal School in Charleston, S. C., for two years, during which time I knew perfectly well the three large public schools in the city, modelled after the New York schools; and in St. Louis for nine years, where I was necessarily called to be familiar with almost every room of every school in that rapidly-growing city. I am also acquainted with the Chicago schools, and with the Normal schools in many States of the Union.

But these evils are not inseparable from mixed schools, nor do they belong exclusively to them. I have now in mind a school of girls, directed by women exclusively, where the girls have been for many days obliged to answer in writing in ninety minutes, twenty difficult questions, as an examination, three girls being allowed only one copy of questions between them, and their promotion to another class being dependent upon their success. Two or three of these examinations are being given in one session of five hours. But if the girls go home from that school-work every day with cold hands and feet, and a headache that keeps them on the sofa all the afternoon, it is not because they are doing regular work, nor are schools or systems in general to blame; the only persons to blame are the individual teachers who plan and carry out the barbarous and savage torture, and the parents, who take so little notice of what is going on, that they permit their daughters to continue such work. It is not the legitimate brain-work, but the nervous excitement, that breaks and kills. It is not work but worry that tires.

However, any words which lead to earnest discussion on the educational question are welcomed by all true educators, for Truth, which is the end and aim of their search, will never suffer in the conflict.

But, were the "old times" so much better than the present? In making the statement that they were, we are always apt to be misled by omitting two considerations of no light weight. The first is, that we draw our information and statistics now from a vastly wider area than in the "good old times," and hence that our figures relating to crime and disease always appear disproportionately large. The rail-road, the steamboat, the telegraph, the printing-press—effects and causes of

advancing civilization--have practically enlarged our mental horizon, and death, disease, and crime appear in unnaturally large proportions. And yet, if it be true that among the first Anglo-Saxon generation born and reared on this side the Atlantic, it was common for the men to have often, two, three, and four wives, it seems that the causes of disease and death among the women were not inactive even then.

The second consideration referred to is this: As medical instruments multiply, diseases appear to multiply in exact proportion. With the advent of the ophthalmoscope, for instance, how innumerable and complicated appear the diseases of the eye. Are we justified in concluding, then, that in the "good old times" of our great-grandmothers--that idyllic time when women must have been at least free from the reproach that they, solely and unaided, were destroying the hopes of the race--that myopic, hypermetropic and astigmatic eyes were not in existence? Such a conclusion would be manifestly unfair. It seems impossible, in this view, to make any fair comparison of the health of women in the present, and in the past; that is, any comparison which will be sufficiently accurate for scientific purposes.

It were better, if we must have an idyllic realm somewhere, to posit it rather in the future than in the past, and to work with all the light we are able to secure towards its attainment. This working may, however, be done in two ways as regards education: we may state, first, and I think without fear of contradiction, that there is too much sickness among American women. We may then patiently and fully investigate all the habits of those women, and if we come to the conclusion that co-education or that over-study in amount or in manner is

the chief cause, we shall all give it up. We shall then seek and find some better way of securing for our girls an opportunity for the full development of every part of their organization, venturing, however, to add 'brain' to Dr. Clarke's list of "muscle, ovary, stomach, and nerve." *

Secondly, we may assume in the first place the general statement that co-education is not desirable—is objectionable—that it must inevitably cause sickness if girls study regularly every day; and conclude that regular study is the chief cause of sickness among them.

And yet God is his own interpreter, and he will make it plain at last, so that the man who runs may read, that he is no such bungler in his workmanship as to fashion the organism of a woman without giving her at the same time the corresponding strength. We have too much belief in him to believe that the power given to us is in such niggardly measure for our needs; that, in order to carry out perfectly the work of the organs most peculiarly our own, the regular action of the brain must be suspended. Not so. He who fits the shoulder to the burden; who, in planning the complex organism, not only made possible greatly increased size and strength whenever they should be needed, but even took thought also to provide for the return of the blood through capillary and vein from the artery which has been severed by the surgeon's knife, is not so forgetful of ends and means. If extra work is to be done by the organism of the woman, extra strength in exact proportion to the extra effort has been provided,

"Where there is power to do
That which is willed."

* *Sex in Education*, p. 29.

To God, the brain of a woman is as precious as the ovary and uterus, and as he did not make it impossible for her to think clearly when the uterus is in a congested state, so, reasoning analogically from the knowledge we have of him, no more did he design that the uterus should not be capable of healthy and normal action while the brain is occupied with a regular amount of exercise. Such is our creed.

We are more sure of Truth by the so-called deductive than by the so-called inductive ladder, and it was not without meaning that she was represented as dwelling at the bottom of a well, for she is more surely reached by descending to her abode from the so-called abstract, than by climbing with our feet on the slippery concrete. Nay, even though physical science still insists in words on holding on to 'facts' and the testimony of the senses, forgetful that any fact is after all only a "relative synthesis," we find it in its latest researches rapidly approaching at both ends, things entirely out of the region of the senses; for, beginning with invisible and intangible atoms, which we are required to take on faith, and which are assuredly very abstract, we find it passing to the correlation of forces and modes of motion, which certainly are as abstract as atoms.

Shall we not be quite as safe then in attempting to solve the problem of "woman's sphere, by applying to it abstract principles of right and wrong," as by seeking for it alone "in Physiology?" Woman is not merely a "cradle" and a grave, as she is assumed to be in the essay under consideration, and all attempts to settle the question of her sphere by considering her as such, are usually, and perhaps not unnaturally, found to excite indignation.

To apply the above statement: the women who are urging to-day the question of education are often accused of presenting education in the light of a quack medicine which is warranted to cure all troubles. And it is true that we do so present it, for the broader grows our experience of men and women, and the more deeply and widely we think, the more inevitably do we find this problem of education appearing before us, in whatever direction we turn. It is like the ducal palace in Carlsruhe, to which all the main streets of the city converge, and which meets one's eyes at every corner.

The question of woman's Dress, for instance, is never to be solved by approaching it from the outside. Earnest and vigorous writers may tell women what they ought to do, and we all know perfectly well that if the skirts of our dresses ended at the tops of our boots, and we were warmly clad beneath in the full trousers proposed years ago by Mrs. Bloomer, we could take much more exercise without fatigue, and should be saved much time and much annoyance. Who but a woman can appreciate the trouble of always being obliged to use one hand in carrying her skirts up long flights of stairs? Who but a woman knows the inconvenience of her long skirts in entering or leaving a carriage, or in a strong wind? Who but a woman knows that it is utterly impossible to take even a short walk on a rainy day, however well protected, without bringing into the house an amount of wet clothing which necessitates almost an entire change? And yet there is not the slightest chance of securing the physiologically needed reform by demonstrating these facts, simply because, below all this question of dress, there lies a deeper thing, of which dress is only the index—the question of Sex, and the relations resulting from it.

For whose admiration and attraction do our young women array themselves? To please whom do they leave off their flannels and attend evening entertainments in low-necked dresses, sweep the pavements with their ornately trimmed skirts, and wear thin boots which shall display to better advantage the well-turned foot? I desire not to have it understood for one moment that I am speaking lightly, or in terms of sweeping condemnation, of the underlying consciousness, of which the external dress is only an outward sign. The underlying impulse is an inevitable, is a true, pure, and womanly one; on it are based all institutions of civilization, for from it spring marriage, the Family, Society, and the State, and an evil tree cannot bring forth such fruit. It may, however, be over-stimulated, and the extravagancies of dress and manner which Broadway and Fifth Avenue, the opera, or any fashionable assembly of young people display in America, are universally and justly condemned by sober thought as falling only a few grades behind actual immodesty.

But if we would produce any reform of any consequence on the subject of external dress, we must do it, not by attacking the dress at all; it will never be accomplished in this way. So long as it is considered that woman's chief and only duty, the only object of her creation, in fact, is to minister to the comfort and happiness of man; so long as it is represented to her that she fulfils the ends of her being, only in the fact that she does this; so long as it is not fully and freely allowed that a woman owns herself, body and soul, in the same sense as that in which a man owns himself—just so much and no more—women will dress to please the taste of men, and will vie with each other to excite their attention, and secure their admiration. Teach a girl that her only des-

tiny is to be only any kind of a wife and a mother, to preserve the race physically strong—keep this idea before her daily, and the more thoroughly she is convinced of it, the more conscientiously will she spend all her thought in seeking and using the only means which are then likely to help her to fulfil her so-stated destiny.

But make her feel that she is a responsible being, accountable only to God and her own rational judgment for her actions; make her appreciate, as far as it is possible, the responsibility devolving upon her as an individual, as a member of society, as a citizen, as a reflection of the Creator in his self-determining Intelligence; give her such a mental training that she shall feel that she is capable of taking her life in her own hand, and the dress will take care of itself. I do not mean that she will adopt the so-called Bloomer costume, but she will let common sense, suitability, and a higher sense of beauty, more than at present, regulate her garments.

In other words, if we would reform even so external a matter as dress, we must ascend to the abstract principles of ethics and metaphysics which Dr. Clarke so lightly sets on one side; for all dress is only an index of education, and all education, to be education at all, must deduce every one of its principles at second hand from ethics and metaphysics. Again, Huxley and Agassiz may, as Dr. Clarke assumes (page 12), represent physiology; but will “Kant and Calvin, the Church and the Pope”—all four of whom Dr. Clarke assumes to be of no importance in settling the question—fairly represent ethics and metaphysics? And yet, if we were limited to these sources for these sciences of sciences, perhaps we might as well return to Huxley and Agassiz, and allow physiology to settle the question of woman’s

sphere for us, on the ground that she is merely so many material organs carefully contrived for only one special purpose, and that, the perpetuation of the race.

Just here, before reviewers shall have an opportunity for misinterpretation, may I pause to guard them against it and to call their especial attention to the word "*only*," which has been so freely used above?

Why is it that the criticisms of so many women who see below the surface, ring with a womanly indignation? They are ready for rational argument, and for widely collected and digested statistics. One of these justly says in her criticism, that Dr. Clarke need not to have written to Germany to be informed of the care which a mother should exercise over the health of her daughter. That there are mothers in America who do not take this care, who are so occupied with other thoughts that they have no time to attend to their children, we sadly know; but some at least of us have had mothers who knew and did their duty, and who handed down to us, unimpaired the "traditions" which are well-known among women, but of which men generally, even fathers of grown-up daughters, have little knowledge, and some of them none.

With regard to "the European way," however, I subjoin the following testimony from a German lady, now a mother, in answer to inquiries. She says:

"I was two years at school at Stuttgart, as a boarding pupil, at the close of which I made my examination in the highest class, No. 8, as it was called. When I entered the school, there were twenty boarding pupils; when I left, there were twenty-five; more than thirty were never admitted. Day-scholars were about four hundred. As to the regulations of the school concerning the pupils

during the time to which you refer, *there was only one general rule, that of being excused from the daily walk which we took from one to two hours every day.* Only two pupils during my stay at school were excused from being present in their classes at that time, and this only because the physician had so ordered it. They were not kept in bed, but in the so-called sick-room, where they could read, write, etc., and must only keep very quiet."

This testimony, as showing the regulations in one of the largest girls' schools in Germany, seems to me valuable, as the course pursued by any large school is the index of the public demand. As to the health of English women, I copy the following paragraph from a recently published book by an English woman,* which would seem to indicate that women, at least in England, are not so much superior to their American sisters :

"Women above actual want seldom suffer from extreme labor or from excessive indulgence, but they seldom enjoy their full vitality, either in exertion or in pleasure. Whether from this reason or not, their most frequent illnesses are those connected with deficient vitality, such as can keep them in lingering misery for years; affecting chiefly those organs whose activity is not immediately necessary to life. Not half the illness of this kind is under the care of a doctor. When he is consulted, it is, if possible, at second-hand, and he is very likely to hear only half the symptoms. * * * It is natural to point to the multitude of women under constant medical care, and the number of doctors whose practice lies chiefly among female patients. But if those could be counted

* *The First Duty of Woman.* By Mary Taylor. Pub. by Emily Faithfull.

who are endeavoring to cure themselves by traditional remedies, by quack medicines, by advice at second-hand, by the use of means that have been recommended by some doctor to some other woman, they would outnumber the former ten-fold. And it must be remembered, that most of the first class belong also to the second, as often as they dare."

This testimony as to the health of English women, as coming from a woman, is of course doubly valuable; and it comes, too, as a mere digression in the article from which it is quoted, the subject of which is "Feminine Knowledge." It remains yet to be proved, it seems to us, that American women are, as a whole, suffering from more derangement of their peculiar functions than women of other countries. Do accurately compiled statistics from full and trustworthy sources, warrant us in asserting that American women are more unhealthy than European women, or are we only assuming the fact from their general external appearance—a criterion by no means a certain one? In the old story, the pail of water containing the living fish was, after all the discussion, found to weigh about as much as the pail with the dead one. Are we sure of our facts?

Or even if we are sure of these, even supposing that a mother of a large family here is not as strong as a mother of a large family in Germany for instance, we are in no wise warranted in concluding that the two were not as strong before marriage. The wear and tear of American life must be taken into consideration, and no one but an American housekeeper who has ever "kept house" on the other side of the water, can appreciate the immense relief from care and trouble which she has there experienced, and the dread with which she again

returns to the care of a house and the dealings with servants in America. It is not work, and not weakness, but annoyance and worry, that tire and drive women into nervous diseases. When we find the American and German mothers subjected to the same strain, and only the same strain, may we fairly judge of their comparative strength and health, and only then. Where are the statistics concerning German women resident in this country? There is a vast field of inquiry open on this subject yet; in fact, a "South-sea of discovery," and till we are sure of our facts, it were well that we were cautious in our conclusions.

The times are gone by when the clergyman uttered the authoritative words of superior knowledge to an ignorant and unquestioning audience. Every clergyman preaches now to a congregation of critics, many of whom are his equals, sometimes his superiors, in general information, and who sit in judgment, more or less adequate, on the statements he may make. In the same manner, the days are past when the physician was the only one who understood anything of the structure and functions of the body, and whose prescriptions were written in an unknown tongue. It is undeniable that the majority, perhaps, of both men and women, are deplorably ignorant of their structure, and the operations of the delicate and exquisite machinery which they bear about with them; but there is also a large number who are not so ignorant, and who trace, with the genuine scientific interest, the phenomena of health and disease. The general diffusion of printed matter is rapidly diffusing knowledge in the department of medicine, as well as in that of theology. The elements of anatomy, physiology, and hygiene, are taught in all our high schools and

academies, and it is no uncommon sight to see a class of girls handling the bones of a human skeleton, or, unmindful of stained fingers, searching for the semi-lunar valves in an ox's heart, with as much delight and intelligent interest as that with which they examine the parts of a watch or the machinery of a locomotive; while they can sketch on the black-board, in a few minutes, the form and relative location of all the important organs of the body, and follow the course of the blood from left auricle back to left auricle again, and that of the food, from the teeth to the descending *vena cava*. And with this basis for study already laid in school, as a part of the common education of a woman, the latest researches and discoveries of the wisest men and women are open to her as well as they are to the physician, and the census reports are at her hand; while, moreover, her knowledge of Latin and chemistry makes plain to her the nature of the remedies proposed in the prescription which she gives to the apothecary.

As a result of our American schools, we have such women now by the hundreds—I am not speaking of those belonging to the medical profession—and does not this question belong to them? As far as the records of experience go they are ready, nay, anxious to receive them, but they ask that these statistics shall be full in some particulars, where they always find them deficient.

This girl is sick? We do not want to know simply that she attended school, and studied and recited regularly; we want to know also the kind of food she eats, and how cooked, and the regularity of her meals. We want to know the state of ventilation in the school-room and her home; we want to know how many hours of sleep she has, how many parties she has attended, what

underclothing she wears, the manner in which that underclothing is arranged, the weight of her ruffled and double box-plaited dress skirt, and its mode of support, the thickness of the shoes habitually worn, the position of the furnace register in the room, the kind of reading she is allowed to have, and her standing in her class as to thoroughness or superficiality, mental clearness or chaos.

We want also to know what proportion of the cases come from pampered, half-educated devotees of fashion, and what proportion from well-educated, hard-working women. When we have all these statistics, and not till then, shall we be in a condition to attempt a rational solution of the question, what it is that makes our American girls sick. While endeavoring to settle this problem, we shall not, however, forget the wise saying of Dr. O. W. Holmes, that the Anglo-Saxon race is not yet fully acclimated on this continent.

But the collection of just these statistics, so all-important, and the want of which makes all assertion of causes useless, is possible only to women. And, therefore, we venture to claim that this is a woman's question—that the women themselves are the only persons capable of dealing with it.* They are the only ones

* In this statement I find myself most unexpectedly endorsed :

“The deterioration in the health of American women is without doubt one of the most serious among modern social problems. It outweighs, in real importance, vast masses of questions usually claiming far more attention.

“That some of this deterioration may be due to close application to study is possible, but the numbers of those who have ever closely applied themselves to study is so very small, compared with the number of those in broken health, that, evidently, search must be made for causes lying deeper and spreading wider.

who can and do know the facts in detail, and the facts being laid before them, can they not, with help, possibly decide quite intelligently as to causes? They desire any and all evidence that may be given, but do not they themselves constitute the only jurors competent to decide on the verdict? From the medical profession, we get a certain amount of observed statistics, necessarily questionable from the fact that a large number of women are not sick, are not good for nothing, are not childless, and, therefore, do not consult physicians; but the reasoning which shall judge and weigh the facts presented, assigning to each its proper value, and, discarding unessential elements, shall draw a just conclusion, is not limited to any profession.*

“The want of success in grasping and presenting these causes hitherto by men, seems to show that there should be brought to the question the instinct, the knowledge, the tact of woman herself, and it would seem that, for this, she has need of a system of education to give the mental strength required for searching out those causes, and grappling with them.

“More than this, it would seem that if the cause lies to any extent in want of knowledge of great principles of health, or in want of firm character to resist the inroads of certain vicious ideas in modern civilization, a change of woman’s education from its too frequent namby-pamby character, into something calculated to give firmer mental and moral texture, would help, rather than hurt in this matter.”—*Majority Report submitted to Trustees of Cornell University on Mr. Sage’s proposal to endow a college for women. February 13, 1872.*

The concluding paragraphs will be found entire in the Appendix.

* Chancellor Winchell, of Syracuse University, makes this statement :

“It is not pertinent to the question for us to inquire whether the pursuit of the higher studies be compatible with the health of woman. She is to be her own judge in that respect. We allow her to judge in regard to the healthfulness of all other pursuits. The pursuit of fashion, in some instances, is reported to have been

As has been before stated, out of the large number of criticisms which I have at hand, the men, generally, and seemingly without appreciation of its logical results, approve of what Dr. Clarke has said; the women of largest experience condemn, denying his premises, disproving his clinical evidence by adding other facts, and protesting against his conclusions.

The criticisms and the criticisms on criticisms would make already quite a volume, from which perhaps the principal lesson learned would be the correctness of Talleyrand's idea of the use of language, as many of them consist chiefly in the assertion that statements of the book which appeared perfectly clear to one mind as having a certain meaning, had in reality not that meaning at all; and the criticisms on adverse criticisms are apt to assert that Dr. Clarke has been accused of dishonesty by the previous critic, when the author is quite sure that no such accusation was expressed or intended. Most of the points made in the criticisms have been emphasized here.

The importance of the subject justifies the interest excited, and the final effect must be good. One result is marked; from all sections of the country, women heretofore knowing each other only by reputation, or not at all, are being bound together by a common interest in a sense never before known, and unknown girls in Western colleges are begging of women to plead for them that they be not deprived of their places. The result need

damaging, if not ruinous, to health; yet in our legislative halls, and in the formation of public opinion, we enact no laws which interfere with the right she exercises to pursue her business of fashion, and to lead a life which may be, and is, prejudicial to her physical health."

not be feared. The irresistible force of the world movement cannot be permanently checked. "The stars in their courses fought against Sisera," and we would answer the girls with the words of Santa Theresa:

"Let nothing disturb thee,
Nothing affright thee ;
All things are passing—
God never changeth ;
Patient endurance
Attaineth to all things,"

if we did not know that there is something higher, even, than patient endurance, and so we say to them, with Goethe, instead :

"Here Eyes do regard you
In eternity's stillness,
Here is all fulness,
Ye brave, to reward you ;
Work and despair not."

ANNA C. BRACKETT.

New York City.

APPENDIX.

CONCLUSION OF MAJORITY REPORT TO THE TRUSTEES OF CORNELL UNIVERSITY, ON MR. SAGE'S PROPOSITION TO ENDOW A COLLEGE FOR WOMEN.

Albany, February 13, 1872.

“IN beginning their report, your committee stated that their duty seemed first to be to investigate the facts in the case separately, then to collate them, then to throw any light thus concentrated into theories and programmes.

“In accordance with this plan they would conclude the general discussion of this subject by concentrating such light as they have been able to gain, upon the main theory imbedded in the arguments against mixed education.

“The usual statement of this theory contains some truths, some half-truths, and some errors. As ordinarily developed, it is substantially that woman is the helpmeet of man, that she gives him aid in difficulty, counsel in perplexity, solace in sorrow; that his is the vigorous thinking, hers the passive reception of such portions of thought as may be best for her; that his mind must be trained to grapple with difficult subjects, that hers needs no development but such as will make her directly useful and agreeable; that the glory of man is in a mind and heart that rejoices in solving the difficult

problems, and fighting the worthy battles of life; that the glory of woman is in qualities that lead her to shun much thought on such problems, and to take little interest in such battles; that the field of man's work may be the mart or shop, but that it is well for him to extend his thoughts outside it; that the field of woman is the household, but that it is not best for her to extend her thoughts far outside it; that man needs to be trained in all his powers to search, to assert, to decide; that woman needs but little training beyond that which enables her gracefully to assent; that man needs the university and the great subjects of study it presents, while woman needs the 'finishing schools' and the 'accomplishments;' and that, to sum up, the character, work, training and position of women are as good as they ever can be.

"The truths in this theory have covered its errors. The truth that woman is the help-meet of man has practically led to her education in such a way that half her power to aid, and counsel, and comfort is taken away.

"The result has been that strong men, in adversity or perplexity, have often found that the 'partners of their joys and sorrows' give no more real strength than would Nuremberg dolls. Under this theory, as thus worked out, the aid, and counsel, and solace fail just when they are most needed. In their stead, the man is likely to find some scraps of philosophy, begun in boarding-schools, and developed in kitchens or drawing-rooms.

"But to see how a truly educated woman, nourished on the same thoughts of the best thinkers on, which man is nourished, can give aid and counsel and solace, while fulfilling every duty of the household, we are happily able to appeal to the experience of many; and

for the noblest portrayal of this experience ever made we may name the dedication to the wife of John Stuart Mill of her husband's greatest essay.

“But if we look out from the wants of the individual man into the wants of the world at large, we find that this optimist theory regarding woman is not supported by facts, and that the resulting theory of woman's education aggravates some of the worst evils of modern society. One of these is conventional extravagance.

“Among the curiosities of recent civilization, perhaps the most absurd is the vast tax laid upon all nations at the whim of a knot of the least respectable women in the most debauched capital in the world. The fact may be laughed at, but it is none the less a fact, that to meet the extravagances of the world of women who bow to the decrees of the Bréda quarter of Paris, young men in vast numbers, especially in our cities and large towns, are harnessed to work as otherwise they would not be; their best aspirations thwarted, their noblest ambitions sacrificed, to enable the ‘partners of their joys and sorrows’ to vie with each other in reproducing the last grotesque absurdity issued from the precincts of *Notre Dame de Lorette*, or to satisfy other caprices not less ignoble.

“The main hope for the abatement of this nuisance, which is fast assuming the proportions of a curse, is not in any church; for, despite the pleadings of the most devoted pastors, the church edifices are the chosen theatres of this display; it would seem rather to be in the infusion, by a more worthy education, of ideas which would enable woman to wield religion, morality, and common sense against this burdensome perversion of her love for the beautiful.

“This would not be to lower the sense of beauty and appropriateness in costume; thereby would come an æsthetic sense, which would lift our best women into a sphere of beauty where Parisian grotesque could not be tolerated; thereby, too, would come, if at all, the strength of character which would cause woman to cultivate her own taste for simple beauty in form and color, and to rely on that, rather than on the latest whim of any foolish woman who happens to be not yet driven out of the Tuileries or the Bréda quarter.

“Still another evil in American women is the want of any general appreciation of art in its nobler phases. The number of those who visit the museums of art is wretchedly small, compared with the crowds in the temples of haberdashery. Even the love of art they have is tainted with ‘Parisian fashions.’ The painting which makes fortunes is not the worthy representation of worthy subjects; French boudoir paintings take the place of representations of what is grand in history or beautiful in legend; Wilhems and his satin dresses, Bourgeois with his knack at flesh-color, have driven out of memory the noble treatment of great themes by Ary Scheffer and Paul Delaroche; Kaulbach is eclipsed by Meissonier. Art is rapidly becoming merely a means of parlor decoration, and losing its function as the embodiment of great truths.

“So rapidly evaporates one of the most potent influences for good in a republic. An education of women, looking to something more than accomplishments, is necessary to create a healthy reaction against this tendency.

“Still another part of woman’s best and noblest influence has an alloy which education of a higher sort,

under influences calculated to develop logical thought, might remove. For one of the most decided obstacles to progress of the best Christian thought and right reason has arisen from the clinging of women to old abuses, and the fear of new truths. From Mary Stuart, at the castle of Ambroise, to the last good woman who has shrieked against science—from the Camarilla which prays and plots for reaction in every European court down to the weakest hunter of the mildest heresies in remote villages, the fetichisms and superstitions of this world are bolstered up mainly by women.

“In Lessing’s great picture, the good, kind-faced woman whose simplicity Huss blesses as she eagerly heaps up the fagots for his martyrdom, is but the type of vast multitudes of mothers of the race.

“The greatest aid which could be rendered to smooth the way for any noble thinkers who are to march through the future, would be to increase the number of women who, by an education which has caught something from manly methods, are prevented from clinging to advancing thinkers, or throwing themselves hysterically across their pathway.

“So, too, that indirect influence of women on political events, so lauded even by those who are most opposed to any exercise by her of direct influence, has some bad qualities which a better system of education might diminish. The simple historical record shows that in what Bacon calls the ‘insanity of states,’ her influence has generally been direful. From Catherine de Medicis in the struggle of the League, down to Louise Michel, in the recent catastrophe at Paris—from the *tricoteuses* of the first French Revolution to the *pétroleuses* of the last, woman has seemed to aggravate rather than soothe

popular fury. Nor is the history of civil strife nearer home, without parallel examples.

“An education which would lead women to a more thoughtful consideration of great questions and more logical treatment of them, would, perhaps, do something to aid mercy and justice in the world at those very times when they are most imperilled.

But to all this it may be said that these considerations are too general and remote—that woman’s most immediate duties relate to maternity, and that her most beautiful mission relates to the dispensing of charities. As to her duties as mother, if the subject were fully discussed, it would be shown that, under the present system of physical, mental, and moral education of women, there is a toleration of perhaps the most cancerous evil of modern society. Suffice it that the system of education proposed cannot make it worse, and may make it better.

“As to woman’s beautiful function as the dispenser of charities, it will do no harm to have leading minds among women shown, as a stronger education would show them, that systems of charity based on impulse and not on reason have in older countries caused almost as much misery as they have cured. Her work in charity would be certainly strengthened by the training which would give her insight into this.

* * * * *

ANDREW D. WHITE, *Chairman*,
In behalf of a majority of the Committee.

EXTRACTS FROM THE REPORT OF THE PRESIDENT OF MICHIGAN
UNIVERSITY FOR THE YEAR 1872.

“The number of women who are availing themselves of the opportunity to study at the University is nearly twice as great as it was in the year 1870-71. The number registered then was 34, viz.: 2 in the Law Department; 18 in the Medical Department, and 14 in the Academic Department. This year the number has been 64, viz.: 3 in the Law Department; 33 in the Medical, and 28 in the Academic. These last are distributed in the classes as follows: Seniors, 2; Sophomores, 7; Freshmen, 13; in select courses, 6. Of those in the regular courses, eight are Classical students, nine Latin and Scientific, and five Scientific. Five of those in the select courses are giving their attention chiefly to scientific studies and modern languages and literature; the sixth to classical work. Six women graduated in April with the medical class, one with the law class, and two now graduate in the Academic Department. In the Medical Department the women have received instruction by themselves, except in chemistry. In the other Departments all instruction is given to both sexes in common.

“It is manifestly not wise to leap to hasty generalizations from our brief experience in furnishing education to both sexes in our University. But I think all who have been familiar with the inner life of the University for the past two years, will admit that, thus far, no reason for doubting the wisdom of the Regents' action in opening the University to women has appeared. Hardly one of the many embarrassments which some feared, has confronted us. The young women have addressed themselves to their work with great zeal, and have shown

themselves quite capable of meeting the demands of severe studies as successfully as their class-mates of the other sex. Their work so far does not evince less variety of aptitude or less power of grappling even with higher mathematics than we find in the young men. They receive no favors, and desire none. They are subjected to precisely the same tests as the men. Some of them, like the men, have stumbled at examinations; but nearly all of them have maintained a most creditable reputation for scholarship in every branch of study which has awaited them in their course. Nor does their work seem to put a dangerous strain upon their physical powers. They assure me that they never enjoyed better health, and their absences by reason of sickness do not proportionately exceed those of the men. Their presence has not called for the enactment of a single new law, or for the slightest change in our methods of government or grade of work. If we are asked still to regard the reception of women into our classes as an experiment, it must certainly be deemed a most hopeful experiment. The numerous inquiries which are sent to me from various parts of this country, and even from England, concerning the results of their admission to the University, show that a profound and wide-spread interest in the subject has been awakened. Cornell University has recently decided to open its doors to women, and it can hardly be doubted that other conspicuous Eastern colleges will soon follow the example. The Alumni and Trustees of at least four prominent New England colleges are formally considering the subject."

FROM REPORT FOR 1873.

"The number of women who enroll themselves as stu-

dents in the University continues to increase. Two years ago it was 37; in 1871-2 it was 64; in 1872-3 it was 88. The attendance of women was, by departments, as follows: in the Law Department 4; in the Medical Department 40; in the Academic Department 45. These last were, according to the Calendar, distributed as follows: Resident Graduates 2; Senior Class 1; Junior Class 7; Sophomore Class 8; Freshmen Class 20; Select Course 5; Pharmacy 2. Of the 35 in the regular courses of study, 14 pursue the Classical, 14 the Latin and Scientific, and 7 the Scientific. Of the graduates, 8 are women; 1 in the Law Department, 1 in the Literary, and 6 in the Medical.

The history of our work during the past year has only deepened the impression made during the two previous years, of the entire practicability of imparting collegiate and professional education to the two sexes in the same schools. If any have cherished a fear that the admission of women would tend to reduce the standard of work in the University, their attention may be directed to the fact that during the last three years we have been steadily increasing the requirements for admission and broadening the range of studies. Now certainly the women experience no such difficulty in acquiring the studies assigned in the regular curriculum as to call for any modification of the course on their account. Their record is as creditable in all branches as that of their class-mates of the other sex. Nor do I see any evidence that their success in their intellectual pursuits is purchased at the expense of health. On the contrary, I doubt if an equal number of young women in any other pursuit in life have been in better health during the year. I am persuaded, that with ordinary care and pru-

dence, any one of our courses of study may be completed by a young woman of fair ability without undue draft upon her strength. None of the many objections, which are still raised against the co-education of the sexes, have thus been found in practice here to have any force. The admission of women has led to no new difficulty or embarrassment in the administration of the Institution. It has certainly brought to a large class the benefits of such an education as otherwise would have been out of their reach, and has awakened through the State and the country, and even in foreign lands, a new interest in the University.”

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