

**Education and culture as related to the health and diseases of women / by  
Alex. J.C. Skene.**

**Contributors**

Skene Alexander J. C. 1837-1900.  
Royal College of Physicians of Edinburgh

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HEALTH  
AND DISEASES OF WOMEN.

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A. J. C. SKENE



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# EDUCATION AND CULTURE

AS RELATED TO THE

Health and Diseases of Women.

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BY

ALEX. J. C. SKENE, M. D.

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1889.

GEORGE S. DAVIS,  
DETROIT, MICH.



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## PREFACE.

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This little work originated in a desire to answer a few of the many inquiries made by those who seek medical counsel regarding the care and education of the young.

While on the threshold of professional life, the writer—in common with all students of medicine—became impressed with the fact that a rational management of the young, in all that relates to their physical and mental education, is highly essential to health and efficiency through life.

The most valuable teachings of medical scientists on this subject, impress the fact, that to guard against errors of development and growth, gives infinitely better results than all human efforts to subsequently correct the evil consequences of mental and physical imperfections. Along with this comes a full realization of the responsibilities of the physician, whose duty it is to give counsel to those who seek his aid in solving this problem. While the teachers in primary schools and universities can be fully relied upon to supply the most approved methods of imparting knowledge, the physician alone is able to prescribe the course of training best adapted to the development of special organizations.

All intelligent persons know what is desirable in the way of health and intelligence; but how to attain this, is a question which especially belongs to the Science of Medicine.

In view of this, I have sought for information in medical literature, and there found much that was required, but there is still much that is needed. Most of the books on education by medical authors, are devoted either to purely physical culture, or else to the relation which the sexes bear to general education. There are other works by non-professional writers



## VIII.

which discuss the general principles of education without regard to the special wants of the organization and functions of those to be taught. Such works, while valuable, are wanting to some extent in the practical adaptation of the means to the ends desired. At least there appears to be room for a few more ideas such as are offered in the following pages, and which are made up simply of the thoughts which have occurred to one while trying to meet the demands of every-day practice in medicine.

Other duties, less important but more urgent, have left only a few spare hours to give to this subject, hence the opportunity has not been found to write about it comprehensively and exhaustively. My object has been, to add a little to that knowledge which already exists, or may come in the future.

Although the work may fall altogether short of the mark aimed at, it may be useful in directing the attention of others to the subject, and possibly provoke comments and criticisms which may have something useful in them.



## CHAPTER I.

### GENERAL OBSERVATIONS REGARDING THE CHARACTERISTICS OF WOMAN WITH SPECIAL REFERENCE TO DE- VELOPMENT AND GROWTH.

The matter which makes up the following pages, was gathered from observations made mostly during the study and practice of the science and art of medicine. The nature of the structure peculiar to women and the functions performed by her, together with their relations to surrounding conditions of life, being the subject under consideration, the methods of investigating these must of necessity be the same as those commonly employed by the student of medicine.

This way of looking at the subject divests it of that interest which it has when clothed in the poetry and sentiment of the spiritual and non-material in the human race. Yet, when viewed from the material side, one can see quite as clearly the nature of a given organized being, and the uses and wants of that being. The conditions in Nature which give birth to the flowers of the fields, the trees of the forest, and the lower beings which inhabit the globe, produce the higher and complex, and all of these may be investigated in the same spirit of honest inquiry. Their nature, habits, duties and usefulness,



together with the surroundings best suited to their well-being, are all subjects for the same thought and investigation. They are all to a certain extent within the boundary line of exact human knowledge. Up to a certain point, the human race can be studied in connection with the lower order of living beings, for so far as the physical is concerned, all have many characteristics in common. The higher brain-development requires a special study, and hence the field of the psychologist is boundless, but below this there is room for much thought. There is a vast field of useful knowledge pertaining to the physical side of this subject.

While the purely psychical and physical studies may go hand in hand, they can be taken up separately and with less tendency to confusion. Perhaps the development and growth of the physical structures can be more easily comprehended if separated for the time being from the more intricate problems of the mental. In considering the subject in this way, it is convenient to look first at the lower orders, and rise from them to the more complex. This will be accepted by the majority as the best way of looking at such an important subject. It might be presumed that the organization and disposition of a child should be studied in the same way as that of a bird or flower, and that the education of the one and the culture of the other might be conducted upon the same principles. This certainly should be so, but as a matter of



fact it is not. Although the superior object commands the highest consideration, it often happens that greater interest and admiration warp the judgment and perceptions, and hence when the student wishes to do his best, he sometimes falls below his average when dealing with human subjects.

Every family of living beings has a natural history. Among the lower animals there is uniformity and sameness in appearance, habits, functions, and general disposition, which change very little from age to age. If one acquires a correct knowledge of the nativity, appearance and habits of a pair, male and female, of any class of animals, that knowledge will cover the whole of that class be it ever so large, and it will hold good for many generations. Evolution effects its changes so slowly that the natural history of animals, if correct at first, need not be revised and corrected in many hundreds of years. The higher the development of the animal, the more varied its behavior, and the record thereof must of necessity be elaborate. Still, though complex it is uniform, regular, and easy of comprehension. My first impressions of the definite and fixed character of animals came in this way. When a boy I read with much interest in a work on zoology, the history of the ground squirrel (chipmonk) and was greatly impressed with his personal appearance as represented in the illustration given. Ten years afterwards, when I had the pleasure of meeting his squirrelship in person, I re-



cognized him at once, and was able to give his family history so accurately, that an American friend who was with me and had known him for years, verified my knowledge by remarking, "Well, you have got his history true to life." So far the study of zoology was very satisfactory. When in after years I turned my attention to the human race I found the task more difficult. There was a greater variety of physical outlines in the different members of the race. The deviations from the highest type were marked. In one I noticed that the hands were small and the feet slightly deformed, the skin was unduly white and the waist contracted to deformity; she appeared to be incapable of any great physical exertion, although full grown. I learned that her parents did not take much care of her in childhood, but they supplied others to care for her, and these still held her in charge. At first I supposed that she was a queen bee in the hive, judging from her dignity and beauty, but I found that she acted like a drone. She toiled not, neither did she spin. Still a bird of paradise in all the glory of its brilliant plumage was not so gorgeous as this specimen in question. In regard to doing any thing in the way of self-maintenance, or the reproduction of her kind, there is a conspicuous blank in my record. The place where she lived was apparently a museum of art. There was nothing in it or about it indicative of a home. Not far from her, I saw a number of others of the same species who were



so intimately mixed up with the wheels and belts of machinery, and were so completely reduced by dust and oil to the color of their surroundings, that at first they appeared to be part of the machinery endowed with wonderful automatic powers. I learned that their habits of life were to run with the machinery about half of the time, the other half being occupied in sleeping and walking between their sleeping places and the machine shops. So the variety of women might be multiplied, but this will suffice to suggest our purpose. In all of the race, fortunately, there are certain designs in the structure and functions which are invariable and intended for wise and good ends.

All this almost incomprehensible variety which is displayed in the human family, comes from perverted brain action. There is nothing apparent in the body below the head, which necessarily should give rise to so much more unnatural action in men than in animals. The same uniform health and contentment would appear in the human race which we see in the lower, if human beings would conform to the laws of their organizations. The machine must do the work which it was intended to do if it is to do anything right. The engine will not do the work of the plough. So it is in trying to make human bodies do that which is foreign to the end for which they were designed, failure and suffering will ever be the result.



So true is this in science that if the body or a part of an animal is shown to a zoologist, he can accurately describe its habits of life, or at least what they should be. The great lesson to learn from this is, what human beings were made for; and that the highest or most natural life is to do that which they were designed to accomplish. This is the only way to secure harmony between organization and action or function, and through that harmony alone can health and happiness be attained.

A brief inquiry must be made just here regarding the organization or structure of woman and the functions for which she was designed.

An idea of the human body sufficiently comprehensive for the present purpose, may be obtained by comparing it to an establishment which is divided into three departments. The first takes the raw material from the outer world and makes food for the whole establishment, which by the most perfect arrangement it distributes to every part in required quantity and quality. This is the maintenance department which nourishes and sustains all, and is called the *nutritive system* in medicine, in place of calling it a supply department, as business men would do. The second department is the reproductive; its object being to reproduce other establishments exactly like the one now under consideration. This is the *reproductive* or *sexual system*, so called by medical scientists. The third is the controlling, or business department; the head



of the whole, it may be called, which in its highest development comes last but (as brains always do) it takes possession of all that comes before it. This *nervous system*, more especially the brain, brings the rest of the establishment or organization into wider and higher relations to other establishments and the world generally. The function of this system is potent for good or evil in all that pertains to the whole being. It can lead the whole establishment to success or to bankruptcy.

To fully discuss the three systems would be a needless task. The reproductive in the female sex will be our chief object, referring only to others in their relations to the subject in hand.

The nutritive system, which constitutes by far the largest portion of the organization, includes all that is requisite and necessary for the maintenance of the individual; it is self-sustaining and capable of an independent existence. The reproductive system, on the other hand, is, like the brain, dependent upon the nutritive system for support, and incapable of a separate existence. It derives its innervation and blood-supply from the nutritive system, and is therefore liable to modifications by all variations of this system. This connection of the two systems, renders it possible for the reproductive system to influence the nutritive in a variety of ways, and the brain, from a like connection with the other two systems, is capable of affecting both.



The relationship of the brain to the rest of the organization is marked, but limited, from the fact that the nutritive and reproductive systems can exist together without an associated nervous system. This fact is illustrated in plants in which the processes of development, maintenance, and reproduction, are performed upon the same principles as among animals, although they are destitute of the higher brain and nervous organization. The absence of the brain in plants simplifies the processes of nutrition and reproduction in that class of organisms, while the presence of the brain in animals, especially in women, complicates these processes because of the multiplicity of functions and the greater variety of correlated influences existing between the several systems. This brief reference to the anatomical relations of the sexual organs to the rest of the body will suffice for our present purpose; hence further elaboration of this point need not be attempted. I shall not occupy time by discussing the relative merits or capabilities of the two sexes. There has been too much prejudiced discussion of this subject. Men, more earnest than wise, have written to show that woman, simply because she is woman, has always been considered the weaker vessel and therefore must be so. On the other hand, some women have written books to show that woman is the equal of man in a general way, and in many respects his superior. Both appear to strive to gain a point rather than to find out the truth of the matter.



The fact is that they were made for different purposes in life; hence each is best and ablest in the position designed to be occupied by each respectively. It would be at once put down as an absurdity if one should try to prove that a woman could, as a rule, sing baritone as well as a man, while a man generally made the best soprano. Some appear to appreciate that there is quite a difference in the faculties of the sexes, which shows that the two were intended for different duties in life, but while quite reasonable on this point, they hold the idea that the physical and mental powers of the one are superior to the other. If the disputant is a man, he usually claims the greatest credit for men, and if a woman, she is as likely to claim superiority for her sex. This shows a little spirit of selfishness on the part of both and a want of courtesy towards each other. It is unwise and unfair to discuss the subject in that manner. That way of thinking and writing about this subject is as useless as it would be to try to settle the question whether the blood-hound or the carrier pigeon manifests the higher mental powers, or which is more useful in the world.

It is necessary to notice in this connection the relative importance of the sexual system in the two sexes of the human species, because it is related to the development and growth of women. Dr. Antoinette Brown Blackwell very appropriately says that the sexes are equal, but not identical. Dr. Alexander Hutchins states the facts as follows:



The distribution of the organs of reproduction is unequal in the male and female. This inequality of distribution is manifest in the structures themselves (*a*); their location (*b*); the difference in effect on the nutritive system in their normal condition (*c*); the special duties required of them (*d*); the special character of their activity (*e*); the changes wrought in their highest development (*f*); and in the period of their active operation (*g*).

(*a*) High organization—their function characterized by activity—belongs to the essential portions of the reproductive apparatus distributed to the male, and of the subsidiary apparatus he has but a small portion; while vast preponderance of the subsidiary apparatus is given to the female, characterized in the main by low organization and passivity of function.

The inferior distribution of the reproductive apparatus in the male, its independence structurally of his organism, the moderate effects of its normal activity on his nutritive system, the limited scope of the duties required of it in the reproductive process, the singleness of its activity without consequent change of structure, and the evenness of its possible activity through so long a period of his natural existence, compel the physiological inference that the reproductive system in the male individual of the human species affects his nutritive system to a comparatively slight degree, and therefore the male individual of the human species represents the typical organism for the maintenance of the individual, and man in his best physical estate is to be taken as the type.

On the other hand, the preponderance of the distribution of the reproductive apparatus in the female, its close affiliation with her organic structure, the depressing character of its functional activity, the extraordinary energy of the duties of which it is capable, the complex character of its activities, the extensive structural changes it undergoes, the periodicity and limitations in the exercise of its functions, make it physiologi-



cally inferential that the reproductive system in the female individual of the human species, is the constant cause modifying her physical structure from the typical organism, for the maintenance of the individual; and woman, in the utmost integrity of her organism, and in her most harmonious development of structure, is, so far as concerns the maintenance of the individual, a modification of the type.

It is clearly evident, from these statements by Dr. Hutchins, that woman in her reproductive system is the highest type of the species. This fact being determined, it follows, in the physiological order of things, that a large share of her nutritive and nerve force must be diverted to that portion of her organization. Certain facts regarding the size and conformation of the female brain, appear to confirm this view of the subject. From a large number of observations, it has been demonstrated that the brain of woman is smaller than that of man, but compared to the size of her body it is relatively larger. The following comparisons will show this more clearly :

The length of the head of a woman in proportion to the length of her body is as 1 to 7.2, and in man it is as 1 to 7.4. The medium height of man is to the height of woman as 1000 to 937. The weight of man's brain compared to that of woman is as 1000 to 914. The relative weight of the two main divisions of the brain is as follows: The average weight of the cerebrum in man is 1155 grammes and in woman 1055. The weight of the cerebellum in man is 179 grammes and in woman it is 147. These figures show



that, while the brain of woman is absolutely smaller than that of man, it is relatively larger; and, also, that the cerebellum in woman is larger in proportion to the size of the cerebrum than it is in man.

From this I infer that the relatively larger size of the brain in woman, especially the cerebellum, is intended to meet the demands of her highly-organized and complex reproductive organs. This conclusion is suggested by the fact that the osseous and muscular structures are smaller, and, hence, make less demands upon the nervous system than in man. Again, the history of woman's intellectual work in the past shows, at least, nothing superior to that of man's, but her share in the process of reproduction, and the care and education of children, has been infinitely greater than that accomplished by man.

Believing, as I do, that brain matter is developed to meet the demands arising from the duties devolving upon organized beings, I can see no other reason for the relatively superior size of the female brain, than the demands arising from the peculiarities of her sex.

With this much regarding the structural relations of the various portions of woman's organization clearly in mind, the reciprocal influences exerted by the structures during development and functional activity can be more easily studied. In pursuing these studies, constant reference must necessarily be made to the nutritive system. Without so doing it



would be impossible to trace the correlation of the sexual organs and the nutritive system.

I will first consider the influence of the sexual organs upon the general development of woman. The presence of the sexual organs in the organization is, I affirm, essential to the complete development and highest functional activity of woman. This influence of the reproductive system doubtless begins during embryonic life. Germs, which appear to us exactly alike, differ in organization sufficiently to produce a great variety of living beings, although they may be evolved under circumstances which appear to be similar. This indicates that the products of development are determined by the nature of the germ, and not altogether by the circumstances or conditions of its development. From this I infer that the tendency inherent in the germ, produces the sex of the individual of a given species according to pre-existing design. During girlhood the characteristics of the female sex are gradually evolved under the influence of the sexual organs. This is assumed upon the negative evidence obtained from the fact that there is nothing, that is known, in the structure and functions of the general system of the two sexes of the species, to produce the differentiating characteristics of sex. The mental peculiarities of sex, although not marked, appear in early life, while the sexual organs are still imperfectly developed and functionally inactive. It is towards puberty, when the nutritive



system approaches its complete development, and the sexual organs are undergoing secondary development, that their influence is exercised in the highest degree. In fact, the reciprocal effects of the two systems upon each other are quite apparent at the time. If a girl at puberty is defective in her general structure, the sexual organs are often imperfectly developed, and again, when the general system is well developed, if the sexual organs are defective, the whole organization is modified. A number of cases might be cited to illustrate this point; it will suffice, however, to say that when the sexual organs, especially the ovaries, are congenitally absent in any person, such a one will fail to develop the attributes and general appearances of the female sex. In such cases the tendency is towards the masculine type of the species. One such person I have seen; she had the narrow pelvis, square shoulders, rudimentary mammary glands, full beard and, in a word, the body of a man. Such subjects show, better than any discussion, the effect which the sexual organs have upon the physical development of woman; they also show, that the tendency of development under such circumstances, is towards the male form and less complex organization of the species, when freed from the control of the sexual system. The question therefore naturally arises whether the masculine product of such a development is the result of the absence of sexual organs, or is due to some peculiarity of the whole organization which had its origin in some devia-



tion from health in the germinal cell. This is, of course, possible, but it is not probable, because, if the deviation from the normal female type was due to disease of the primary element or elements, deformity would be most likely to occur instead of change from one normal type to another. Were it necessary to quote authorities to sustain this point, many could be given. One will suffice.

Virchow states that all the specific properties of woman's body and mind, all her nutritive and nervous sensibilities, the delicacy and roundness of her figure, and, in fact, all her womanly characteristics, depend upon her ovaries. This expresses the opinion of the majority of competent writers who refer to the subject; and I can see no other way by which such results could be obtained except through influences exerted during development. In following up this line of observation, we naturally come to those cases in which the development of the sexual organs is arrested in the more advanced stages of the process. Secondary development, which should take place at puberty, is entirely omitted in some cases, and in others it takes place only to a limited extent. In the one class the sexual organs remain in the infantile condition both as regards anatomy and function; in the other, they are defective anatomically, and perform their functions imperfectly. The state or degree of development, whatever that may be, at puberty, usually remains the same through life. Arrested de-



development, without deformity of the sexual organs, is usually associated with some imperfection of the general system, such as a small heart and arteries, and a peculiar state of the organic system of nerves. This variety of arrested development may not have any appreciable effect upon the general system at the time when it occurs; but when the menstrual function is established, the influence upon the nutritive and nervous systems is very great, and sometimes very disastrous. It is certainly extremely rare to see a symmetrical nutritive system in connection with defective reproductive organs. Hence, it is difficult to tell how far the sexual organs act in the causation of abnormal phases of the general organization. In the few cases which I have carefully observed, in which the general organization appeared to be faultless, while the sexual organs were undersized, and the menses irregular and scanty, the general functional activity was below the highest standard of health. In one class there was marked sluggishness, both mental and physical, with a strong tendency to obesity; in the other, there was premature degeneration, the appearances of old age occurring early in life. The menses were scanty and irregular, and ceased entirely in one case at twenty-eight years; in another, at thirty-one. Both of these women subsequently had consumption.

It cannot be positively stated to what extent general ill-health may be caused by the malformation and imperfect functional action of the sexual organs, but



my own impression is, that health is often markedly impaired. This belief is based upon clinical observation, in connection with the well known fact that any considerable imperfection of any part of the organization relating directly or indirectly to the nutritive system, modifies the whole structure, and that modification is in the direction of a lowered vitality. Were this not so, it should follow that if the sexual organs (which claim a considerable share of the nutritive forces) were small, and their functions reduced to the minimum, the general system would be capable of extraordinary attainments in development, growth, and functional activity; but such is not the case. There is a general law of compensation between organs engaged in similar functions, so that impaired action on the part of one may lead to enlargement and increased functional activity of an other. There is, however, no such disposition to mutual aid on the part of the several systems, except to a very limited extent.

Viewing the subject from another standpoint we are led to the same conclusion. Races and individuals who procreate early in life, seldom attain the highest possible development of the general system. This sufficiently shows that the harmony between the nutritive and sexual systems may be disturbed in varying degrees, by premature as well as retarded development. Before the sexual organs enter upon functional life, their influence is limited to the production of certain characteristics of the individual. After



puberty they are capable of deranging nutrition and modifying the functions of the brain and nervous system.

The effect of imperfect sexual organs upon the brain and nervous system, is perhaps greater than upon the nutritive system. The sexual apparatus exerts a marked influence upon the development of the brain and nervous system, and also upon their functions, by stimulating the intellectual faculties and the emotions in a variety of ways. Many of the manifestations of the mind are but responses to extrinsic impressions and physical wants. During early life—the “receptive age,” as Dugald Stewart called it—the brain is called into action by surrounding objects; therefore mental development depends largely upon the impressions made upon the mind by agencies outside of itself. By withholding the influence of the sexual organs, a modified mental condition is the sure consequence, and that modification is towards a lower organization or activity. The facts obtained by actual observation support this doctrine. Among the insane I have found a number of young patients in whom the sexual organs were imperfect and inactive, and the brain was correspondingly defective. Some of these were normal as children, but they remained childish. The arrest of brain development apparently took place at puberty, and deranged function in the form of insanity followed soon after.

Premature development, and the consequent de-



rangement of function, is quite as common as retarded and defective development. And the two classes are in marked contrast. Such children are sometimes mentally bright beyond their years, but they are usually weak in both body and mind, and show excitability without power. While at times they show maturity of thought and affectionate dispositions which are attractive, they are capricious, and often very irritable and despondent. They often have headache and indigestion, and are usually languid. They generally menstruate too early in life, and assume the mental characteristics of "the young lady" while in size, form and years they are still girls. When these evidences of premature development of the sexual characteristics first show themselves, much can be done by constant watching, moral influences and diversion of the mind. Physical exercise, well directed and so arranged as to secure constant occupation, will often accomplish much in the improvement of this class of subjects.



## CHAPTER II.

### THE SEXUAL FUNCTIONS DURING THE MIDDLE PERIOD OF WOMAN'S LIFE.

Having briefly referred to some of the more prominent relations which exist between the sexual and other portions of the body during the early period of life when development and growth are going on, the subject which next presents itself is their functional relations during the middle period of woman's life. Up to the period of puberty, and after the menopause, or change of life, the sexual organs, being to a great extent inactive, exert but little influence upon the general system, save that which has been already noticed; but during functional activity—the period of reproduction—new and important relationships are established, which demand careful investigation. The secondary development of the sexual organs takes place when the girl approaches maturity. It has been claimed, upon theoretical grounds, that the sexual organs complete their development and take up their function when the osseous and muscular systems have completed their development, and the excess of nutritive force accumulated by the lessening demands of the bones and muscles, is directed to the reproductive system. This theory is based upon the fact that the termination of development of the osseous and muscular structures occurs at the time when the functions of



the sexual organs begin. Furthermore, the development of the bones and muscles stops at an earlier period of life in woman than in man; so that she continues to be inferior to man in the size and strength of her osseous and muscular structures. This gives her what is called a supplemental nutritive power, which sustains her sexual organs. It is also claimed by some writers, that the motor power required to control the muscular system is less in woman than in man, hence the greater development of the brain in man is necessary to control his muscular system. It follows, apparently, from this line of reasoning, that the sexual organs make no extra tax upon the brain power, but are abundantly supplied by the nutritive forces rejected by the muscular system. I am inclined to give weight to this view of the relations of the muscular and sexual systems, but I do not think that the whole truth is contained in that one fact. It appears reasonable to suppose that the nutritive system and the nervous system are more or less taxed by the sexual organs in the performance of their functions. It may be, that during the process of menstruation there may be no more urea eliminated by the kidneys; the circulation may not be changed, except a slight increase of vascular tension for a short time before the menstrual flow; and the majority of women may manifest all the activity of body and mind during menstruation that they do at other times; but it does not follow that ovulation and the nutritive changes of



the mucous membrane of the uterus that are constantly going on, are all supplied by the nutritive materials left over after supplying the bones and muscles. I grant that woman may not, in her highest estate, require special rest during her menstrual period; but I firmly believe that ovulation, development, degeneration, and exfoliation of the mucous membrane of the uterus which take place every month, impose a tax upon her whole organization. A normal tax it is, and one that does not produce ill health, but nevertheless it abstracts something from the vital power of her organization, although it may be but little. Were it the muscular system alone that was influenced in its nutrition by the sexual organs, then extreme muscular labor would influence the sexual functions more than excessive brain work. The contrary of this has been noticed in practical observations.

The functions of the sexual organs are established early in the life of woman, and are necessary to the welfare of her whole organization. They are involuntary, not subject to the will of their possessor. In the male, the sexual function may voluntarily be postponed for an indefinite time without injury to the brain or general system. This last statement is made upon the authority of Dr. Elizabeth Blackwell, who clearly discusses that subject in her very excellent book—"Moral Education in Relation to Sex."

One thing is certain regarding ovulation and menstruation, viz.: These functions must, when once



established, continue, or else the whole organization including the brain, will suffer derangement. Again, a certain degree of health of the nutritive system and brain is requisite to normal ovulation and menstruation. This interdependence, which any one can verify by clinical observation, argues strongly in favor of the influence of the sexual organs being general, not special and limited. Leaving the theoretical and turning to that which can be seen in every-day practice, we can trace the influences of the various systems upon each other in diseased states, and reason from the abnormal to the normal. It is well known that excessive menstruation impairs general nutrition, and indirectly diminishes mental vigor. The same results follow suppression of the menses from unnatural causes. Amenorrhœa, caused in a healthy woman from nervous shock or exposure to cold, will derange her general nutrition; secretion and excretion are retarded, and mental inactivity follows. This influence of the sexual organs is chiefly exerted through the organic nervous system. The nervous phenomena which are manifested by such subjects, are not always accounted for by the extent of deranged nutrition present; therefore, it may be inferred that deranged menstruation acts upon the organic nervous system to lower its vital activity. The cold hands and feet, the irregular flushing of the face, the constipation and flatulence which occur in that class of cases, are relieved most certainly



by remedies which stimulate the organic nerves, showing that they are at fault.

The relation of pregnancy to the general organization has been more carefully investigated than any other portion of the subject under discussion, and need not therefore occupy much of the present time. The great modifications in the general nutrition which take place during utero-gestation, as shown by the changes in the composition of the blood and dynamic state of the circulation, the enlargement of the glands generally and their increased functional activity, the extraordinary activity of the lymphatics, and the changes in color of portions of the skin, are all familiar to every observer. These changes, I venture to say, are all produced primarily through the influence of the gravid uterus upon the nervous system. That the nerves, organic and cerebro-spinal, are influenced by the pregnant state, is true in a marked degree. The gastric derangement, the abnormal cravings for peculiar articles of food, mental depression and irritability, the extreme nervous tension which predisposes to eclampsia and puerperal mania, all testify to the fact that the sexual organs during utero-gestation influence the nervous system to an extent that is unequaled by any other phenomena in the human economy. All this suggests that during pregnancy the body and mind are made tributary to a great extent to that one function. All the mental and physical phenomena of pregnancy, although normal,



hold a kind of intermediate position between the normal and pathological influence of the sexual organs on the brain and nervous system.

With this knowledge of the profound effects produced upon the brain and nervous system by the process of reproduction, we anticipate more marked influences in disease of these organs. The functional importance of any organ renders it more varied and extensive in its effects upon the organization in health and disease, and the complexity of anatomy and physiology of any structure increases its liability to disease. This is well illustrated in the accidents and diseases incident to reproduction. The derangement of menstruation from natural causes, the injuries so frequently sustained in parturition, and the great variety of inflammatory affections which are liable to follow them, have no parallel in any other organized being than woman. And because of all this, her brain and nervous system are taxed by the normal action of the procreating organs, and deranged by diseases of them. Lactation, also, makes great demands upon the nervous system. The evidence of this is found in the great number of nursing women who suffer from nervous exhaustion, or neurasthenia as it is now called. In this condition there is not only a lowered state of the general nutrition, but also a well-defined depression of the nervous system which in some rare cases terminates in insanity. It is true that this nervous exhaustion is due generally to the fact that



women, either from choice or necessity, engage in severe mental and physical labor while nourishing their offspring, but that does not modify the fact regarding the taxation of lactation.

Thus far I have considered the correlation of the sexual and nervous systems as maintained chiefly through the nutritive system. There still remains the most obscure portion of the subject, viz., the relation of the sexual system to the brain. To a certain extent, reproduction is an involuntary process, nevertheless the appetence which directs the human species to seek those social relations through which reproduction is consummated, has its origin in the mind, as surely as the poet's love of the beautiful, or the physician's interest in science. The will power and reason can aid in the fulfillment of the reproductive function, guide and restrain it, or prevent its completion. To this extent the mind controls reproduction, and the efforts to do so engage the brain functions to an extent greater, perhaps, than any other object in life. Reproduction under the control of the reasoning powers, gives intellectual enjoyment by securing new objects of admiration, and by stimulating the brain to higher exertions in order to obtain protection for the object admired. Of all the inducements to brain work this is the highest, not even excluding ambition and avarice. The fulfillment of the injunction "to multiply" is the highest earthly function of woman. On the other hand, failure in reproduction, in all that



belongs to that process, whether voluntary or by force of circumstances, always causes more or less disappointment and mental depression in those who are naturally of sound mind and body.

The brain is capable of overdoing attention to the sexual system; and by stimulating and preventing\* the normal emotions and overtaxing that portion of the organism, disease and debility are engendered. Perverted mental influence in this direction is likely to result in derangement, to some extent, of the brain itself, by reaction from disease of the sexual organs.

Again, to deny the sexual system the normal brain influence, tends to develop disease of the sexual organs. Dr. Emmet shows in the clinical records given in his book, that functional inaction or sterility, is a potent cause of disease. The war against the flesh commended by inspired authority was not intended to be a war of suppression or extermination, but simply moral government. It is evident, from the few facts stated already, that the brain influence upon the reproductive system is necessary to maintain a normal harmonious action of that system, and also that deranged function and disease of the sexual organs may be caused by perverted brain influence. The correlation of the two may be formulated as follows: The presence of the sexual organs is the most potent means of developing the social appetite, which is the mental agency or motive that excites efforts to secure some of the conditions necessary to



the performance of the reproductive function. In the normal state of the brain and sexual system, they act and react upon each other to secure that harmony of function which results in health. Disease of the sexual organs deranges the tendencies, and arouses false emotions or perverted brain action. On the other hand, excessive brain excitation gives rise to perverted emotion through imagination, and in turn deranges the functions of the sex and, finally, causes disease.

In order to avoid wandering too far from the key note of my subject, I may repeat, as follows:

The normal exercise of all the functions in the process of reproduction, imposes a tax upon the whole organization, but in return strengthens and preserves body and mind by maintaining the harmony of the entire organization. Excess in any of the functions of the sexual system causes depression of the whole organization, especially of the brain and nervous systems. Arrest of any of the functions of the sexual system causes derangements of nutrition and also of the brain and nervous system. Extreme functional activity of the brain detracts from the sexual system generally by increasing excitability at the expense of power; sometimes excessive brain work causes diminished excitability and power also. Early excitation of the emotions, and mental attention to the sexual system, will cause premature functional action to a limited extent the result of which is imperfect devel-



opment, abnormal irritability, and want of power of the sexual organs.

In illustration of the first proposition, it is well known that the best specimens of mental and physical health are those women who have menstruated normally, and have borne and raised a number of children, under protective and favorable circumstances. Although reproduction makes great demands upon the whole organization, the taxation is natural, and therefore strengthens and preserves the body in the same way that reasonable exercise will strengthen muscles. Cases which come under the second head are too familiar to require much notice. The pale, care-worn mother, exhausted by frequent child-bearing and prolonged lactation, whose nervous system is rebelling against over-taxation, may be seen every day. Such a one complains of many nervous symptoms; she is emotional, fearful of dangers, and cannot relate her symptoms to her physician without weeping. Her whole bearing shows plainly that she is on the boundary line of insanity. The same general condition (arising from very different causes) is to be seen in the subject who, regardless of the hygiene of her sexual system, is reduced to a pale, spongy mass of sluggish, ill-nourished tissues, with a broken nervous system which is incapable of doing anything well, except, perhaps, manifesting hysteria.

The same state is often developed in those who are disposed to live according to the laws of health,



but are the slaves of others. Both suffer alike—the guilty, and the guiltless victim of the transgressions of others. Those next to be mentioned, in whom the reproductive functions are arrested or interrupted, are also of two classes—the voluntary and involuntary transgressors. The woman who willingly tries to reverse the order of her physical being in the hope of gratifying some fancy or ambition, is almost sure to suffer sooner or later from disappointment and ill-health. Doctors make fortunes (small ones) by trying to restore health and peace of mind to those who violate the laws of morals and health in their efforts to prevent reproduction. In such cases, the relations are deranged by perverted mind influence. Disease of the maltreated organs follows, and revenges their wrong by torturing the brain and nervous system. Those who know their duty, but do it not, because of the abnormal environments beyond their control, suffer in a similar way. Deranged nutrition and the peculiar nervous symptoms observed in cases of menstrual irregularities, are good examples of what is here referred to.

In “Body and Mind,” by Bain, the influence of pain is well defined in these words: “The light smart of a horsewhip is enough to awaken the energies without damaging the vitality. The pain of a flogging, which multiplies smarts of still greater intensity, is utterly exhausting to the whole system.” So it is with the suffering of the subjects in question. The resist-



ing power diminishes at each recurrence of the period of pain, until hysteria, or screaming and writhing, brings the doctor with his morphine. Even that is not always the end. If the physician is unable to remove the cause, and can only relieve pain by anodynes, the suffering may for a time be lessened, but the brain and nervous system become more and more exhausted until chronic invalidism or insanity is established. This description is not overdrawn. There are too many cases in this world with just such histories, to leave any doubt about what has just been said. Regarding the last proposition—the influence of overtaxation or derangement of the brain and nervous system upon the sexual system—much might be said. Those who have heretofore discussed the subject now under consideration, have sought to show the effect of the body upon the mind, rather than the effect of the mind upon the body. This is true, in regard to the mind and reproductive system, at least, but we find that the interdependence is well balanced, and that the mutual relationship is maintained by equal potentiality on both sides. At first it might be supposed that the reproductive organs being largely under the influence of the organic nerves, and to a great extent involuntary in their action, the mind would not be capable of indirectly affecting the functions of these organs except through the direct agency of the will. Theoretically this appears to be the fact, but actually it is otherwise. To show this in clear light,



it is only necessary to recall the well known facts of the effect of the emotions in arresting menstruation and utero-gestation. Cases of suppression of the menses, and abortion, caused by shock, fear, grief, over-joy, and suffering, are so familiar as to require no comment. The facts teach, however, that other mental states of a milder nature produce effects upon the sexual system equally important, although less abrupt and striking. Derangement of the emotions, such as grief, prolonged by being nursed or cultivated, or anxiety from real or imaginary cares, often causes scanty and irregular menstruation. The sorrow of a mother for the loss of a child may retard the coming of another to fill its place; and the disappointment and fretfulness of a woman because of her sterility, may help to prevent that for which she so devoutly wishes. Intellectual labor, too severe or prolonged, tends, no doubt, to debilitate and derange the sexual system, but not to the extent usually supposed. There are few in this world who have sufficiently overcome the natural laziness of the human race to over-indulge in pure intellectual labor. Much has been said, and books have been written, to prove that school-girls should not be compelled to study severely at puberty and during menstruation; but no one should be required at any time to pursue a course of study which cannot be kept up during menstruation. There should be sufficient reserve force at all times to sustain the little extra taxa-



tion of menstruation. It has always appeared to me that if school-girls were sufficiently supplied with good food, and could be protected from premature emotional excitement, they would be able to obtain a liberal education and menstruate comfortably during their school days. But although woman may not require special rest during menstruation, she ought to be protected from all those influences which are capable of arresting that function. She may be capable of an amount of mental and physical labor which most men would consider sufficient for themselves, but she cannot endure over-work and extreme mental excitement during her menstrual period, without endangering her health from derangement of the sexual system. Physicians know, and women ought to know, that menstruation can be arrested or deranged by abnormal mental and physical influences, and that most unfortunate results may follow therefrom. That fact alone shows that woman cannot safely expose herself to the dangers of life to the extent that man may do with impunity, and hence it should teach her to guard against that possibility of self-injury. Still, excessive brain work will derange the functions of reproduction; not because of any disturbance of the relations between the brain and the sexual system which are maintained through the nervous system, but simply by derangement of nutrition. If an excess of nutritive force is directed to the brain, the sexual system will be deprived of its just dues and become lowered in the scale of health.



All this indicates that it is necessary to clearly comprehend the design of woman's organization, *i. e.*, the purpose for which she was intended; and all that helps or hinders her to do her life work should be known in order to secure the one and avoid the other.

The foregoing has been presented in the form of suggestions of study, rather than an exhaustive elaboration of the subject; but this much must be evident from what has been stated, that, a harmonious and complete development of her body is necessary to enable woman to fill her position in life. That the cultivation and training of her mind should have for its object the same end. That the natural exercise of all her functions is the only way to secure health and happiness. That in proportion to the extent in which any woman falls short, either from choice or unavoidable circumstance, from conditions in the capability, and opportunity and will to do the natural life work, so will her sorrow and suffering be.



### CHAPTER III.

To begin with the simple, and gradually rise to the complex, is a very natural and easy way to obtain clear ideas regarding the structure and functions of organized beings. The law of Evolution, as manifested in the development of living organisms, if well understood, is a great aid to a comprehensive knowledge of the natural sciences. This will be acknowledged by many who do not endorse all the conclusions from the theories of Evolution.

In the study of any subject, it is best to take it in the order of its development, hence to follow the order or law of Evolution is the safest and surest guide in education and investigation. This after all is simply stating that the evolution of the mind is governed by the same laws as evolution of the body, and therefore a rational education or mental training should be based upon the principles of Evolution.

It may be better to act without rule or principle, rather than to be guided by bad principles. One acting at random is likely to be right at times, by accident, while one who is governed by erroneous principles must be continually wrong.

To occupy the highest and best position as a student or teacher, some well matured system of action must be followed.

In studying the physical structures and their uses



or functions, the best way is to begin as already stated, with the simplest, and then rise to the more complex.

And so it is in looking at the mind action in the government of the human race in relation to their physical wants and general conditions.

In the investigation of the relations of mind and matter in the human family, the beginner will find some valuable aid by looking at the same subject as manifested among the lower orders. The actions of the human race must of necessity be governed by reason and judgment. The lower animals are guided in their life work by instinct, more properly called inherited memory and transmitted tendencies. They do exactly as those who preceded them did, rarely, if ever, deviating from the example of their parents. The consequence is, that they enjoy a physical perfection and a degree of health rarely known in the human family. The lower orders of life fall naturally into the position in the world which they were designed to fill; they are qualified for their life-work; they perform it fully and faithfully, and live in health and contentment. Life with them is a true success as far as it goes. The Society for the Prevention of Cruelty to Animals should be called the Society for the Prevention of Man's Inhumanity to Animals. Kings and Presidents might well envy the complete life of the lower animals when free from the cruelty of that higher animal, man. Animals need no protection



from themselves; every creature is endowed with the power of self-protection. They are cared for by special provision in the laws which govern their lives, and they accept the situation and act accordingly. The human race suffers because it has broken away from the laws of instinct, and not yet learned to fully obey the laws which a higher brain development has imposed. More than half of the misery and suffering which torture human beings comes from errors of judgment and reason; the faculties of the brain were intended to guide men in their life-work, but because of unfavorable education and misdirected use, they often lead to disease and suffering. Though destined to the highest power and enjoyment in life by virtue of greater intelligence, mankind is capable of the greatest degradation and misery when guided by perverted reason and biased judgment. The very power which places woman above all other things endowed with life, brings with it capabilities for sorrow and suffering which are unknown to the lower orders. No exercise of intelligence can enable woman to violate the laws of life without suffering the consequences. When a boy, I often tried to drive back the waves of the sea which dashed in seeming anger against the rocky shore, but they are still breaking into spray as in days gone by, regardless of my puerile efforts to stay them. So men are equally helpless in trying to stem the tide which controls the affairs of their lives. They may



resist and try to avoid the laws of Nature; they may suffer and die rather than obey in peace; but the waves of destiny will roll on regardless of them and their suffering. If then we are cut adrift from the guidance of instinct and intrusted in part to our own intelligence, to know and submit to the laws of our being, it behooves all mankind to learn these laws and to labor to obey them, knowing that obedience alone can bring success and true happiness.

To clearly define and understand the position which woman was designed to fill, is the first thing to be accomplished. This would be easy if words would convey the full meaning which a life experience gives to them. To be a wife and mother, is the chief end and object of woman's life—to occupy that throne which is far higher than the gilded chairs set apart for royalty: that crown which is placed upon the head of the wife and mother by husband and children, has more valuable jewels in it than any diadem. Such are the rights and attributes of her who creates a home. The home is woman's kingdom. There she rules, or should rule, with an unseen hand. Her subjects obey her from love, not fear. She governs by the kindness of her heart, which is far more potent than the intrigues of the head which kings and statesmen employ. If she possesses health and vigor of body and mind when she takes her place at home, she will ever find her duties pleasant and agreeable. Home has its cares and troubles, but they only tend



to make the bright brighter, as the shower brings out more fully the beauties of the landscape. Our greatest joys are often seen through wholesome tears. It is the feeble or diseased mind that becomes wretched under ordinary cares. This is not a fancy picture painted in coarse colors, but is intended as a few lines, hurriedly drawn, to suggest the ideal life of woman—a life which will become real when science has accomplished all that is possible.

Some time ago, English artists painted a series of "types of beauty," which were reproduced in woodcuts in *Harper's Bazar*. This reminded me that I had long been occupied in searching for types of health, happiness, and beauty, among American women. I found them, but not in the work-shop, nor counting-room, nor at the bar, nor in the prayer-meeting, nor practicing medicine, nor lobbying in politics, nor in Woman's Rights clubs, nor in the lecture room. I found them *at home*. There I found typical women, beautiful in youth, and lovely in old age: entering life bewitchingly charming, leaving it crowned with glory and sublimity. The grandmother I found like the victorious old warrior resting securely after the battle, like the sailor after having vanquished the storm.

Congenial occupation is the key to health and happiness in life. To be occupied with that kind of labor which is suited to one's organization, is the only way to secure peace of body and ease of mind. Let



it be taken for granted that the natural duties of home life are adapted to woman, and that the surroundings of a true home are congenial to her and fulfil all her wants. These will occupy her whole time; and it is only necessary to know that she is agreeably occupied, to be certain that she will be blessed with all the health and pleasure which she can obtain in this world. At home her duties are labors of love; if they do not prove to be so, she is not at home. In caring for those in whom all her heart's interests are centered, the days glide by as bright and peaceful as the sun in his course. While man is struggling to wrest from the earth and his fellow-men the means to make his home comfortable, woman is carefully contributing the very life of the household, securing to all a share of home's blessings. In all this and for all this, the body and mind of woman are constituted; and if she is worthy of her mission and performs it faithfully, the harmony of her life must be as complete as the colors of the flower or the song of the bird. In her occupation she will forget herself, and enjoy that most blessed of all forms of forgetfulness. The pleasure of life depends largely upon occupation of body and mind which takes the interest and attention away from self. Let any one refer back to the most delightful time of past life, and it will be found that that time was occupied with some great source of interest which had nothing of self in it. To be unoccupied, drives one back to self, and few there are who



find solace or comfort in their own company. When one turns inward in search of something for thought, an uneasy head and an aching heart are all that is usually found.

The natural history of a true woman's life, in her right position, is a simple story, interesting and easily told. She is well-developed in body and mind, and her education has all been directed to fit and prepare her for her place in life. At maturity she meets her life companion, who proves to be a man in all that the name implies. For a brief season they enjoy those golden hours, which are made so by a true and mutual devotion. Those hours in which "hope springs triumphant on exultant wings." She is soon enthroned in her home, and with that bravery which women—not men—possess, takes up her duties and cares. Long before the end of the first bright season of life comes, other living objects dawn upon her and win her love and her happy solicitude. When the object of her first affection nears the autumn of life, his image in her little ones brings back to memory the charms of youth, which first caught her fancy and secured her devotion for life. Her children grow to honor her by doing well as she has done, and, in due time, her interest and affection finds fresh stimulation in a new generation. Her grandchildren give a radiance and glory to her declining days, which remind us of the blending of winter and spring in the landscape.



This mere suggestion of the picture of true home life will suffice for my present purpose, and I must hasten to look at the lives of those who choose, or are driven by circumstances, to lead a different life. Women of wealth who become impressed with the idea that foolish indulgence in fashionable life will give more pleasure than home life, generally complete a sad history which they would not repeat if they could. The one class seeks society simply for its gaiety and the attention and flattery which they there obtain. Their admirers lose their attractions when the novelty of a fresh conquest passes off, and they give up the prematurely old for the new, as easily as they change their dresses. The excitement of abnormal life soon begins to exhaust the vital forces, and artificial stimulus and extra exertions are necessary to keep up the demands of the salon and ball-room. The devotion obtained, and the conquest of heart or hearts, are flattering to the vanity and give a pleasure which can only be enjoyed at short intervals and in limited degree. Such pleasures soon begin to pall, and repose from this excitement is demanded in order to restore lost color and elasticity. This is not always successful, and the fashionable belle returns to her gay life to find that she has lost some of her charms, and hence the complete control of those who formerly were her early victims. During this short season of dress, company, drawing-room and dramatic entertainments, she meets and parts with the only one



who could make her life worth living. The prize was within her grasp, but she did not recognize it, being blinded by the glare of an artificial light, held in the hands of that miserable phantom called fashionable society. In time she feels herself being left behind in the race after unnatural indulgence. She comes now to seek in place of being sought, and in despair turns to the more real in life, but finds that she has no qualifications for such usefulness. In short, she becomes what is known as the *passé* society girl. Weary, lonely and forsaken by the gay and thoughtless, who contributed to her amusement in early life, she is left without any visible or invisible means of interesting or occupying herself. The poorest among the poor is she, having nothing but money to supply her animal wants. In desperation, she may enter into a copartnership with some one as ill-qualified to live as herself. All she has of married life is the name; she is quite homeless in her home, and lives a life that is all but lifeless. Alcohol, opium, and chloral hydrate, may help to hasten her journey to her last, her only home, wherever that may be, and she is fortunate if she is not delayed in the insane asylum on her way home.

I would not be understood as wishing to deprive woman of society, far from it. The seclusion of women in a Turkish harem is quite as absurd as the ruination of them in the continual dissipations of so-called fashionable life. Society of the best kind is morally as essential to woman's welfare as food and clothing.



To mingle with intelligent, cultured people whose walk and conversation are refined, instructive and enjoyable, is not only interesting and valuable, but essential. Writing and comparing notes and interchanging ideas on all subjects, is an easy and very sure method of self-improvement.

Nearly all the modern methods of social entertainment adopted by the most intelligent people, are necessary and valuable, and tend to improvement, and due time should be allowed to them. The mistake is not in choosing to mingle with fellow beings, but in giving too much time to amusement to the exclusion of the more serious work of life.

Neither should one practice a slavish devotion to home and its care. The wife who is too exclusive in her servile devotion to her liege lord may find herself poorly rewarded. There is a very old and true saying "The man who is over-inclined to run will find road enough." Again, mothers sometimes err in their over-devotion to their children to the exclusion of all other home duties. The lady of means is not required to take the whole charge of her children. She can hire help to do the real work, but she should be able and willing to direct and see that every duty is executed. A mother should not bestow her whole time and affection upon her children to the neglect of her husband. Many a home has become demoralized by the mother and children usurping the control of the whole household. Wives and mothers should



remember that excessive care and devotion are about as unfavorable as disregard and neglect. The same caution may be given to husbands and fathers.

Home, children, husband, neighbors, and friends, have claims upon every wife and mother, and the wisest of these will give to each a reasonable share.

Many of those in favorable circumstances start well in life, but they try to enjoy home life and still enter too largely into the dissipations of society. In order to do this they must either leave their children wholly to the care of domestics, or else worse still, they choose to avoid having such wholesome company. This latter has been called the curse of American women and it is well named. Could I paint the mental and physical misery which come from this method of shirking the duties and responsibilities of life, the picture would be too horrible for public exhibition. Crimes are these for which neither poverty nor ignorance can be offered as mitigating circumstances. This is simply a wanton disregard of all those laws which are sacred and holy; laws, the violation of which is followed by shame and swift punishment; a mad violation of the highest law to escape a little trouble by plunging into tenfold more misery and suffering. The little song bird could save herself all the trouble of maternity by simply breaking the shells of her eggs, but in place of that she guards her nest with miserly care, and her reward is health and happiness. How blessed is the woman whose life is as pure



and full of wisdom in this respect as a song bird! She will ever be admired by those whose love she craves, and find enough for her own admiration. How thoroughly a little amusement and recreation are enjoyed when the real work of the day is ended! How loathsome popular amusements are when one tries to live on them alone! More than half the pleasures of our pastimes come from seeing others enjoy themselves. The joy of a mother's heart is to see her little ones at play, and her own recreation is made doubly sweet if she can have all the members of her household engaged with her. The mental degeneration which comes from neglected energies; the torpor of mind which comes from excessive indulgence; the nervous irritability which comes from the demands of the higher brain faculties being neglected or perverted, make a picture of mental weakness and suffering which is as sad to look upon as it is difficult to outline. The physical weakness, the pain and suffering which come from violating the laws of sex, are the source of more bodily misery than we dream of even in our philosophy. All this and more comes to her who has the means to do as she pleases, but chooses to walk in the paths which are foreign to her mental and physical organization. It would appear that every one is responsible for this misuse of the will, reason and judgment, but, in justice to the woman of the present, it should be acknowledged that a major part of her waywardness comes from transmitted



tendencies, and above all to a faulty education in which precept and example are both misleading agents. The remedies for all these errors of life are to be found in an improved training and school education, and a radical change in the social life of the wealthy.

Look now to those daughters of the poor who are compelled to violate the highest laws of their lives in order to satisfy the immediate wants of existence. It is not the fault, but the misfortune of those who are stunted in development and are compelled to live lives of sickness and suffering, and to die before they have lived out half their days. In all the industries of life we find girls, many from necessity, some from ambition, entering the field in competition with boys in mental and manual labor, and the result is very disastrous. Statistics, and the testimony of good observers, sufficient to fill volumes, could be produced to show that girls and women who labor either with head or hands, or both, cannot maintain health and do the labor that boys and men can do. Exceptions to this rule are many, but the rule has been abundantly proved. How to remedy the condition of those who by circumstances have been forced out of place, is one of the great problems of the day, a problem which will not be solved in our time; still, a more general and perfect knowledge of the subject will help to its solution in the future. When men and women who are fortunately placed in life, once learn their duty



to themselves and to those who are less fortunate, many of the errors of the present will be avoided in the future. As matters now stand, the rich and the poor who depart from the true path of life, are about equally unfortunate. I have seen as bitter tears in the palace as I have ever seen in the poor-house, and I have made sketches from life in both places.

That the good may be cultivated and the evils in life overcome, some general thoughts may now be offered regarding physical and mental culture which bear upon sex in the various relations of life.



## CHAPTER IV.

Health and the enjoyment of life are attainable by woman far beyond that which is usually experienced in every day life, if she is well developed mentally and physically, and provided that her environments are agreeable to her organization. There is nothing in the peculiarities of the sex which necessarily tends to the development of diseases of either body or mind. It is only when her organization is defective, or when her conditions of life are unfavorable, that disease and suffering come to her. It is also a fact that if she is well developed in body and mind, she is the better prepared to control and command her circumstances and turn her surroundings to her own advantage. The world was made for her and is adapted to her wants, hence the problem of life is to fit and prepare her to occupy with the greatest advantage the land in which she was destined to live. The object of all culture should be to bring the being into harmony with its environments.

Much has been said, and written, about the delicate health of American women, without much foundation in fact for all the fault finding. Some have bewailed the degeneration of our women on no better ground than the fact that many girls and women in this country are in ill health. They are unmindful of the fact that delicate and sickly people are found everywhere. One medical author of our own time declares



in his work on the diseases of women that the race here would undoubtedly run out if not sustained by importation of strong women from the older countries of Europe. He evidently has overlooked the thousands of superior American women to be found everywhere in the country. He might also find consolation in the fact that many of the tribes of American Indians maintained for centuries excellent physical health and strength, until contaminated by importations from Europe. The facts appear to be as follows: There are a great many delicate women in this country but they are so because of their habits of life during the period of development. The peculiar organization of this new country gives a continuous temptation to over-taxation, so that children and young girls often break down before arriving at maturity; but those who escape from the deteriorating effects of over-stimulation go through life as strong, healthful and useful as the women of any country.

Were we to measure health and strength by the mental and physical labor accomplished, then the women of America would compare very favorably with those of other lands.

When Mathew Arnold saw the wife of Senator McDonald in Washington, he exclaimed, "Wife, wife, come here, I have seen the most beautiful woman in the world." Surely the learned Englishman would not have paid such a compliment to any except a perfect type of mental and physical health and strength.



When the excitement and ambition incident to this new country cool down and the habits of life become more fixed and mature, more time will be given to development and growth, and hence more of that health and strength will be attained which are seen among the better classes of Europe, and which come merely from their easy going habits of life. There is nothing in our climate which necessarily tends to ill health in women. More knowledge of how to live is all that is necessary.

This subject includes all that relates to the development and hygiene of body and mind, but I intend to limit my remarks in that connection more especially to that which relates to the interdependence of the various systems or departments of the body with special reference to sex.

It is an established fact, already stated, that a full development, not only of the nutritive and nervous systems, but also of the sexual organs, is necessary to the fulfilment of their functions, and also to the general mental and physical well-being of woman. Therefore it is of the highest importance that her conditions in early life should be such as to insure this harmony in the development of her whole organization.

The physical hygiene of the reproductive organs during girlhood is not special, because these organs depend upon the nutritive system for nearly all the conditions of their formation, growth, and mainten-



ance, and hence the highest organic perfection of the sex can only be attained indirectly through the general system. It follows, therefore, that a perfect system of general hygiene will cover the ground pertaining to the physical culture and care during early life. It would be beyond the capacity of this work to state here the general laws of hygiene so far as they are known and taught. They are, to a great extent, alike adapted to the young of both sexes. It will suffice to state that all those conditions which secure the highest type of physical womanhood, are also the most favorable to the development of the peculiarities of the sex. In the best systems of hygiene of the present day, there are rules sufficient for the care of girls, but unfortunately they are not generally known to those who are most responsible for the care of the young. There are also conflicting opinions among authorities regarding the laws of health as applied to the female sex, in reference to some of the peculiarities of organization.

In the practical working of the culture and care of girls, there are errors committed even by those who are most desirous of being faithful in the discharge of their duties. Many of these defects come from mistaken views respecting what constitutes true culture. In the present state of society in this country, too much time is devoted by one class to mental culture, and by another to a necessary struggle for existence. Nearly all our institutions of learning are devoted to



intellectual and moral culture while there are no organized means of physical culture, except a few gymnasiums, where muscular exercise passes current as physical education. It seems as if the culture of the nervous and the muscular systems comprised the whole subject of physical development. There is another false principle which prevails to a very great extent in our systems, viz.: the application of one system to every variety of subjects. The precocious, dyspeptic girl pursues the same course of training as the one who is mentally dull, but physically vigorous. Now, as the object of true culture is to secure, as far possible, uniform development of all portions of the body and mind, it follows that the method employed should be adapted to the special wants of each individual. In one the intellect may require the most attention, while digestion and assimilation ought to be cultivated in another. In place of one general course for all, as practiced at the present time, there should be a special course for each, according to the requirements of her organization. As society is organized in the present age, it is impossible to follow out this plan, but more and stronger efforts should be made towards perfecting it. The medical profession ought to labor to secure most of this needed information, because physicians are the only qualified judges of the physical requirements of children. The confidence which is being inspired in the people by the progress of medicine in the department of hygiene,



and the prevention of disease, gives hope for more rational culture in the near future. It is wiser to employ a physician to superintend the physical education of the girl than to employ him to care for her ill-health during womanhood.

According to my own observations of the subject as it stands at the present time, the chief cause of imperfect development in women, is imperfect general physical culture. Mental and moral education have their influence upon the sex, but they cannot take the place of bodily health.

The poor, especially in cities, suffer from confinement in doors, improper food, and all other causes of disease which come from poverty and overcrowding. The consequence is that they are imperfectly developed generally, and the sexual system shares in the common lot of the whole body. The unwholesome physical condition of the lowest class of the poor leads to further degradation, which is too often but the outgrowth of the abject state of their physical surroundings.

There is another class which, although poor, can by industry secure all the necessaries and many of the comforts of life, and thereby attain a high degree of development. Although lacking to some extent in mental training, the work which they are obliged to do brings them health and strength. In this class are to be found the finest specimens of women, because they live nearer to the laws of health. They are not



stunted by poverty and over-taxation, nor distracted and harassed by the excitement of a so-called higher though perverted civilization. They have food sufficient for their wants, and time to eat and digest it. Abundance of sleep and exercise gives strength, while they are free from the slavish demands of society which exhaust the nerve energies, hence they grow to be women qualified by physical development and health to sustain the function of reproduction and perform their share of the duties of domestic life.

The children of the rich or well-to-do class who have the advantages of means, but the disadvantages which come from the misuse of wealth, are, in this country at least, more liable to imperfect physical development than any other except, perhaps, the extreme poor. This class ought to be physically and mentally the most perfect, because they have the means to procure all that is necessary to cultivate both body and mind, but so far, they have not improved their opportunities to the extent possible. The cause of much that is defective in the development and growth of this class is due to great disproportion between the time and attention given to the body and mind. The unnatural home culture and school education over stimulate the brain and nervous system, and, by creating mere excitability without power, arrest development and lay the foundation for ill health and failure in after life. Parents and school teachers have apparently but one idea, and



that is to store the mind with knowledge and enforce good moral behavior. While the physician advises country life, rest for the brain and care of the body for girls who rank high as scholars but are miserable in general health, the reply to his counsel often is that they will thereby neglect their education. They fail to see that a little knowledge gained at the expense of impaired development of body is worse than useless. A knowledge of mathematics and astronomy are of little value or comfort to a pale, bloodless girl, who suffers from indigestion and backache. The undue amount of time spent in the house, in company and at places of amusement; the variety of objects of interest which crowd around her while in the street; all tend to tax the brain and nervous system at the expense of the rest of the body. Lounging in easy-chairs at home, and the strained sitting posture in school, interrupt the return of the blood from the lower portion of the body. That keeps up an engorgement of the pelvic organs which retards their development and growth. This want of proper exercise, and dressing in clothes which hang heavily, and often tightly, around the waists of daughters of rich parents, are alone sufficient to interrupt their uniform development. The results too often are malformations and displacements of the pelvic organs, with all the misery of body and mind which follow in after life. Girls are occasionally seen in this grade of society who inherit vigorous digestive organs and stolid brains, and are



therefore little disturbed by the excitement of their artificial surroundings. Such girls become fat and indolent; their circulatory systems have but little to do, and in consequence the heart and blood vessels remain small, and the sexual organs are often imperfectly developed. They become bloodless, and often suffer in womanhood from menstrual derangements and sterility. Their abundance of flesh and white skin give them an appearance of health, which is not real, and they are incapable of any thing approaching the highest functional activity. It is true, that such peculiarities of constitution, like all others, are transmitted from parents, but they can be overcome, to a great extent, by proper training during early life.

The best results of careful physical culture are to be seen among the domesticated lower animals, and there has never been any very good reason given why the same perfection could not be attained in the human race. It will not suffice to say that the bodily defects of the human species are due to original sin, because the "real, hardened wicked," often enjoy as good health as the truly good. It rather appears to be because man has given more attention to the physical culture of the lower animals than to himself.

These brief details will make clear the original proposition, viz.: that the only way to secure normal development of the reproductive organs is by securing a uniform, harmonious development of the whole organization. It is possible to have a high degree of



development and functional activity of one portion of the body while another may be markedly defective, but this is rather accidental and exceptional, and when it does occur, the portion that is well developed will certainly be hampered, to some extent, in its function by the defects elsewhere present in the organization. The great object in culture then should be to devote the greatest care to that portion of the organization which is most deficient. The reverse of this is very often practiced in every-day life, as has already been stated. The strong, muscular girl is often permitted to exercise and neglect her lessons, while the delicate one with a large active brain is encouraged in her studies, because she is inclined that way, and is quick to learn. The result generally is failure to attain the best possible in both cases.

The best way to get at this proposed system of culture is through a study of the temperaments. It has become a habit among medical men to use the word temperament to designate a condition of the organization in which one or more portions or systems predominate, *i. e.*, that are more highly developed than the rest. When the brain and nervous system are better developed than the rest of the body, the person is said to have the nervous temperament. When the heart and blood vessels are proportionately large, the function of blood-making active, and the hair light or inclined to red, the sanguine temperament predominates. The bilious temperament is manifested



by large bones and muscles, abundant dark hair, and spare habit.

In the lymphatic or phlegmatic temperament, the digestive organs and the assimilative functions predominate. Such subjects are usually good livers and possess an abundance of fatty tissue.

In the highest type of development there is a well balanced state of all parts of the body, the temperaments are harmoniously blended, and for want of a better term to express this condition, it is called an even, or balanced temperament. Phrenologists have directed more attention to temperaments than any other class of pseudo-scientists, and they have done great harm among the half educated people by urging parents and teachers to further development of special temperaments. The boy or girl with a highly developed nervous temperament, is, according to their dictum, best adapted to brain work, while the sanguine bilious temperament should do physical labor. The object of that theory is to make the best of the material on hand, but it does not tend to improve the race. The true principle of elevating and improving the human race is to equalize the temperaments, as far as possible, by such physical and mental culture, occupation and position in society, as are best adapted to the improvement of the defects of the body or mind. If this principle guides the culture of girls from infancy up to puberty, the sexual organs will become well developed in the great majority of cases.



Most of our literature upon this subject is devoted to the care of girls at puberty, that is during the transition from girlhood to womanhood. But to insure a satisfactory transition at that time, the proper culture and care should begin at birth, and continue not only up to puberty, but during the whole functional life of the sexual system.

Special attention ought to be given to the physical wants of girls at puberty. Certain instructions should be given to girls regarding what they may expect, and how to protect themselves. Much of this information must of necessity come from the mother or some cultivated lady friend of mature years and good judgment. Up to the time when the girl begins to show evidence of maturity she may be left in ignorance of her sexual organs and all that pertains to them. In fact this should be insisted upon as far as possible. Nothing can be more prejudicial than to disturb the mind of a child, half grown, with information regarding reproduction. If by misfortune a girl receives information about her organization from her young, thoughtless associates, a mother may be obliged to discuss the subject in order to place the mind of the youthful, misguided investigator at rest, but ignorance of sex up to the period of puberty is bliss. When approaching puberty is indicated by the change of form and appearance, which every intelligent observing mother will recognize, the girl may then be told regarding the menstrual func-



tion and the way in which it is manifested. By such information she is prepared for coming events, and should be instructed to report to her mother or governess when the menstrual function first declares itself. It is not necessary to give minute instructions regarding all the sexual functions. This may be largely reserved until the time when new social relations are about to be assumed.

When the menstrual period first comes the subject should be protected from sudden changes of temperature, exposure to cold, exhausting heat, sea voyages, change of climate, (except from an unfavorable to a favorable climate), extreme nervous excitement, pleasant or unpleasant; extreme muscular exertion, errors in diet which may cause indigestion, and exposure to contagious diseases. The girl who has been raised in luxury, and is over-fed and sluggish in energy, should exercise, while the over-worked one should rest more. The book-worm should be sent out into the fields to get fresh air and light exercise; exhausting walks should be avoided.

Now all these rules of hygiene are good to follow at all periods of life, but they are especially important at puberty when the secondary development of the sexual organs takes place, because exposure, which might be harmless at other times, is capable of arresting the evolution of these organs and deranging their functions thereby impairing the future health and usefulness. The full development



of the sex in boys may be postponed, but not so in girls. When they arrive at the time when general development is near completion, it is absolutely necessary that the reproductive organs should take up their functions promptly and perfectly. According to the observations of Dr. Emmet, more than half of all women who at puberty suffered from menstrual derangements are sterile and delicate in after life. This shows how important it is to begin right. To this I may add that my own observations show that the vast majority of incurable diseases peculiar to women, originate in imperfect development and the consequent derangement of function. The best organizations, while possessing great power to resist, are still liable to diseases and accidents, but they possess strong tendency to recuperate and respond more promptly to the care of the physician and surgeon than those who begin wrong.

There has been a popular belief that the culture of the brain and nervous system differed from that of the general system. This is a mistake. The physical conditions which will produce a good heart will produce good brain tissue. There are certain conditions of the brain and nervous system necessary to meet the demands of the reproductive system, and these conditions in their integrity are best adapted not only to maintain health, but also to resist the causes of disease, whether they are intrinsic, extrinsic, or reflex.



There are affections of the reproductive organs which if long continued are capable of undermining the strongest nervous system, but the vast majority of diseases of the brain and nervous system which can be traced to the sexual organs, are due largely to certain states of brain and nerve tissue which predispose to disease. It is well known that a well developed brain and nervous system can withstand the disturbing influences of disease in other portions of the body, while a less perfect organization would break down completely. In estimating the influence of diseases of the reproductive system in the causation of the various affections of the brain and nerves, the susceptibility of the latter to such causes of disease should be clearly understood. And in seeking through the laws of hygiene, to secure harmony of organization and function between the sexual and nervous systems, it is necessary to consider both sides of the subject. Whatever the opinions of psychologists and physicians may be, regarding mind, they all appear to agree in believing that the functions of the brain and nervous system have an important relationship to the material organization. In other words, physical organization is necessary to the manifestations of mind and all nervous phenomena. This is true in the normal condition of things, and it is equally true that wherever there is a marked tendency to diseases of the brain and nervous system from extrinsic causes, there is imperfection of their structure.



In a number of careful observations recorded in the *Medical Gazette*, New York, August 14, 1880, by Prof. Jarvis S. Wight, M.D., it is shown that the heads of epileptics and inebriates deviate from the conformation of the typical head. A like deviation is observed among criminals and the insane. This shows that the character of the brain organization predisposes to either normal or abnormal function. Education, and the restraining influences of environment, are capable of modifying the action of abnormal organizations; but in order to secure an inherent tendency to normal brain action, either intellectual, moral, or motor, it is necessary to have a certain quality of brain structure harmoniously developed in all its parts. This appears to be admitted as a fact in science, hence it follows that one of the most important predisposing causes of disease of the brain and nervous system is defective development,—some imperfection in the quantity and quality of nerve tissue, or some disproportion between the different portions of the brain and nervous system. An excessive development of one portion, while the other portions of the brain may be actually normal, but relatively inferior, disturbs the organic balance, and inharmonious function is the product.

The deviations from the standard of normal organization are largely due to the transmitted peculiarities of parents, and cannot wholly be corrected in one generation. However, education and culture



can accomplish a great deal in the improvement of the organization in early life, and the only way to secure a worthy physical inheritance to those of the future, is through the improvement of the present generation.

Brain development as already stated, must be conducted upon the same principles as those employed in the cultivation of other portions of the body, the object being to secure the character of development of the brain best adapted to harmonize with the body to which it belongs, and to the environment of the subject. A high degree of brain development is not, under certain circumstances, the best. A marked development of certain portions of the brain out of proportion to the rest, is often the worst organization that can exist. It is not the greatest possible development, but the best adaptation of the brain to the requirement of the person who possesses it, that should be aimed at.

First, harmony of development of all portions of the brain; and second, harmony between the development of the brain and body.

In order to facilitate the handling of the subject, I shall take the liberty of arranging or grouping the brain functions under the following heads: Intellectual, moral, emotional, and motor. This classification is open to objection, perhaps, but it will best answer my purpose, which is simply to show the relationship of these brain phenomena to the reproduc-



tive system in maintaining health and in causing disease. This is necessary to a clear comprehension of brain culture and education in their relation to sex.

The intellectual, moral and emotional attributes of the brain will, no doubt, be understood as I intend they should be, and as I shall employ them, but it is necessary to state that the term motor, as used here, is used to indicate that function of the brain and nervous system which presides over locomotion, respiration, circulation, and nutrition.

The highest development of the brain secures a well balanced condition of all the functions classed under these four heads, and this harmony of organization and function is best adapted to sustain normal relations to the reproductive system, and to withstand adverse influences arising from diseases of the sexual organs.

That one portion of the brain may be developed out of proportion to the others, and that one group of brain functions may be unduly active, are truisms, and true culture and proper hygiene seek to avoid such abnormalities. To reduce this subject to the rules employed in treating of the general system, it would be permissible to employ the word temperament to indicate certain portions of the brain most markedly developed.

We will then have for consideration the intellectual, moral, emotional and motor temperaments. Illustrations of the predominance of either of these



brain attributes are seen often enough to warrant the use of such a classification.

Now, the object of brain culture and education should be to equalize the development of the brain, and thereby secure uniform and well-balanced function. A little attention to this subject will show that such is not the accepted method of culture. Home and school education appear to have for their chief objects the cultivation of the intellectual and moral, the emotional and motor being neglected; this hardly ever is noticed by educators. In fact, the reverse of the true method is often adopted. Boys and girls, the strong and the weak, the stolid and the emotional, the active and the lazy, all go through the same mill. By this system the most is made of the material on hand, but it does not tend to improve the race as a whole.

The system of culture and education suggested here, if fully carried out, would equalize the whole human race. Class distinctions would be forgotten. Men and women would become equal, as they are now in this country equally free. This is certainly the Omnipotent design. The well developed, well balanced human mind, can comprehend that there is neither wisdom nor justice in the ignorance and misery of the many, while a few enjoy the privileges of a higher life. To render to each and every human being the rights and enjoyments of this life, must be the desire of the really good, wise and



benevolent. This end can be attained, not by the fiery ravings of the Socialists, but by science, which teaches us the laws of our being and how to obey them. In all practical efforts to attain this great object, the rational education of women must be pre-eminent. Let woman have her rights and legal privileges in all efforts towards securing true progress, and then she will be, as all men who appreciate and respect her desire her to be, triumphant.



## CHAPTER V.

### HOME CULTURE.

The subject of home culture of the mind is far too great to be even outlined here. All that can be done will be to state some of the principles of mental culture which bear directly upon the question of sex. The chief object to be accomplished is to keep the emotions under the control of the will and judgment as far as possible. The tendencies of the sexual appetence when freed from the guidance of instinct is towards error and extravagance. Intelligence, then, is the only agency through which the emotions can be kept within legitimate bounds. To obtain the required adjustment between the intellectual and emotional in the mental composition, necessitates the closest attention.

Self-control is one of the great lessons to be learned in early life. It renders childhood happier, and is the best preparation for life in womanhood. It lies at the foundation of the ability to accommodate one's self to circumstances. Many a woman goes through life uselessly struggling to make her surroundings conform to her desires, while by accommodating herself to her environment, she could secure contentment and happiness. Indulgent parents may yield to every whim of their children, and thus train them to expect from others the same sub-



servience in after-life, but the world refuses such concessions to individual demands. It is true that the free-born have certain inalienable rights which they ought to assert, but these are the common inheritance of the human family, and hence, the portion of one should not be increased at the expense of another. The existence of such attributes implies that no one has a right, in the exercise of his own liberty, to disregard the liberty of others. The girl who has had her own way in childhood will desire the same concession to her wishes throughout her life. The first step towards acquiring the power of accommodation to circumstances, is to learn obedience to parents. Every child is dependent upon others, not only for support and protection, but for such mental and moral training as will best prepare it for self-control and intelligent submission to circumstances and the laws of life. If these lessons are neglected in childhood, when they may be easily learned, experience will be a harsh teacher in after-life, and disease and misery will be the lot of her who learns only after an unequal and exhausting struggle that the world cannot be moulded to her will. She who has learned to limit her wants in life, is, perhaps, more fortunate than she who can gratify her many desires.

Obedience to laws, whether those of parents or of Nature and society, is not necessarily slavish subjection. It only implies a knowledge of what we can



do, what we can acquire, and what we can contentedly do without. Childhood is often made unhappy by desires and cravings which cannot be satisfied, and no effort is made to teach the reason why indulgence cannot be granted, and to show that contentment is possible without the gratification of every selfish wish. By proper control the nervous system is freed from one great source of irritation in youth, and is strengthened and developed in that direction which best prepares one for the realities of adult life. Much of the nervous irritation so often seen among women is due to useless desires which cannot be gratified. Unreasonable indulgence begets selfishness which develops self-consciousness. Self-consciousness is one of the most marked predisposing causes of nervous disorders. Every little disturbance of the mind or body is noted and cherished, and an impatient desire to be free from it is at once awakened. Selfishness seeks relief from every care, and if that is not promptly obtained, useless fretfulness ensues. Nervous disorders grow and thrive by nursing, while patient submission and forgetfulness of self starve them out. Constant introspection, which arises from selfishness, circumscribes the mind and general usefulness. With such persons no impression is strong or lasting unless it pertains to something of self. When the family teaching has established this state of mind, it can never be fully overcome in after life. All efforts to enlarge the range of



interest are generally futile. The mind dwells upon its own follies and vain desires, wrongs and injuries, real or fancied, and cherishes them with miser care, which, sooner or later, leads to a fixed morbid state of mind.

To protect a child from itself and teach it how to find material for mental occupation outside of self, lays the foundation for much mental health and happiness in after life. The children so taught begin life under the best conditions of mental hygiene, and are likely to go on to higher development. They will continue to find objects of interest in the world, while selfishness early acquired can hardly ever be overcome. All efforts to forget self and find enjoyment in things around are often futile. Intelligent and willing obedience to immutable laws, *i. e.*, the power of adaptation to inevitable circumstances, and the ability to find interest in things outside of self, are most easily taught in the home circle, by parents. If these lessons are not inculcated in childhood, the result is a spoiled child, and that really means a human being spoiled for life. A girl so reared at home is constantly annoyed by her surroundings in after life. When she leaves home as a bride she finds that others have claims which she ought to respect, but she is not prepared to do so. She reigned supreme at home and cannot easily yield to the dictates of others. And she either becomes a discouraged good-for-nothing, or else enters upon a life long war with the world



and all that is in it. Even her prayers to God are pleadings for blessings which she neither needs nor deserves, without a word of thanksgiving.

The family habits in America tend to premature development of the brain and nervous system. There is scarcely any childhood here. I well remember that the first thing that attracted my attention when I arrived in this country, was the precocity of the children. The slow, reserved awkwardness to which I had been accustomed in Europe, I did not observe among American children. They were all mentally mature beyond their years. There was not the same difference between the adults of Europe and America. A more careful study of the children has convinced me that their chief peculiarity is mental activity. They do not present evidence of greater size or strength of brain, but much greater excitability and activity. At home, and in schools, I did not find extraordinary capacity for long-continued application, nor any marked proficiency in specific branches of knowledge, but a great amount of general information, a readier application of knowledge acquired, and a facility of thought and action superior to that of children in some parts of Europe. There are, no doubt, many circumstances and conditions which give rise to this rapid development of the brain and nervous system in this country. Climate, the restless, ever-changing condition of society, the mixing of nations and races, and all the stimuli which a new



country naturally affords, all these have their influence upon the young. In this connection attention is directed to the home influences. Here children associate more with adults, and more early are led to adopt their habits and modes of life. Children occupy the same rooms and sit at the same table with their parents. They are less left to themselves, in cities at least, and as adults rarely adapt themselves to children, the children are obliged to accommodate themselves to the ways of their elders. This, to a certain extent, is as it should be, but the restless activity of the American people which gives too little time for social life, has its influence upon the young. Boys and girls soon learn the value of time, and like their parents make the most of it. Unconsciously they catch the spirit of the age and country, and are hurried along without being permitted to linger in the quiet, irresponsible, thoughtless period of childhood.

The value placed in America upon every human being is too high to permit any one to remain long in that state of mental evolution and growth, which is best fitted to develop strength and brain. The young American must work while his less energetic neighbor is permitted to grow. Too much time is spent in action and not enough in repose. Too much forced work and not enough of easy play, which really is natural occupation. This applies to cities, the worst places to develop strong children.



The same misfortune, to a less extent, prevails in the country. People here are almost all striving to better their condition. By industry they hope to rise in the world, and they need the help of their children earlier, and to a greater extent, than among the fixed populations of older countries which remain more stationary. The poor children in every nation have to work, but their employment in old countries has more routine and is less exciting than ours; hence, I presume, that in Europe imperfect development is more frequently due to poor food than to over-work.

There is yet another great error of early training which prevails in all countries, but perhaps more in this than elsewhere, viz.: the cultivation of the emotions out of proportion to the rest of the brain functions. To use the classification adopted in a former chapter, we find that the emotional temperament predominates among the girls of America. This, added to their intellectual activity, gives the characteristic brain organization of this country, and is a predisposing cause of nervous affections. The management of children which prevails here, tends to produce these peculiarities. The prosperity of the majority of the people enables them to indulge their affection for their children, and that indulgence begets strong affection in their offspring. The delicate sensibilities of the children contrast agreeably with the rude, coarse dispositions of a less fortunate race. Still, those finer feelings in children are the products of



a high, but perhaps misdirected civilization, and sometimes unfit them to sustain those struggles for existence which often fall to their lot in mature years. With us, hypersensitiveness often takes the place of the cold indifference of barbarians, but a wiser civilization would develop a nervous organization which would be controlled by the intellect; kindness and mercy would be guided by justice; benevolence and sympathy would go hand in hand with reason; while the cruel heartlessness of the savage, and the supersensitiveness of the over-refined, would be unknown.

The great object to be attained is to keep the emotional temperament under the influence and control of the moral and intellectual nature. This can be accomplished by wisdom in training during childhood. A great majority of parents, in affectionate fondling of their children, only teach them to love and be loved. It should ever be borne in mind that the most commendable attributes of head and heart, if developed to excess, give rise to evil, and should be avoided.



## CHAPTER VI.

### SCHOOL EDUCATION.

Those most learned in the art of educating others consider usefulness in that which is taught, as the most important element. This is said to be very largely the realistic age in all things, and there is doubtless a great natural striving for the real rather than the ideal, and so it is becoming more and more apparent that every one should be taught something that can be made useful in life.

When I have asked why a boy or girl should be made to spend years learning things which they promptly forget when they enter upon the duties of life, the answer has usually been: For the sake of the mental discipline and training. There is, no doubt, some benefit in study as a mental exercise, but there is a double advantage in learning something that can be made useful in the future, as well as strengthening to the mind at the time. This is recognized by some of the greatest thinkers and best educators of the day. As I have already stated, one should, as soon as possible, learn first what profession or occupation in life is likely to be chosen or imposed upon the candidate for an education, and then everything that is taught should tend to prepare the pupil for his or her life work.

The following quotations from high authorities



give the idea of the great object of education, and although intended to apply to the masculine gender, the principles involved apply to women with equal force, so far as scholastic teaching is concerned.

Froude writes: "The knowledge that a man can use is the only real knowledge, the only knowledge that has life and growth in it and converts itself into practical power. The rest hangs like dust about the brain, or dries like rain-drops off the stones."

Herbert Spencer writes: "We are guilty of something like a platitude, when we say that throughout his after career, a boy, in nine cases out of ten, applies his Latin and Greek to no practical purposes. The remark is trite, that in his shop or office, in managing his estate, or his family, in playing his part as a director of a bank or a railway, he is very little aided by the knowledge he took so many years to acquire—so little, that generally the greater part drops out of his memory; and if he occasionally vents a Latin quotation or alludes to a Greek myth, it is less to throw light on the topic in hand than for the sake of effect. If we inquire what is the real motive for giving boys a classical education, we find it is simply to conform to public opinion. Men dress their children's minds, as they do their bodies, in the prevailing fashion. As the Orinoco Indian puts on his paint before leaving his tent, not from a view to any direct benefit, but because he is ashamed to be seen without it, so a boy's drilling in Latin and Greek is



insisted on, not because of its intrinsic value, but that he may not be disgraced by being found ignorant of them—that he may have the education of a gentleman.”

Prof. Alexander Winchell says: “If there is any peculiar cultural power in linguistic studies, there are the living languages of the world, that are not so inferior to those of the ancient, but that we can afford to content ourselves with simple culture, when culture and useful knowledge are offered instead. I make the frank confession that it wounds my sensibilities to utter these sentiments. Years of my own life have been devoted to the acquisition of the languages and literatures, which from the revival of letters, have been received and consecrated as the most efficient means of mental culture. I console myself, in contemplating the psychological relations of the modern sciences.

“Is it verbal memory which we seek to strengthen? The technical lists of botany or zoölogy are better than the Latin lexicon. And if we must have languages, behold the sonorous Italian, in which we shall still hear the echoes of the Ciceronian periods. Is it critical acuteness which we wish to develop? Try your hand at studying the delicate reactions in the chemist’s tubes, and weighing the chemist’s infinitesimal precipitates. Is it judgment which we wish to enlarge? Weigh the diversity of characters presented by a group of birds, or fishes, or shells, and



dispose them according to the weight of the respective characters, into species, genera, families and orders. Select a fossil bone from a box of débris and by pure reasoning build up a complete animal around it. But Latin, Greek, and mathematics, the traditions of dark ages, continue to constitute a staple of liberal education; and to this day the same ghost stalks through the corridors of our colleges.

“Let me not be deemed unkind toward classical education. If a man loves classical lore, and enjoys classical culture, if he is a man of ease and plenty and has no need to hew a pathway in life, if he has no ambition or inspiration to join in the noble work of human progress, let him sit in his study and gloat over the beautiful features of a dead literature, but let it not be said that there is no road to a liberal education except through six years' wrestling with Latin and Greek.”

This is not only true of Latin and Greek, but of many other things, and impresses the fact, that usefulness should lie at the foundation of education.

I observe that usefulness is often overlooked in the education of girls, and what is still worse a large number suffer bodily injury while receiving their school education. In looking over my own record of cases, I find many diseases dating back to the year of graduation in school, academy, or college. Such facts observed in the practice of medicine and gathered from those who have the care of young



girls, abundantly show that defects in our systems of education are active causes of ill-health. But little notice has been taken of the current literature on this subject, because most of it is of that destructive order which declaims loudly about the abuses, without giving any hint or suggestion to help matters. Any one can see that educators, as a rule, labor earnestly to teach those who are committed to their care, so that they are not responsible for evils which may come. Again, an education is of so much value that all young ladies should be willing to take some risks in order to secure such a valuable acquisition. Our present duty, then, is not to scold, but to ascertain where the errors are, and inquire how they may be avoided. The fault lies, no doubt, in the principles involved, not in the honest endeavors of teachers to execute the task set before them.

The same rule which lies at the foundation of natural physical culture applies with equal force to the mental, and hence the two should go hand in hand. It is a sad mistake to send a girl to school where her brain alone is exercised and the rest of her organization left to care for itself. The proper idea of a school education is an institution in which all the organs of the body should be equally developed and trained, if they are equal in strength and development by inheritance. In case there is any defect, the weak part should be most attentively encouraged and cultivated. The system of education would then



be adapted to each individual, in place of one system for all, such as now prevails. Much has been said and written about the relative capacity of the sexes for acquiring education. Enthusiastic persons claim with much vigor, that girls receive education in all branches with as much power and facility as boys, and therefore they should pursue the same course of study. This discussion is a waste of time and energy which can result in no benefit to either sex. The capacity of the sexes may be equal, but their aims and objects in life differ. They were not intended to be identical, therefore their education should be such as would best qualify each for the sphere in life which Nature intended each to occupy. It is true that some women, by reason of exceptional peculiarities of organization and the force of unusual circumstances, are compelled to occupy positions in life intended for men, and if this lot could be predicted for such women while in childhood, then a masculine education would be best suited to them. As the spheres of life differ with each sex, as a rule, then it follows that the education of each should not be identical, if the best interests of each are to be served. This war about the relative power, capacity, and ability of men and women, should cease forever. They are not identical, but widely different and intended from the first for different positions and duties in this world. The question then is, how best to qualify each for the life designed for each. Woman is pre-eminently



intended for home life. In fact, she alone can make a home. Houses are not homes, but the place where woman presides, rules, and guides, is the home. In the sacred precincts of that home where man finds, or should find, rest, comfort and recreation, and where the child's Garden of Eden is, there woman is supreme. While she shapes and designs the destinies of the coming generation, and gives the inspirations which lead good and great men to do good deeds, she deserves a repose and a protection which true men should fully afford. While man should be the pioneer in business and in all the departments of human industry and development, his chief object should be to obtain support for his wife and children, and protect his home. To be a wife and mother capable of making home all that it can be, should be the chief object of woman's life and education. This is surely a large enough field for the greatest mind and body that any woman can hope to possess.

The peculiarities of woman's organization require certain considerations during school education. First, her mental training should never in the slightest degree interfere or retard her physical growth and development. In this regard she requires more care than a boy. This point has been contested by opposing parties who have been energetic enough in their efforts, but not very successful in their results. One side has argued that the strength and activity of the girl is quite equal to that of the boy, and



that she is quite able to pursue her studies alongside of him. The other side has declared that this is not true. I am quite willing to admit that boys and girls are equal in their capacity for study and school education, which is granting all that the champion of Woman's Rights desires, but I am certain that it is wrong to tax girls to the same extent, or cause them to pursue exactly the same course of study as boys. While co-education is possible, even with our faulty systems of education, it is not the best that can be done for girls. It is not the way to make the best, most useful, and most happy women. The physical organization of woman requires great care and protection during its development. While she is yet a school girl, her organization undergoes a marked and somewhat abrupt change; the transition from childhood to womanhood. This development is of the greatest importance to her perfection of body and future health and happiness. The sexual organs must complete their development and take up their function, in part at least, during school days, and no education should interfere with this all-important process. Any theory that can in the least degree interfere with this should be carefully avoided as unworthy and dangerous. The highest development and functional activity of the sex in boys may be postponed until later years, but not so with girls, they must at a given time either complete their development, or go through life imperfect. If



then the nature of the being insists upon this attention to physical development, school masters should not insist upon girls keeping up with boys, especially as they drive both at the top of their speed. In order to succeed, the school life of the girl should be free from excesses of all kinds. She should never be taxed to the full extent of her capacity. Her studies should be limited, so that she need not expend all her energy on books and tasks. She should have reserve force enough left after her school duties are performed to carry on development, growth and functional activity of the body. The great error in our school system is the undue haste to do too much in a given time. An education which should require five years is crowded into three. The result, too often, is in the case of the girl, headache, indigestion, sleepless nights, a head full of ill-digested knowledge, and a body useless for the purposes of life. The remedy is, fewer and more useful studies; shorter hours in the school-room; more time to eat, to sleep, and for out-door exercise. Again, too much competition should be avoided. Reviews of study are all well enough, but the examinations (which are but competitive exercises) which appeal to the ambition of pupils and stimulate their emotions, are dangerous if they occur very often, and are prolonged. Competition and rivalry—so long as they are agreeable—are the best stimuli to those who need a whip and spur to overcome natural laziness, but they should be used with care upon the ambitious and active.



Above all, graduation year is the most dreadful. So often have I heard (when trying to fix the origin of some physical or mental affection before me) "the year I graduated," that I have come to look upon that period in the life of a girl as the one in which she attains certain mental acquirements, and a lasting malediction to her body. Much of all this is objectionable for boys, but much more so for girls. It is not necessary to overtax girls in order to obtain all the education which they ought to acquire in school. If more time were given to training the mind in the way of acquiring knowledge, *i. e.*, in training the mind to study rather than to crowd it with facts regarding an endless variety of subjects, just as much good would be accomplished, and no harm would come to the scholar's bodily health. I am inclined to think that the good health of the women belonging to the wealthier class in England is, in part, due to the kind of school education they obtain. They are taught less, I think, than the girls in this country, and the kind of education that they obtain is more thorough, more practical, and much less extensive. I have often found a girl of twenty in this country who knew a little of all the sciences, a few words of several languages, and a smattering of history and general literature, but could not write a passable letter on any subject. In Great Britain I have sometimes found just the opposite. A very limited general education, and a



very thorough training in the knowledge which is required in every-day life, is rather the character of a girl's education in Europe. I argue in favor of a limited school education, much more so than is usual at the present day, because more time should be given to the development and growth of the body.

Some rather impractical suggestions have been made by Dr. Clarke in his "Sex in Education," regarding rest at certain periods during a girl's life. At puberty and during the menstrual period he favors rest, but this is unnecessary and impracticable. The labors of the school should not exact all the strength and energy of the girl. She should, from the day when her education begins until it ends with her life, have strength and energy enough left at all times to perform all her physical functions. If we drive school girls at the top of their speed and to the extreme limit of endurance, then rest from such over-taxation is very necessary at puberty and afterwards; but a reasonable time can be given to the acquisition of knowledge, and still there will be energy enough left to perform all the functions of sex. Wholesome, moderate mental labor does not interfere with bodily functions; on the contrary, it favors general health. It is only when one portion of the organization is taxed at the expense of others that we do harm. The golden rule is: "A time for all things." In school this should ever be kept in mind. A time for mental exercise, a time to eat, digest and sleep; and



a time for muscular exercise, generally called play. The great law which guides development and growth of body and mind is, to exercise but not exhaust. This law is either not understood or else generally disregarded. There appears to be no very clear distinction made between training, which is developing and preparing for work, and production or actual work. The object of the one is to develop power, the object of the other is to use the power thus acquired. The one enlarges and strengthens the capacity of body and mind, the other employs that capacity in doing good or bad work as the case may be. This may be made more clear by giving examples. When great muscular strength is desired, one is put in training, that is, he is submitted to a course of development and growth; systematic muscular exercise is taken at regular intervals, care being taken not to over fatigue; and rest is taken sufficient to restore the worn-out tissues and supply material for new and great efforts. The exercise should be just sufficient to stimulate the nutrition of the muscles, not to waste them, and proper food should be given to supply demands. Under such training the muscles become larger, harder, and capable of greater achievements, until the highest natural limits of the individual are attained. If the one in training is young, the growth of the muscles will be most marked, in fact a good muscular system can be developed. In the adult the muscles can only be put in perfect con-



dition up to the limit of his organization, as the muscular system acquired in youth can not be changed in character as it can be in the growing boy. During this process of training, if the exercise be too violent or long continued, growth and development are at once arrested. Under these circumstances the whole nutrition of the muscles is used up in exercise, and there is nothing left for increase of tissue, and the individual comes to a standstill. He can repeat his work but cannot surpass his record. Should the exercise be pushed still further in severity, or be long-continued, then he will break down entirely and fall below his former record with but little chance of ever coming up again. The laborer who does all he can in the way of hard, useful work, uses up all his nutritive material every day, leaving nothing to build up greater size and strength of tissue. The consequence is that he can do no more in a day at the end of the year than he could at the beginning of it. On the other hand one who simply takes enough of exercise to stimulate nutrition will steadily gain in power up to the limit of his organization. It is during early life that this law governing development and growth is most operative, and hence it should be most carefully obeyed. From birth to maturity is the time when one can be made just what one will continue to be afterwards, either strong and capable, or weak and inefficient. Something may be done to correct the errors of early training, but any little that



can be gained in that way costs much more than it does before the age of maturity.

All that has been said regarding the development of the body by training, applies with equal force to the culture and education of the mind. The mind manifests itself through brain tissue, and the results depend largely upon the size and quality of the brain.

This can only be accomplished by a sufficient supply of food with time enough to digest and assimilate it, so that the brain shall be well nourished. The mind should be regularly, and not too constantly or severely exercised, in order to create a demand for nutritive material, and rest enough should be given to permit the brain to assimilate not only enough to accomplish the work of the day, but also to appropriate sufficient for development and growth.

Too often the nourishment of the brain is only sufficient to maintain its life and to accomplish the labor imposed upon it. Examine the amount of mental labor required of the average school-boy or girl, and it will be found equal to that of the majority of mature people engaged in business or the professions. This is certainly wrong and unjust.

This violation of the natural law of education and culture as applied to mental development and growth, is very common, and leads frequently to the same results as come from neglect of mind culture. Healthful, invigorating exercise, tends to increase of



size, quality and power. Exhausting work takes all, leaving nothing to accumulate for higher attainments. This affords an explanation of that which is often seen in every day life, viz.: some woman from the rural walks of life who has had time to develop and grow under wholesome circumstances, and although having a very limited school education, manifests wonderful capacity for mental labor, while another who has enjoyed all the opportunities for thorough education in the best institutions of learning, graduates with the highest honors and is never heard of in after life. The brain of the one was permitted to develop, grow and become useful, that of the other was overtaxed, or "trained down too fine," as horsemen would say, and did not "turn out well."

To fill a child's head full of knowledge is that which passes current at this day for an education, but to develop the brain and train the mind to thought and action are the foundation of all thorough and useful learning. When a mechanic wishes to learn a trade, he is first taught how to manage and use the requisite tools, and then he learns how to work with them; and the same principles apply to mental training.

The strict observance of these rules is necessary during development and growth. After maturity we may tax ourselves to the full extent in one direction with impunity, but not so in early life. The system of school education should be special for girls. It



should be designed to qualify them for home life, to be wives, mothers, and companions for men. The aim of all education should be to make *women* in all that the name implies, and to make men all that they ought to be. No training or education can effectually change the relation of sex, or the positions which the two sexes must occupy in this life. While the school education for boys should be designed to qualify them for business and professional positions, girls should be educated in all that can fit them for home life. To do this, personal accomplishments should ever take a prominent position. It matters little to the lawyer or statesman whether he can play or sing, or make himself specially attractive. Knowledge of law and the ruling and government of nations, will be of most use to him; but the one who governs the home circle must possess many personal attractions. A knowledge of how to be attractive and agreeable is a power which is of great value to woman. To raise a great statesman from his cradle to his entrance into public life, is a far greater achievement than aught that he has to do thereafter.

Woman was destined to win by charming and attracting those whom she needs to guard and sustain her in life. Man succeeds by conquering those who should contribute to his welfare. Personal accomplishments which make woman attractive should be considered as all important in the education of the girl. A



knowledge of music and kindred arts, some facility in speaking modern languages, grace and ease of manner, are all more necessary to woman than to man. A clear idea of the beautiful and attractive in dress, is one of the great essentials in woman's education. However we may denounce extravagance in dress, it must be conceded that to dress with becoming taste is one of the great charms of woman. Personal beauty and attractiveness should be cultivated as a duty which woman first owes to herself, and then to those who are associated in life with her. Woman was not made to be alone in the world; she was intended to be under the care and protection of man. We often see women who are better able to take care of themselves than are the men who pretend to care for them, but these are exceptions to the law of Nature. This only shows how far short men fall of being all that is possible for them to be in this world. Woman was intended to attract, not to seek, man; and to succeed she should be attractive in order to win. This attractiveness should be sufficient to captivate and hold her life companion, without which the life of woman lacks its chief object. The school education of the present day is not altogether the best qualified to fit her for the chief object of her life. It often fails to give her the physical health which is the prime essential. It fills her mind with knowledge which she soon forgets, and leaves her little of that which she most needs. To be a mathe-



matician, metaphysician, logician and scientist, would show great intellectual development in a woman, and would command the approval of men's heads, but would not be likely to win their hearts. Men of great minds seldom fall in love with women of superior intellectual attainments of the masculine sort. Jane Welch married Carlyle to gratify her ambition, and in the end declared her whole life had been a disappointment. Had she attracted some robust Scotchman with less logic and more love and sympathy than her famous Thomas, she would have been happier, because her life would have been better adjusted to the laws of her being. Educators of girls should ever bear in mind that no amount of knowledge of the so-called higher branches can take the place of the rosy cheek, sparkling eye, elastic step, and serene disposition, which are born of health, and which are as attractive and useful in life as they are valuable, to him who can say, "They are mine." Of what avail is it for a woman to be able to solve the most profound problems in mathematics, read Greek and Hebrew, if she knows nothing of the duties of the home which she has been called upon to occupy? She is as useless as the man who can write poetry, sing sweetly, waltz lightly, yet cannot make a dollar to pay for his dinner, to say nothing of providing for a wife and children.

The education of a girl should not be considered complete without a knowledge of how to care for



children. This kind of information should be largely obtained at home. This subject will be referred to farther on. I would not be understood as denying woman the power or the privilege to study all the higher branches. The pretty, empty-headed girl is, if anything, worse than a repulsive scholar. The accomplished, attractive woman, who knows nothing of the useful in life is perhaps the worst of all. My desire is to state that education should seek to secure health, refinement, and the mental training which gives the use of the mind in the sense that one obtains the use of the hands. A thorough knowledge of the every day duties of home-life, is the great essential, and if to these can be added all the branches of higher, or the highest education, so much the better.

I desire to call especial attention to the peculiarly baneful results of teaching young children anatomy and physiology.

At the present time, the great majority of well informed people, and quite a few medical men, believe, that anatomy and physiology should be taught in schools, and the practical carrying out of this idea usually results in directing the attention of children to the structure of their bodies and the functions which certain organs perform. It is well for every one to know early in life the wants of the body—the need of pure air, and plenty of it; good food and how to prepare it; cleanly habits in every respect; bodily



exercise, how and when to take it, and its relations to rest and sleep; all these should be understood by every cultivated person. More than this, every one should be taught how to obtain all these necessities of life. There can never be too much knowledge possessed by any one on these subjects. A full knowledge of hygiene, so far as it is related to one's requirements of life and health, and to one's relations to the world around, should be included in the education of every girl. It is only when investigation is carried beyond this, by directing the attention to the personal anatomy and physiology, that the mind is liable to become perverted. A little learning in anatomy and physiology is truly a dangerous thing. The heart will not do its duty more faithfully, nor will the stomach digest food better because the one who possesses them knows all about their structure and functions. On the contrary, either of these organs may be greatly disturbed by thinking about them. This is often illustrated by students of medicine, who for want of proper subjects, dead and living, are obliged to turn their attention to their own bodies as means of illustrating the things that they read and hear about.

To study the structures and functions of one's own body is a kind of vivisection which is nearly always followed by bad results. The only way that students of medicine escape from mental perversion, (and they do not always escape), is by having before



them continually subjects which direct attention away from themselves; and this diversion of thought should be continued when as physicians they engage in practice. In fact, I am fully satisfied, from careful observation, that the books on anatomy and physiology in use in schools, and the way in which these subjects are taught (excepting in medical schools), are all wrong, and injurious in their effects.

I know that I am laying myself open to severe criticism by a multitude of worthy parents and teachers, and not a few medical men, especially those who have written school books for children on these subjects. But, I have heard no arguments yet for this kind of education that are not off-set by well known facts on the other side. Such knowledge, in the first place, is not at all necessary to our welfare. The laws of life and health can be fully obeyed by knowing what is necessary to life, and all this can be obtained without any knowledge of one's personal structure and the action of certain organs. I have never seen any benefit derived from teaching children a little smattering of anatomy. On the contrary, it is either soon forgotten, or else leads to the habit of introspection, which is a waste of time, and finally leads to a great variety of functional affections. Some say that the evils of this kind of information can be avoided by imparting such knowledge only to those who are old enough to fully comprehend it, but while that would lessen the evil, it would not wholly avoid it.



Every observing practitioner of medicine sees the bad effects of watching and studying one's own organs of digestion, respiration, and circulation. Indeed, it is a fact that certain doctors of medicine frequently cause introspection by exciting the interest of their patients in their own cases. Those symptomatologists who lay great stress on every trivial physical feeling of patients, often do a great deal of mischief. They direct the attention of patients to themselves, and set them to watching and speculating about the value of every symptom in the form of aches and pains, until they are converted into night and day watchmen of their own frail bodies. I have great apprehensions about those patients who keep a constant watch of their symptoms.

Next to the doctor in the order of mischief-makers in the business of producing introspectors, is the intelligent mother who has had lessons in physiology. Such a one usually injures her own children and those of her neighbors who come within reach of her amateur teaching of the laws of life. It is ridiculous to tell a child that it must not eat candy or anything except at the proper meal times, *because* it will injure the stomach, cause dyspepsia and worms, and general ill-health by exciting the secretion of gastric juice at improper times, and creating a false appetite by deranging the functions of the pneumogastric nerve. How much wiser it would be to have a child obey the laws of health because her parents directed her to do so.



The amateur physiologist and psychologist insist that children should be treated like rational beings, and are to be persuaded by appealing to their reason, and not obliged to yield a blind obedience to a parent's commands. Practically, I see that children prosper the most who obey first, and learn the reason of things afterwards. But, again, the progressive people, deem it a duty to answer a child's questions, of all kinds, and at all times. This rule has many exceptions that should always be observed. The proof of this is shown in the fact that parents, teachers, and doctors of medicine, restrict their teaching to portions of anatomy. Now, it is quite natural for a child who has been taught all about the head, stomach, liver, and kidneys, to desire to know about equally important organs, but the most progressive, liberal, and enthusiastic have not yet ventured to teach the anatomy and functions of the sexual organs to children.

I have also observed that mothers and lady teachers are most disposed to err in the management of girls, especially in regard to the development of introspection, and in directing attention to the subject of reproduction. Those who have the care of the young, and are best qualified for the duties and responsibilities of such offices, occupy the minds of their pupils in acquiring sound, useful information, giving no attention to the social problems, until the maturity of those committed to their care, and then they give them only such information as may be necessary to guard them from harm at puberty.



## CHAPTER VII.

### PHYSICAL EDUCATION AND CULTURE.

To begin well, one must be born of parents who are sound in body and mind. They need not be educated according to the popular meaning of that term. Size and vigor of brain and body are transmitted according to purely physical laws. The children of well developed, healthful parents who may have but a limited school education, often possess great mental ability, while on the other hand, the children of great geniuses are often stupid. The brains of great men and women are often ruined by their excessive and ill-directed labor, and their children inherit this wreck, not the original. So also the athlete may injure his body and transmit his broken health to his children. This idea regarding hereditary transmission is all that need be added to that which is well known to every one. It is not what people have been, nor what they hope to be, but what they are, that is transmitted to those who follow them. The characteristics of parents are transmitted to their children, by laws beyond the control of the will. After birth and throughout childhood, the influence of parents may be to make their children more like themselves, or change them to being better or worse than themselves, according to the kind of care and culture which they bestow.



Food is the primary necessity in raising children. The character, quantity, and time of administering food, should have the scrupulous care of all those who are responsible for the welfare of children. There is only one reliable source of supply for an infant. It is the first "food for infants" which was used, and it has not yet been equaled by any other. No artificial food compares with it. Druggists and grocery-men do not keep it. It is, indeed, a sad sight to see an helpless infant cut off from the maternal supply of food and having to depend upon stuff manufactured by men who are guided in their work by a formula they do not understand and hence can not imitate. If a mother by any misfortune or physical defect is unable to care for her own young, a nurse should be provided, if possible. It is a great misfortune to begin life with a bottle. The poor usually do right by their infants, so far as feeding them for the first year. But the rich in this country are often derelict in this respect. Those birds—not birds of paradise, though their gay plumage would lead one to suppose that they belonged to that favored tribe,—those birds that can sing and won't, are the most reprehensible in this respect of all God's creation. It is a fact that a great many wealthy mothers cannot nurse their own children. Dr. George M. Beard, who had much of the real scientist in him, once asked me what proportion of educated women of the better class were able to nurse their children. I could not



then tell him, but I have since made observations which show that the proportion is large, far larger than it ought to be; larger than among the poor who are in less favorable circumstances. Many there are who are too weak to perform that most important of functions. Lamentably perverted creatures, wholly out of place in this world, there are, who will not. I very well remember a startling example of this kind of mother. A wealthy lady of this city committed the care of her infant to a nurse. This young girl cared for little Willie until he was four years old. One day he strayed from home and was lost. I saw the nurse looking for him. The expression of her face had so much deep agony in it that I asked her what her trouble was. She told me about the lost child and I joined in the search. As we turned the corner we saw a policeman coming along holding by the hand a little fellow, who was doing his best to keep up in his first march with his new friend. With a bound the nurse rushed to him, clasped him in her arms and deluged the little one with her tears of joy. Holding him in her arms she hurried homeward pouring a stream of blessings on that little head and almost smothering him with kisses. I followed instinctively to see the end of this small tragedy, and as the happy pair, nurse and child, approached a grand mansion, I noticed a gorgeously dressed lady standing placidly on the door steps. She said, with a drawing-room kind of sigh, "Mag-



gie, I am glad you found him. Willie, you naughty boy, why did you go away from your dear mamma?" Maggie, the nurse, was a rosy-cheeked Scotch girl and should have been the mother of that rich boy. His mother, *by law*, did not know the first lesson in the care of children. Fortunate it is that the son of this madam fell into the care of poor Maggie, who had so much of a woman's heart.

It is essential to have the maternal affection well developed. The hand seldom errs, either in controlling or caressing, when guided by pure and intelligent affection. Still affection not under the guidance of reason and intelligence, often leads to grave mismanagement. Love for children with a clear appreciation of one's duty towards them, and knowledge of the methods of caring for them are all necessary to success.

The love of children should not be so blind and all-absorbing as to exclude justice and common sense. This leads to unwise indulgence which is ruinous. The want of love for children leads to neglect, with consequences, which, though differing from over indulgence, are equally unfavorable. The lower animals care for their young in a most rational and effective manner. They protect them with wonderful sagacity, but do not spoil them with over indulgence. They feed them in accordance with the most approved bill of fare, guard them from danger, teach them all they have to impart, and bring them to



maturity well prepared for the life they have before them. Here is to be found in an humble way the most perfect example of caring for the young. The whole process is conducted upon a plane far below that of the human family, but it is perfect as far as it goes. Far higher, indeed the highest illustration of the proper care of children, is to be found when parents have a full share of love for children which gives interest, and then a clear comprehension of how to manage them, both in regard to what they need and how to bestow it. The two extremes may be called the upper and lower boundaries of the proper training of the young. Between these all kinds of imperfections and blunderings are to be found.

In all this training and education the mother is the chief actor. Nearly all the duties devolve upon her. The father can help by his counsel and support, and when boys are nearing manhood he can help them then, and from that time onward, but this is about all he can do. Occasionally a mother is found so inefficient that the father must needs take the largest share in caring for the children, but he usually makes poor work of it.

Though it has been hinted at in these pages already, it may be stated again, that over devotion to children on the part of the mother is to be carefully guarded against. Though in a given case the children are not injured, but fortunately and wisely cared for by all this observing care, still no mother should



give her whole life to her children unless she is left alone with them. In the complete household there are others who require care and attention from the mother besides the young autocrats of the home circle.

From this short digression to glance at the maternal affection for children, and the part that it plays in the physical care and nourishment of children, I return to the question of supplies. Food prepared and given from the neighborhood of a loving, maternal heart is the true method of nourishment during the first year of life, and I need say little more on the subject. Books there are all sufficient for every purpose on infant feeding, which may be consulted if elaborate details are needed. There is, however, one principle relating to this part of my subject which may well be brought out, viz: The ways and means of ascertaining if the food employed is agreeing with the child. The rule is, that a child of good constitution will prosper if supplied with proper nourishment. It follows, that mal-nutrition depends either upon the food given, or upon the use made of it by the child. If then, a child has a pure constitution and is free from disease and still does not thrive, the food must be improper. Under such conditions the duty of a mother clearly is to ascertain the kind of food which will answer the purpose. This is often attempted by the doctor, who recommends some kind of food or bill of fare which he thinks must agree with all children; or,



the mother may have some fixed ideas about infant feeding, and hence, all little ones who come under this special doctor and mother must take the prescribed food. The true thing, true, because based upon facts, is to find for each child the food which it likes, and which agrees with it. The only safe rule is to obey an injunction which was given for another purpose: "Try all things and hold fast to that which is good." The choice of things should be limited to articles of food that are known to be suitable in a general way, and when any one thing is found to agree with the child, it should be fixed upon and placed in the bill of fare.

The quantity of food given should be limited only by the wants of the child. When a child is in health the appetite is the best guide in eating, so far as regards quantity. Sins without number have been committed in scrimping the diet of girls in order to make them delicate, believing that to be sickly and helpless is lady-like. Strange it is that some women who talk the loudest about Woman's Rights, deny their own girls (I should say girl, as they usually have but one), the right to eat enough to satisfy hunger. Children seldom over eat, unless subject to the evils of that other wicked habit of keeping them too long between meals. Nutrition is so rapid in childhood that the quantity of food required is relatively greater than in adult life; hence, children should be fed at regular and not too long intervals. Want of attention to this



is the cause of the bad habit of eating between meals. If the time is not too long, children seldom ask for scraps in the intervals. These rules will suffice for all healthy children, and therefore special care is only necessary when in given cases there is some apparent malnutrition. It should be borne in mind, also, by lay people, that there are two grand divisions in the process of nutrition; first, digestion and absorption; secondly, assimilation and disintegration. Digestion is the change which is made in food by the digestive organs which prepare it for absorption, that is, its transmission from the alimentary canal to the blood vessels. Now, when any derangement occurs in the primary processes of nutrition, it is usually manifested by loss of appetite or irregularity and capriciousness in the desire for food. On the other hand, when the secondary process, *i. e.*, assimilation, or the appropriation of nutriment by the tissues of the body, is deranged, the result will appear in the character of the tissues. Examples of this are seen in children that are fat and pale faced. They are often regarded as pictures of health by the laity, while to the physician they are simply pictures of mal-assimilation. Their food literally runs to fat in place of bone, nerve, and muscle. The object then, should be, in catering for the one class, to find food that agrees with the stomach, which really means food which that particular stomach can digest. In the other class, that food should be used which gives the kind of



tissue most needed. In all cases it is safe to employ an abundant supply which includes both animal and vegetable food, and the variety should only be limited by the exclusion of articles which are known to be unwholesome. Finally, in feeding children, girls and boys should eat at the same table and fare alike. The differentiation of sex which is observed at birth, should remain elementary until towards puberty, so that during childhood the nutrition of both sexes should be the same.

Regarding the clothing of girls, a word to the wise will suffice. The object of clothing is to secure warmth to the body, or rather an equable temperature of the body, so far as possible, and in doing this, care should be taken not to retard motion. Clothes should not be long enough or heavy enough to do that. Neither should any garment be tight enough to interfere with motion and expansion. Clothing should also be equally distributed. There is no reason why the body of a child should be arrayed in all the finery of a fashionable belle, while the limbs are left bare as those of a savage. Great care should be given to the shoes which are worn because much of development depends upon free and easy locomotion. It is during the forming stage of life that perfection of body can be attained. After maturity, if any one enjoys having the feet squeezed, they may; but children should have shoes made to protect their feet, not to deform them. A



whole lecture might be devoted to high heels, but I will content myself by saying, *condemn them*, they have spoiled millions of limbs that would otherwise have been beautiful. Let them go to Gehenna from whence, I presume, they originally came, having been used there as means of torture.

During the transition from girlhood to womanhood—the time when a little more care is necessary than either before or after—clothing should be faithfully attended to. It is rather a strange fashion, having little sense in it, which requires girls at that time to add to the weight of their skirts and put on corsets. True, there is something in the mental condition which prompts the girl to seek the robes of maturity; but there is nothing in her physical state which requires additional weight to the skirts and severe constriction of the waist by tight clothes. Corsets, which have been the subject of condemnation by all reformers in dress, are still worn by women, and I presume that they ever will be. The persistent use of this article has led me to study the subject, and I have come to the conclusion that this fiend of the wardrobe is not quite so bad as commonly painted. Corsets, if properly made, and worn as they ought to be, are as harmless as any portion of the clothing worn about the body. It is the abuse of the article that should be condemned. This article of clothing has been so long worn that there has been a demand established for it. The mammary glands of the women of the most



mature civilization require support, because the deep fascia which is the natural support of these glands is imperfectly developed, and has been so for so many generations, that this imperfect state is transmitted from mother to daughter. The resulting pendulous state of the breasts, therefore, requires artificial support, and this is best supplied by a well-fitting corset. This has been overlooked by those who would institute immediate reform and at once give up this article of clothing entirely. The fact is, it would take several generations to cultivate a form and figure which would admit of dispensing with corsets in mature womanhood. Take the women of our own times as they are, and it will be found that they will be more comfortable and just as healthful with the proper use of corsets. The cruel, absurd habit of lacing corsets, need not be alluded to. There is, however, a danger which is not generally known even to those who desire to dress rationally; and that is, that the waist will contract under very slight but long-continued pressure. The corset that was only snug to-day will be loose a week hence. Great care, then, should be exercised in keeping corsets loose, especially in growing young women. I have also thought that if some elastic material could be introduced into the mechanism of the corset, which would admit of freer movement of the body, at the same time giving the required support to the mammary glands and the skirt, it would be an improvement.



## CHAPTER VIII.

### RATIONAL OCCUPATION OF THE YOUNG.

Occupation, mental and physical, is demanded by the young, and that in a very imperative way, hence it requires the highest skill and judgment in order to direct aright the ever active child. Regarding physical exercise, the very unnatural idea prevails that time is divided between exercise or labor and rest. The fact is, there is no such condition as complete physical rest, if by that term is meant inaction. The vital forces of the body are ever active, and rest simply means inaction of one portion of the body while others are at work. Even in sleep, the nearest approach to complete repose, there are endless numbers of skilled workmen engaged in sweeping away the débris resulting from the wear and tear of the body in its last day's work, and myriads are busy repairing the worn-out tissues of the body. Change of occupation is all the relief that can be obtained in this life of continual activity. It follows, then, that the rational distribution of the time occupied by the several portions of the body and mind is the only true rule for exercise or occupation. The greatest error, and the one which is every day and everywhere committed, is to "keep still" as the often-repeated command in the household has it. For a child to keep still, *i. e.*, unoccupied while



awake, is unnatural, and if persisted in to any extent, is sure to lead to ill-health of body and mind. The rule, or principle of home culture, then should be, to ascertain what the child is capable of doing and likes to do, and then provide the means by which it can do it. It is evident, from the activity of the child, that much muscular exercise is necessary. A great part of the day should be spent in some occupation which requires muscular exertion. It is in this way that the muscular temperament is developed and perfected, and every means should be provided for this kind of employment. Playing, which really means agreeable occupation, is the great source of exercise in the child. The play engaged in should have some purpose in it which will at the same time develop other powers besides the muscular. To furnish amusement combined with useful occupation which necessitates a large share of muscle work, should be the aim of all educators, and in all this girls should have the same privileges as boys. Girls are not capable of such violent exercise as boys, and they should not be encouraged in extreme efforts, but they should have all the exercise that they desire. Girls were made to romp and play in childhood, and they should be permitted to do so. In everyday life they are constantly checked in all their efforts to develop themselves. This usually arises from parents desiring to make their daughters refined and delicate. That they succeed in securing



delicacy is certainly quite true, but awkwardness, nervous irritability, and lassitude come in place of refinement. The fact that the muscular system naturally stops short in its development before attaining to that of the male sex, will tend to limit girls in their exercise, and keep them from overdoing in this direction. And again, the "boyishness" so much dreaded by anxious mammas will all disappear at puberty without care from anyone. Just as soon as girls require the protection which modesty and timidity afford, it will come by the simultaneous development of the emotional temperament which can not be arrested by any reasonable indulgence in harmless out-door sport and play in girlhood. The same freedom of action and out-door life should be accorded to girls as boys now enjoy, only stopping short of the heavier athletic exercises. Still, I believe that in all schools, a course of instruction in this all essential subject should be provided. To learn how to use the muscles is useful education. A very good example of the uselessness of much of our school education is seen in the young lady who graduates with a fair knowledge of theoretical chemistry and astronomy, but could not tell how to make chicken soup. Such a one is quite at home among the stars, but a perfect stranger to an infant's wardrobe. Much of her school education is of most benefit to her when it is forgotten. Such knowledge has to be replaced by the lessons of actual life which



she has to learn by her own efforts. The early tendency of girls to be interested in dolls shows the aptitude for the care of children, and should suggest to parents and teachers the necessity for that branch of education which is now so entirely neglected. The older members of a large family often learn much about children by seeing their younger brothers and sisters, but there are hundreds of thousands of young, accomplished ladies, who know less about the nature and habits of an infant than they know about mushrooms and how to raise them. Any one who has witnessed the embarrassment of a hen who has been made to hatch a brood of ducks, has obtained a very slight idea of the tribulations of an average young mother when she assumes the care of her first baby. Now it certainly is a fact that every woman should be skilled in the care of children. The poor ought to know, because to their lot must fall the care of their own young, and the rich, because money will not buy the care of a mother for her child. Those who trust their children wholly to servants, play with the lives and fortunes of their young and often sacrifice them. Quite often it happens that a nurse has the right material in her composition, and takes very good care of the little ones intrusted to her, but all are not so. God help the poor children (of rich parents) whose home care and culture are bought at the rate of twelve dollars a month and board! Maternal affection and intelligence can alone care for the little girl, and bring her to womanhood fully qualified to fill the sphere which was designed for her.



## CHAPTER IX.

### REST.

That which has been said about rational occupation, must of necessity be incomplete without some clear ideas about rest. The two, labor and rest, are so intimately associated that the one can not be discussed in full without taking up the other to a very great extent.

The following thoughts are intended mainly to give some clear idea of the value of rest in the education and training of the young, but nearly all that is stated will apply equally well to the regulation of adult life.

The question of rest is certainly not generally understood. If it were, we would see and hear less of the every day manifestations of a decided misunderstanding of the subject. Many times it is the hardest work possible for a child to keep still, and yet children are often commanded to keep still in order to rest. Again, many a good wife who is tired and weary with the cares and confinement of home, is told to sit down and rest, when she would find far more rest and recreation in some outdoor amusement which would involve considerable physical exercise.

Too little attention, altogether, is given to this question of rest, either to comprehend it or to em-



ploy it as a means to important ends. It is generally looked upon as a necessity which must be attended to, but is a clear loss of time, and should be reduced to a minimum by all active, ambitious people.

All kinds of schemes are on foot to facilitate labor; all kinds of expedients are tried to squeeze a little extra work out of the souls and bodies of our men and women. The whole talk is how to do more, and not a word is heard about taking rest, except an occasional wail which comes up from some broken-down mortal who has fallen out of the whirl-wind of haste and ambitious excitement. The whip which was used to overcome any original laziness of the human family, has been plied with a vigor which has started them off in a mad gallop that threatens to end in a smash up of the whole race.

Now, all these efforts to accomplish much in this short life are right and praiseworthy, and if men would keep within the limits of human endurance no fault could be found. Unfortunately, the tendency among enterprising people, is to neglect rest, that most important necessity to power and endurance. Rest, like food, being a necessity, so, just in proportion as human beings deprive themselves of that great restorative, they curtail their working power.

Just here I may give a definition of rest, which will suit my present purpose: Rest is *repose*, or *inaction*, of a portion of the organism, during which the waste caused by the wear and tear of work is re-



paired. Observe, I say, repose of a *portion* of the body, for during life we never find the whole at rest. From the time that the first blood-globule begins to oscillate in the rudimentary blood-vessel, until the last sigh dies away in the stillness of eternity, there is no such thing as complete rest.

Human beings are so constituted that they can not exercise all their faculties at one time. They stand on one foot and rest the other; walk until tired, then sit down to rest; and when weary of an easy chair, get up and take a walk to "stretch the limbs." They talk until their tongues are tired, and then stop to think of what they will say next. So they go on throwing one set of wheels out of gear to let them cool off and get oiled up, while they set another portion of the machine running. Even in sleep, in which they come the nearest to complete rest, they are still hard at work. While the brain is standing almost still, the senses locked up, and the muscles relaxed, there are countless thousands of busy laborers at work, oiling up the whole machinery, replacing a worn-out cog here and there among the wheels, and sweeping out the dust and débris worn off by the friction of the machinery of this great manufactory of thoughts, words, and deeds. When the day workmen stop, the night laborers go on duty, and some of the most skilled artisans are busy during sleep, repairing the tissues.

The work that we do during the day with our



heads and hands, is what we get credit for; but when we rest and sleep, there is an important work going on. That branch of labor performed while we rest, is unseen, and, for that matter, unknown by the majority of us, and hence is often neglected.

For the sake of more clearly defining the relations of labor and rest, I may state that two distinct branches of labor are performed by every living being: First, the visible work which we do with our heads and hands. Second, the invisible labor performed by those cunning workers, the vital forces, who keep the body in repair.

The vital forces first build the machine, or develop the human body, and start it running and maintain it, or keep it in repair. Now, both can not work well at the same time, *i. e.*, the machinists and the machine itself. When the machinery is running, the machinists must rest, in part at least; but when it stops work, the workmen can begin their labors of repair. The moment that the tired hands and arms of the school-girl drop to rest, the workmen begin to get them ready for the next day's work; and as soon as the weary head of the one who labors to turn out thoughts and ideas, drops to sleep, the same laborers overhaul the brain and fix it up so that it can wake up again, able to resume thinking.

This shows the importance of, and necessity for, harmony between the work which is done by the body, and the work done to keep the body in repair.



The harmony or balance of labor and rest, is simply the division of labor between the engineers and engines. The machine can not run if it is not kept in repair, and if it does not run at all it does not need repair. If we rest well we can work well. It has been said that the rest of the laboring man is sweet, and we might add that the labor of the well-rested man is also sweet and pleasant.

Enough has been said, I trust, to show the relation of rest to labor, and to show that in proportion to the ability to rest well, so will be the capacity to work well. Knowing well the fact, that the amount of work which can be performed will be in exact proportion to the rest taken, it becomes necessary to learn to rest as well as to learn to work. It may be said that most of us take to rest more naturally than to labor, but I am satisfied that much of that over-inclination to rest is due to an imperfect knowledge of how to take it.

We are so constituted that the normal, healthful exercise of our faculties gives pleasure. It is pleasant exercise to eat when one is hungry; to rest when weary; to walk when well rested; to think when the brain is fresh and clear. In fact to do anything rational, when thoroughly prepared by previous rest, is agreeable. This is not only true of head and hand work, but also of the natural exercise of the feelings and emotions. When trouble comes the feelings are wounded, relief is found in complaining



and sorrow, and pain is washed away by tears. The Omnipotent set a limit also to human sorrow and suffering. The storms of affliction break over the healthy man or woman, and subside after a shower of tears and give place to the sunshine of hope and happiness. It is the weary and worn who can not rise above their troubles, who go fretting and sighing in search of rest.

A well preserved nervous system can stand an occasional attack of righteous indignation in which considerable strong temper or passion may be manifested, if time is taken to fully cool off between the heats. It is the continual fretting, grumbling, and growling, without intervals of rest that is wearing and injurious.

The law of harmony between work and rest, when fully obeyed, not only maintains strength, but develops it. All intelligent people know that fact, but many fail to think of it in such a way as to be governed by it. To exercise the muscles of the arms until they are tired and thoroughly rest them, and again exercise and rest, makes them grow stronger and bigger. So with the brain, it becomes stronger under well regulated exercise and rest.

A moment's attention may be given to the various ways of resting.

First and most important of all, "Tired Nature's sweet restorer, balmy sleep." Of all the ways of resting this is the most complete and important. I have



already hinted at what goes on during sleep, and the importance of the work done during that time. The time devoted to sleep should not be regulated by hours so much as by the requirements of each individual. Some one, perhaps Franklin, said six hours for a woman, seven for a man, and eight for a fool. A little girl friend of mine when told this said, with much wisdom, I think, "I like the fool's share." While I admit that some sleep too much, the majority get less sleep than they need. Sleep should be taken with great regularity, and be free from all disturbance. Sleepless nights are often spent because of being too irritable from fatigue to rest. One ought to stop work long enough before retiring to cool down to the sleeping point. Hunger, too, will chase away sleep. I would not recommend late suppers, but some easily digested food taken at bedtime when needed, will often secure a sound night's sleep. We are told that: "He giveth his beloved sleep," and I know that there is much truth in that. The consciousness of being right and having done well is the best anodyne, the best sleep producer. There is none too much sleep for the righteous, but there is less rest for the wicked who violate natural laws.

In addition to the good night's sleep, it is a good plan to take a short nap in the middle of the day. It divides the working time, gives the nervous system a fresh hold on life, and enables one to more than make up for the time so occupied. It is well to guard



against too long a sleep at such times, for that will produce disagreeable relaxation. There has been much discussion regarding the after-dinner nap, many believing it to be injurious. I vote for it, believing it to be natural and wholesome.

Much can be accomplished in the way of resting, short of sleep. It is very important to economize the opportunities for rest during working hours in the day. The great principle which underlies daily rest is the relieving of one portion of the organization from duty while the others are at work. This can be done to a great extent. When the muscles are tired and worn from mechanical work, which requires but little attention of the brain, stop motion and set the brain at work. The laborer can read, think, and speak, while his weary limbs are at rest. His brain need not be idle because the hammer or chisel has dropped from his weary hand. On the other hand, a man can work with his hands when his head is tired. The book-keeper whose head is weary with business facts and figures by five o'clock in the afternoon, has considerable time in the evening to sing, play, dance, dig in the garden or black his boots, all or either of which he may do while his head is partially at rest. There is another very important way of obtaining rest mentally, that is by changing from one occupation to another. The dexterous gold beater when he finds one arm getting tired, takes the hammer in the other, and so may the man who hammers thoughts out of



his brain, exercise one set of mental functions while the others are at rest. One may read until tired and then write; may acquire knowledge until weary and then teach it to others.

In order to be able to profit by these short periods of rest during working hours, it is necessary to thoroughly learn how to drop work completely when through with it. We are all liable, when we leave the studio, counting room, or workshop, to take our work with us and uselessly think about it. This is wrong, and cuts in upon our resting time.

In all departments of life, they wear best who lock the shop door when the day's work is done, and do not enter it until the next morning. In addition to rest for the body and reasoning faculties of the mind, the same should be secured for the feelings, emotions, and passions—the social portions of our organizations. In this respect I fear we are the most unjust to ourselves. For the sake of gratifying our lower wants and desires, we deprive ourselves of higher and more lasting enjoyments. The social element should not by any means be crushed out of existence—far from that; but social pleasure should never intrude to any great extent on our hours of sleep, or the time rightfully claimed by useful and necessary occupation. There is perhaps no better restorative of wasted mental and physical powers than a reasonable devotion to family communion.

While we have hinted at a good sleep every



night, and the careful economy of every spare moment for rest during the day, I would also advocate an annual vacation of a few weeks, less or more.

There is no greater boon to humanity than this same vacation if properly spent. In the country, the weary eyes and ears rest, the lungs rejoice in pure air; and the stillness, contrasted with the noise of the city, soothes one down to the point of repose.

A hint or two regarding the way to spend vacation profitably, may be given at this point:

Examine the character of the life led daily, and then choose the opposite during vacation. If one has had a sedentary life indoors, go out into the fields, ride, run, and climb, as much as may be agreeable. If worn down by physical exertion, then recline under the vine and fig tree. The school-girl should give up her books and musty school-rooms for the fresh air in the fields. The poor sewing girl or woman should do likewise as far as possible. The mother who is worn and tired with the care of a house and children, should go where she can have her food without having to think of preparing it, and where her children can take care of themselves to a great extent.

Many of my readers will say that rest is all very well but the poor at least can not find time to get all of it that they require. True, there may be some unfortunates, but the vast majority have time enough if they know how to use it.



The indulgence of our desires—and not the highest desires either—leads us many a weary dance. We often forsake rest and recreation for phantoms which are neither useful nor amusing.

By learning self-control, and by that I mean to exercise our faculties in useful employment until fatigued and then taking ample rest, there would be less time to indulge in foolish gratifications, and much less time to be miserable.

It is better to reduce our wants, rather than overtax ourselves in order to indulge them. We should always keep in mind the fact, that the only satisfactory way of enjoying the pleasures of life is to stop short of being over-satisfied. On the morning after an evening's pleasure, it is better to be able to wish that we had indulged a little more than to regret that we indulged so much.

The practical results which spring from well regulated rest are endless. To be well rested simply means to be thoroughly prepared to do the work put before us with ease and comfort to ourselves. In fact, the best work is almost always performed easily; or, as learned men state it, the greatest mental and physical power is manifested in repose. The skilled workman, rejoicing in his strength, goes through his day's work with ease and comfort, and thinks it no trouble. The orator controls his audience by his power, not by any spasmodic effort. The professional man, whose brain is well sustained by rest and



nourishment, can do his mental labor easily and accurately. The schoolgirl who has had time to recover from her weariness of yesterday, can go through her recitations to-day without a whimper. The horse which has had sufficient rest, can run with pleasure to himself and those who guide him. Even a dog, when he has had a good dinner and a snooze on the rug before the fire, can bark with more vim and satisfaction. In all the walks of life we find that those who succeed best are those who work with the greatest ease and the most pleasure. They are those who take time to prepare for the duties they have to perform.

In short, well timed, carefully managed rest, gives power, comfort, success and happiness. On the other hand imperfect rest is disastrous. Observe that under that head, imperfect, I include too much as well as too little rest. While the majority give too little time to rest, there are others who are ruined by idleness. The machine which stands still too long gets rusty. The oil on the axles gets thick and stiff, and clogs the whole machinery. When started, it runs heavily and jars and screeches. So it is with the human organization. Long inactivity causes degeneration. The unused muscles get soft, flabby and lack strength. They waste away, and become incapable of doing a fraction of what they were intended to do.

The brain also when not regularly exercised, becomes soft and dull.



The two extremes are alike unfortunate in their results. Too much and too little rest are alike in producing incompetence. The unfortunate subjects of either mistake, suffer the penalty—inefficiency, and inability to do their life work, and the consequent pain and disappointment. We hear the same lamentations from both classes. They are constantly complaining of cares and troubles which they can not overcome, and their complaints are but acknowledgments of their inability to fill the positions in this world in which they are placed.

The lamentation of the one class is like the plaintive song of the caged lark, longing for liberty to soar; the complaint of the other is like the screaming of the eagle, that is tossed in the storm, calling for shelter.



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