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EDUCATION

PHRENOLOGICALLY & PHYSIOLOGICALLY CONSIDERED.

A Lecture,

BY L. N. FOWLER, OF NEW YORK.

A CHILD is more suggestive of thought than any other object of creation. A child is more valuable than any other human being. It is not the *number* of children in a family that makes the family the most valuable to a nation. Nor the *number* of soldiers in the army that makes the army the most successful; but the kind and quality of the stock, the discipline, the development, the education and adaptation of each child to its life-work, and each soldier to his duty.

There are so many different meanings attached to the term Education, that it is well to define my position, and to explain what I think it includes.

Education does not consist so much in the ways, manners, fashion, dress, or even in book-knowledge, as it does in the legitimate use and exercise of the elements of our being, and in the proper development, direction, and training of all the various powers of the body and mind. In proportion as we understand the laws and wants of our natures, and those of our children, will we be able to be the most successful in life.

Children are made up of organs and functions; and that system of education is the most perfect which recognizes the greater number of elements, functions, and organs in their various stages of development and legitimate uses.

Education should begin at the beginning of existence, even with the parents before the birth of the child; the amount of parental love and interest manifested toward the child has much to do with its education; for children of promise are fully born, welcomed, encouraged, and qualified to take their places in society. All others are impediments, are under a cloud or a spell, and only fit subjects for idiot and insane asylums; or they grow up neglected, and cultured only to fill prisons and almshouses.

The ends to be secured by education are *action, direction, harmony, and development* of every element of body and mind.

Sometimes, from causes beyond their own control, children are dull, stupid, weak, and imperfect; sometimes, they have passions, propensities, eccentricities, and various kinds of genius that they do not seem to have the power to control. This class of children is frequently whipped and beaten by parents and teachers, who will not take the trouble to understand why their children exhibit these traits of disposition, or idiosyncrasies of character. Proper allowances should be made for natural deficiencies; the stronger faculties should be repressed, and the weaker made more active.

By education we create no function of the body or faculty of the mind; for each child has at birth all the organs and functions it will ever have, and we cannot add to the number; but can direct and guide their legitimate and harmonious development.

The natural divisions of our subjects are, first: physical development and training of the various functions of the body. Secondly: mental culture, or the development of the powers of the mind.

Physiology points out the functions of the body, and gives hints how to train and take care of them, so as to secure growth and health.

Phrenology, more fully, definitely, and correctly than any other system of mental philosophy, points out the different qualities of the mind, and their adaptation to the various purposes of life. All parents should understand the peculiar dispositions and talents of their children phrenologically, if they would know where and how to commence their education; otherwise they may waste the entire youth, and dwarf the mental powers of their children.

Phrenology describes only those faculties whose manifestations are apparent in every-day life, so that it is a safe, as well as wise, guide.

Look at the past, and consider its systems of education when compared with those that are the most popular at the present day. The former were based in ignorance, while the latter are based in knowledge. It was at one time thought that if pupils studied certain books, and learned certain sciences, it was sufficient, and teachers were only required to be posted in book-knowledge; but when education is placed upon its true basis, it will be deemed necessary for teachers to understand human nature as well as the technicalities of books. When parents feel that their children are not educated unless they are taught to use their whole powers of mind, they will then be more particular in the selection of teachers for their children. It is too often the case that education begins with training the intellect and ends in the same way. As soon as a child is old enough to learn to say A, B, and C, it is sent to school, and kept in school till its education is completed, according to the common acceptance of the term; and no attention is paid to its physiology, unless perchance it becomes ill, when it is taken from school, cured as soon as possible, and sent back again, as it is thought to be important that the child should make as rapid advancement and as great proficiency as the other pupils. A father brought a very precocious



lad to me and asked me how to train him. I said to the father, "Do you wish your son to live?" "Of course I do," replied the father. "Then," said I, "you must take him from school, and have him to attend to some physical labour. If you want him to know more and die early, the way to attain your wishes is to keep him constantly studying and in school. You will thereby outrage the laws of his nature, and the boy will also be sacrificed." The father said, "It is difficult for him to study all the time, on account of his health. But we cure him as soon as we can, when he is obliged to stay at home, and then we stimulate him with presents, and his teachers stimulate him with prizes, to study harder to catch up with his classes; for he is the best scholar in the school, and I would not like him to take an inferior position." I reasoned with this ambitious, well-meaning, but mistaken father, and he began to understand that when a child has a very large head, and is precocious in mental development, he will not amount to much in life unless he has a good body to sustain the mind. When people generally understand these things, we shall have an improved system of education. The first important consideration for a child is a sound constitution. If the system is diseased, racked with pain, poorly fed, and subjected to an impure atmosphere, or if its energies are consumed through the brain, then the body suffers in proportion as it is robbed of that which belongs to it. Great attention should be paid to diet, to exercise, and to the quality and quantity of air that is breathed. Frequently children are confined in close school-rooms, and obliged to breathe air from which the oxygen has been nearly consumed. Children need instruction about violent running and playing, as many children die suddenly, or never fully recover from excesses of exercise.

Too much attention cannot be paid to the body; for it is necessary in order to sustain mental effort that the body shall be in a good condition. Teachers can do much in directing the mental powers of their pupils, but they cannot remould them, or give faculties and physical stamina when there is an absence or great deficiency of either body or brain.

Action, speed, and expertness, are the order of the day in every department. It is the live child, the fast horse, the express train, the telegraphic news that we want. Man lives faster and his pulse beats from seven to ten times more in a minute now than it did fifty years ago. We mature earlier, we eat and live faster, we travel faster, we get news with the speed of lightning, across the ocean by telegraph, and it seems as if there is more life in the atmosphere than there was formerly.

All the faculties act from some motive or desire on the part of the child or individual. A weaker faculty is increased by stimulating the desire for its gratification, and it is important to present as high a motive for a stimulant as is possible.

The moral brain should give the standard of excellence; but those organs that are naturally the most active should aid to make up for the deficiency in the character resulting from the action of small organs. The only way to increase the power of a faculty, is to increase its

activity through the aid of those that are already active and powerful, or by combining the action of the weaker with those of the stronger.

Some children are naturally dull and stupid, and need to be waked up and thoroughly roused. A child should be educated as a whole in body and mind. To educate one faculty does not educate another, as each has a specific work to do, and should be trained according to its own wants and nature. It is especially important that a child should be taught those things that are the most important to be known, that it should be trained to think for itself, have a mind of its own, and supply its own wants.

Some children, however, are naturally deficient in self-government, and require special care and training. I have the portrait of a boy that formerly lived in America; he had the animal propensities and passions strongly developed, and was quite deficient in the intellectual faculties. One day he became angry with his father, and seizing an axe, attacked his father and killed him. The boy was arrested and thrown into prison; while awaiting his trial, the governor of the State in which he lived, believing in phrenology, said "That he did not believe a boy with his unfortunately developed brain could control his propensities," and he took the boy from the prison into his own family to observe his conduct, and to ascertain how much moral responsibility he had over his actions. "I will not be guilty of giving my sanction to the hanging of a fool or an imbecile," said the governor.

I was invited to examine the boy's head while he was in the State's prison, among other criminals, old and young, without knowing the particulars of the case at the time, or that such a lad was in the prison. I stated "That he had immense passions, and not enough intellect to guide them; in fact, that he would not be responsible for the result of his own actions, and if not controlled would be liable to commit deeds of violence at any time if his passions became roused; that he should be placed under strict surveillance, should not be crossed, excited, or provoked in any way." It is a great misfortune to a parent to have such a child; but if the father of the lad had understood Phrenology, he would have been very careful to train and develop his child so that he would not have shown those outbursts of passion by which he lost his own life. It is necessary to educate what there is *in* the child. It is impossible to make two individuals, who have different casts of mind, do the same thing with equally clear perceptions, or with the same degree of talent.

It takes a lifetime to do the work of life. We must not expect to accomplish it in a day; for growth, development, and maturity require time. All healthy permanent progress is slow; but every step in the journey of life is necessary to prepare us for the end of the journey. By understanding the natural excesses and deficiencies of children, and the natural influence of different studies and motives for action by way of expanding, disciplining, refining, systematizing, and energizing the mind, we could easily have systems of education adapted to the development of each mind according to its individual needs. But when we place seventy-five or one hundred scholars under the care of a young man or young woman, we must not expect that the children will become

fully developed; for the parent with only two or three children at home is often unable to govern those as they should be governed. Parents need to understand their own peculiar tones of mind and dispositions; for these are so often manifested in the government of their children. A father who has large Combativeness, Firmness, and Self-esteem, is positive and dictatorial to his children, and places himself in the relationship of a king over his subjects. The child should obey the parent; but there are various ways to secure obedience without necessarily using force or compulsion. Some parents are very nervous and irritable, without much experience. Some have not enough firmness, and are too indulgent; hence it is important that parents understand the human minds they have to train and discipline, and phrenology will enable them to understand the natural dispositions and mental capacities of their children much better than any other system of mental philosophy.

What do we want to accomplish by an education, or in other words what should education do for a child?

The mind of a child should be expanded by teaching it general truths and laws of nature, laws of life and health, laws of dietetics, the principles of physiology, astronomy, phrenology, and religion.

Its mind should be systematized by an acquaintance with positive, detailed knowledge, by studying drawing, the configuration of objects, and mathematics.

Its mind should be made practical by the studies of anatomy, geology, mineralogy, and agriculture.

It should be taught the law of combinations by studying chemistry, mechanics, colouring, and composition.

It should be taught to think and reason by studying grammar, the languages, philosophy, politics, and the natural relations between cause and effect.

It should be taught to individualize by encouraging close observations of nature, of persons and things, their uses, qualities, and conditions; also, to put into practice all knowledge gained by reading history, biographies, and by travelling, and should be encouraged to try experiments.

It should learn to analyze, criticise, and discriminate, by studying character, logic, medicine, rhetoric, and the natural sciences.

It should be taught to use as many faculties at the same time as possible, and to study their combined influence one with another; also the general effect of combined truths in nature, philosophy, and religion.

It should be taught its dependence by learning its relation to higher powers and qualities.

The glory and crowning elements of man are his moral powers. Hence education should be commenced, prosecuted, and perfected with a constant, solemn deference to the ultimate end and destiny of man, as well as to his rank and dignity in the universe. It must be adapted to the whole being, physical, intellectual, and moral.

The questions may be asked how is this to be done, and who is competent to do it? also what kind of schools and school-houses would be

requisite to carry out these ideas? Only those teachers would be competent to inculcate these life-principles who understand them fully, who feel their importance, who can apply them both to themselves and to their pupils; those who can sympathize with children in their ignorance and simplicity, and adapt themselves to them sufficiently to guide them; those who love teaching as a profession, and do not consider it an unpleasant task to train the young mind. The profession of the teacher is one of the highest, and none should enter it but those who have enthusiasm and a fitness for the vocation.

A school-house should be convenient, and near to the residence of the pupils. Those children who have to walk five or six miles, exposed to a burning sun or drenching rain, to go to school, are not in so good a condition to study as those who live nearer. The school-house should be as attractive as possible in order to be a desirable place of resort. The children should not go with a feeling of dread and dislike, but because it is an agreeable spot where they can enjoy themselves, as much as though they were going to the circus or to a museum.

For young children, it should be full of *objects* or *things*, not of books. Young children do not need to know anything about books. Their perceptive faculties are to be developed first; and they need to gain ideas by seeing, observing, and perceiving through the senses, or, in other words, by ocular demonstration. It should be a museum of art and nature, containing a great variety of natural objects, as shells, minerals, birds, fish, and different kinds of wood; these various things should be minutely described; how, and why, and by whom they were made; so that the whole field of natural history is brought in a simple manner before the minds of children. Such impressions would be indelible, and would be a good foundation for future knowledge.

There should be a beautiful garden, containing a great variety of plants, shrubs, flowers, and trees, connected with the school-house. Then the children could learn botany, and, if need be, the medicinal properties of plants and flowers.

There should be a pond of water in the grounds, containing a great variety of fish.

There should be a workshop containing a variety of tools, machinery, and appliances for doing all kinds of work, so that children could not only see different things done, but could make, construct, and prepare the way to invent if they had the natural qualifications.

There should be a complete clothing establishment, where cutting and making are both carried on, so that girls could learn to cut and make their own clothing, and boys could be fitted to become tailors if they wished. There should be a department devoted to art, where drawing and painting could be learned; also one filled with statuary, so that those who wished to develop themselves as sculptors could have every facility.

Singing and music should be taught, as well as a thorough system of gymnastics and calisthenic exercises. Then boys would be drilled, ready to fight for their country if necessary, and girls would develop

bone and muscle and a good constitution, while developing their mental powers.

The walls of the school-house should be covered with maps, paintings, portraits, and everything calculated to make the room look pleasant. In short, as far as possible, children should be introduced to all departments of nature and art. General ideas with regard to each department should be given, also opportunities to develop every kind of artistic or mechanical genius.

After a few years' training in this practical way, children would be prepared to take books to read and study. Then they would profit by what they read, and would remember more in one year than they can possibly do by crowding the mind before it is fitted to receive what is given to it.

"But," says one, "such an education is too expensive; we cannot afford it; besides, it would be impossible to carry out such a thorough system." It ought to be afforded; and, if money should not be spent for an education, it is of but little permanent use. Some persons are very willing to spend money for the gratification of their appetites, but will not give much for the cultivation of their intellectual or moral powers. A nation will lavish millions of expenditure for war and politics, while education runs at a low ebb, and individuals remain undeveloped for the want of an opportunity to gain knowledge. There are three enormous bills that mankind are generally willing to pay; one is for the indulgence of the appetite; the second is to pay for restoring the stomach after it has been deranged by excessive eating; the third is to pay for the privilege of fighting. When individual minds are better balanced, and religion has its true influence, we shall not have fighting or wars at all; but so long as more is spent to maintain drinking-saloons than school-houses, we shall have a greater development of the passions that lead to quarrelling, and finally to wars, than of the moral qualities that lead to the promotion of peace and all the arts of civilization.

The child generally spends every odd penny for candy and something to eat, instead of something to improve or benefit the mind, and too often learns the use of stimulants in early life, so that the appetite becomes so depraved, that the individual will sell the last garment to gratify this perverted appetite. Such a person would be one of the first to exclaim in view of a thorough system of education for his family, "It is too expensive, I cannot afford it." If this man told the truth, he would say, "It is of more importance to me to gratify my artificial desires and propensities than it is to educate my children." The fact is, we can generally tell the grade of mind of a person by finding out the channels through which his money is expended freely. To spend money for education will do far more good than to spend it to follow the fashions and to keep up appearances in society. Many men will expend beyond their income to gratify a foolish feeling of pride, to have the externals of life, to purchase jewelry, to indulge in extravagant dress, and in intoxication, but they economize when they pay for the education of their children. A father said, "He had been so very un-

fortunate in business, that he could not afford to educate his children," who were naturally very intelligent; yet he acknowledged he spent £50 every year for wines and spirituous liquors.

All should be producers; then we should have no drones in society. It is a fact, that the more a nation or government pays for the right kind of education, the less it pays for prisons, the maintenance of paupers, and asylums of various kinds. It is very true that we often find in prisons, men from the educated ranks of society; but these are exceptional cases, and are not thoroughly educated, and many of them have not learned even the rudiments, the necessity of self-government, which was the reason they were committed to prison. There is no country that has so perfect a system of education for the masses as America has; none that pays more to secure general intelligence, and the result is that the children of the great hordes of ignorant Irish, French, and Germans that migrate every year to her towns and cities, become much better citizens than they otherwise would be if they had not the privileges of education offered to them almost "without money and without price." Had it not been for these systems of education, America might have merged into a kind of barbarism or heathenism.

A correct system of education is *attractive*, and not repulsive. The parent who has to urge a child to go to school, may rest assured that either the child has not received the right home-discipline, or that the teacher does not know how to interest children. Some boys are constantly annoying their parents by their "playing truant" instead of going to school; in too many instances such children are allowed to have their own way in almost everything, or else they are governed very harshly and severely, and break from the traces when they can find an opportunity; but when children are well trained at home, and are placed under teachers that are naturally qualified to teach, it will be a pleasure to the child to go to school.

It should not be necessary to whip an education into a child; it is natural for a child to want to know everything, but sometimes children are required to study those subjects that they cannot comprehend, which they forget as soon as they leave the class-room.

Attraction, and not repulsion, is nature's method, and the gospel way of bringing about the greatest results; but we should seek to adapt education to the child to be educated, and make it attractive by having reference to the peculiar organization of the child. I hope I may live to see this principle recognized in the training of the young; for it is impossible to make all alike clever, or to make all interested in the same pursuits. I have had such an extensive experience in analyzing mind, that it seems strange to me that teachers should require all their pupils to come to the same standard of excellence; yet all pupils have their own peculiar talents, which might be improved. Let me give a few instances from my own note-book of differences among individuals.

In 1834, in Cincinnati, a gentleman brought to me for examination a man dressed as if he had just been picked up from a drunken frolic or

carousal in the street. The gentleman said to me, "Is it possible to make anything of this drunken loafer?"

I put my hand upon his head, and replied, "Drunk or not, there are the elements of greatness in this brain. With an opportunity for development he can make a mark in the world, for he has ambition, perseverance, fine powers of imagination, an excellent eye to judge of proportions, superior natural talents for a first-class mechanic, architect, sculptor, artist, or scientific man. He ought to excel in one of the higher departments of sculpture, architecture, or mechanics."

I was then introduced to young Powers, who had assumed this *incog.* to test my science. He had just commenced to show his talent as a sculptor; had produced his work called "Heaven and Hell," and a number of very superior busts. Since then he has acquired a world-wide fame, is celebrated in the old world as well as in the new for carving his beautiful "Greek Slave," a statue of "America," and a host of others, each of which would have been sufficient to give him an enduring reputation.

When in Indiana, in 1834, a young student from college called upon me for an examination. Among other things, I said, "You can write poetry, for your Ideality is one of your largest organs, and you have just the temperament adapted to it."

"But I have never written a line in my life," he replied.

"Make the attempt, then," I rejoined, "for you can succeed."

He went away. At his first leisure hour he took a slate, sat down under a tree, and wrote his first verse of poetry. This was William Ross Wallace, and he now supports himself by his poetic effusions, which are always acceptable to editors of newspapers.

In 1837, an editor came into my office in New York one day with a young gentleman, and asked me to point out his peculiarities. In a few minutes I replied, "He has uncommon powers of Self-control, large Eventuality, Secretiveness, Cautiousness, Firmness, and Self-esteem; great observing talents to notice everything pertaining to the physical world; can commit to memory with great facility, is fluent and copious in the use of language; has Mirthfulness and Imitation which would enable him to mimic, caricature, and represent characters, and the whole cast of his mind is in that direction." After a few other remarks I was introduced to Edwin Forrest, the tragedian, who has since gained a world-wide reputation.

When in Frederickstown, Nova Scotia, in 1859, before a large audience, I examined a ragged and dirty-looking boy, and said, "That he had superior talents to excel as a mechanic, and that I hoped some one would feel a sufficient interest to train and educate him, for he had too much natural ability to be neglected." At the close of the examination, a person who knew him stated, "That he had already, with only a jack-knife and a few simple tools, made a small steam-engine, which was in working order." There was so much interest created for the boy from the phrenological examination, that a few months after I left the town I learned that several gentlemen had represented his case to the Colo-

nial Parliament, and a sum of money was subsequently granted to defray the expenses of his education. The lad has since then exhibited great skill and mechanical ability, and, if his life is spared, he will become a noted man.

Mr. Isaac Smith, of Birmingham, had attended my phrenological class in that town, and with his usual sagacity readily applied the knowledge gained, as the following fact will show:—A lad went into his place of business one day and asked him for employment. Mr. Smith looked at his forehead, and seeing a hole in the centre where Eventuality is located, said, "You have a very poor memory of what is told to you, and cannot go on errands, for you forget your message as soon as you have heard it, so you will not do for an errand boy."

The boy looked up in astonishment and said, "That's just why they turned me away in my last place, sir; I can't remember scarcely anything that I hear, and I always forget when I am going on an errand what I am going for."

"Well," replied Mr. Smith, "I don't want a boy to remember, but I would like to have one that could turn a crank in some part of our machinery. Let me see if you have muscular strength." So he took hold of his arm, and finding it well developed, said, "You have a strong arm; do you think you could turn a crank? If so, I will engage you at once." The bargain was soon made, and for aught I know to the contrary, he is there turning a crank to this day. If the parents of that lad had understood Phrenology they would have made him learn and relate at least one fact or anecdote every day of his life, and he would gradually have acquired a better memory of facts.

It is very interesting to sound the minds of children on the subject of their pursuits in life. I asked a little boy one day what he wished to be when a man. "I don't know, sir." "Think for a few minutes, and tell me. Do you want to be an omnibus driver?" "No," he replied, briskly; "I do not want to be that." "There is, then, one thing that you are decided about. Do you want to be a doctor?" "Oh, no; I should not like to get up in the night and go out in the cold." "There are two things that you do not desire to be. Do you want to be a lawyer?" "Oh, no; I don't care to sit in the house all day and write." "Do you want to be a merchant, and make money?" His eyes began to kindle with interest, and he soon replied, "Well, I would not mind that." He had really the natural qualifications to make a good merchant; so I encouraged his father to qualify him for that kind of business, but first to develop his bodily powers, as his constitution was not very strong. In some similar way, children should be encouraged to decide upon their professions and business pursuits, for they will be much more successful if they like the calling which engages their attention, and if they are really fitted for the position in life they are to fill. Of course, the judgment of parents should control in this as in all other cases; but reference should be had to the tastes and dispositions of children.

Another thought I should like to suggest is, that when education is

"finished," according to the usual acceptation of the term, a child should be qualified for some life-business; but as the custom is now, a child has to begin to learn a business or profession after he or she leaves school, and oftentimes the education already received is entirely forgotten during the pursuit of business.

Not only should the child learn the history of natural objects and the sciences, but he should be taught to understand the greatest of all studies, the knowledge of himself; that all minds above idiocy are composed of social, executive, aspiring, intellectual, and moral qualities. All children need to have their social and love-natures cultivated and rightly directed. For the want of attention on this point, many lives are often sacrificed and shipwrecked, that might otherwise have been useful.

Children need to understand how to control and properly develop the executive and selfish propensities. These are very valuable elements of mind; but if they are not guided, they will prove as detrimental weeds that are allowed to take root and spread among the flowers in the garden. The aspiring qualities play a very conspicuous and important part in the history and destiny of the race, and need to be properly guided and turned to a good account. It is not enough to stimulate pride and ambition, but these elements should be directed into legitimate channels. The intellectual faculties are the light of the mind, and open the way to perceive laws and principles, with their applications to the use, quality, and individuality of things. The mind opens gradually to receive the dawnings of truth, and that part of the mind which is naturally developed first should be the part first educated.

The child's ear should be cultivated. His eye should be trained. He should be taught to speak clearly and distinctly, to describe correctly what he has seen or heard, and to walk easily and gracefully.

Faculties should be exercised according to their natural strength. They should not be over-fatigued, but sufficiently exercised to make them active. They should be taught that there is time enough in the natural life of man to develop every organ and function of body and mind, so that they shall reach maturity and approximate to perfection.

The minds of children are frequently over-excited and unduly stimulated to action, which would never be the case if we allowed the mind to develop more in accordance with its natural attractions. Occasionally we see a giant mind in an infantile frame; but the frame is sure to be shattered by the undue growth of the mind beyond its natural limits. A meteor is very brilliant, but who would not prefer the more enduring light of the moon or the stars? One of the most wonderful instances of precocity on record is CHRISTIAN HENRY HEINSKEN. He was born at Lubeck, Feb. 6th, 1721. When he had completed his first year he could recite the principal facts of the five books of Moses, with a number of verses on the creation. In his fourteenth month he knew all the history of the Bible. When he was two years and a half old he knew all the history of the nations of antiquity, anatomy, geography, the use of maps, and nearly eight thousand Latin words. Before the end of his

third year, he knew the history of Denmark, and the genealogy of all the crowned heads of Europe. In his fourth year he acquired the doctrines of divinity, with the proofs from the Bible; ecclesiastical history, and a knowledge of ecclesiastical institutions; two hundred hymns, with their tunes; eighty psalms; quite a number of entire chapters of the Old and New Testament; fifteen hundred verses and sentences from the ancient Latin classics; almost the whole *Orbis Pictus* of Comenius, from which he derived his knowledge of the Latin language; arithmetic; and history of the monarchs of Europe and their kingdoms. His wonderful memory caught and retained every word said to him or what he heard, and he was enabled to associate what he heard with all other knowledge he had gained previously.

At the court of Denmark he delivered twelve speeches, and underwent a public examination on a variety of subjects, especially with regard to the history of Denmark. He spoke German, Latin, French, and Low Dutch. He was very good-natured and well-behaved, but of a most tender and delicate constitution. He never ate any solid food, but chiefly subsisted on the milk of a nurse.

He was known and celebrated all over Europe by the name of "The Learned Child of Lubeck." He died June 27th, 1725, aged four years, four months, and three weeks, lacking three hours. Thus, this child, that might have been one of the most erudite theologians of the age if he had lived to maturity, died in early childhood; he was like a summer flower born before its time, or one that matured during the early weeks of spring. It is a great temptation to a parent or teacher to push a child that is naturally precocious; but such need curbing and restraining, and special care is necessary to bring forward their physical powers. It is necessary that a child should have a variety of mental discipline. Yet direct, definite, active exercise is all important to bring out the power of each faculty. To make a musician, a person must sing and play; to make an artist, a person must paint; to make a chemist, a person must practise chemistry; to make a dancer or rope-walker, a person must practise dancing or walking on the rope. It is not enough to read a treatise on these different subjects; it is not enough to see or hear another perform; for expertness in everything comes from practice, and even genius would not amount to much without well-directed effort and constant practice.

Man is not satisfied with the progress he has made. All are striving to be something higher. It is a constituent element of the mind to aspire beyond the present. The reason is, that man has a longing after immortality, and the more knowledge he gains in this life, the more he feels that he can enjoy in the life to come; the more ignorant he is, the more satisfied he is; and the more he knows, the more he wants to know. Perfection of character is not attained all at once. If a child lived alone, where he never heard the human voice, never saw the human eye and the human expression, never came in contact with the world without, he would never attain perfection; for we are perfected by the knowledge we possess, and by coming in contact with other minds.

Knowledge is gradually acquired. We are obliged to gain it step by step, as we go up the steep mountain, gradually, till by-and-by we find that we are actually making progress.

The child begins its book education by putting A and B together, then it adds another letter, and then the fourth; then it learns words of two syllables, then of three, and of four; then it puts a short sentence together, which is about all it can comprehend at first. Soon it can make a comparatively long sentence as easily as it framed a short one previously. But it is necessary to understand a simple rule, before the mind can comprehend a variety of rules, and their combinations.

The child develops its animal nature first; hence we see that the appetites, passions, and impulses are so imperious in childhood. The affections are also early manifested by the child clinging to its nurse, or mother, or any one who has the care of it. Then it begins to discern the difference between one kind of food and another, to appreciate its playthings, to be pleased at first with a rattle, and then with more complicated playthings, till by-and-by it desires the tools that only a full-grown man can use.

As the child has everything to learn, it is quite important that its powers of observation should be early developed, and its powers of memory gradually strengthened, till it can remember all it has ever heard and seen.

It is astonishing to what extent the memory can be developed. If parents and teachers were only aware of the capability of this power of the mind, they would encourage the child to cultivate it more than they now do; not with a view of making the child precocious, but in order to unfold one of the most useful faculties that God has given to the child, to aid him in securing a thorough acquaintanceship with the world in which he lives. A child may acquire a vast amount of knowledge, but unless he can remember, and recall what he has learned, he can go on learning to the day of his death, and yet will not become very wise.

Dr. Gall was a great reasoner, but he had a very poor memory of what he saw. He did not recognize his patients when he met them in the streets, and when he went out to dine with friends, he did not recognize them the next day, if he saw them. He could not remember places, figures, colours, or music.

Hon. Horace Mann had small Locality and the Perceptive faculties, and he could not find his way in the streets of Boston, although he had lived there many years. I am acquainted with a clergyman who cannot remember the names of his children, and at one time forgot his own name, when he went to the Post Office to call for a letter that he expected. Neander, a celebrated German author, could not find his way from his house to his class-room. There are many well-authenticated accounts of persons who have cultivated their memory to a wonderful extent. Dr. John Leyden, the orientalist, and Cardinal Mezzofanti, could remember every word they heard or read. The latter could talk correctly in over fifty different languages and dialects when he was seventy years of age, and understood twenty more well enough to trans-

late them. He began to learn the languages by listening when at his work to the recitations of the school-boys.

Thomas Cooper, who is now one of the greatest of English controversialists, was once a cobbler. At twenty-one years of age, he committed to memory the first three books of *Paradise Lost*, the whole of *Hamlet*, and thousands of lines from Byron, Burns, Coleridge, Wordsworth, Scott, Keats, and other poets.

I am acquainted with a lady who committed to memory forty pages of Shakspeare's Plays one night after tea, before bed-time, and recited them the next day. This she did when she was only thirteen years old.

A person may not necessarily have an equally good memory in all departments. Sir Walter Scott, Dr. Thomas Brown, Edgar A. Poe, and Shakspeare could remember pages of poetry without the least difficulty. Dr. Linnæus could remember the names of flowers and plants. I examined the head of a gardener in Dublin, and gave him a wonderful power of memory. He told me "that he could remember the names and peculiarities of ten thousand plants, and that he chose his vocation because he had such a retentive memory as well as a love for flowers."

Themistocles could remember the faces and names of twenty thousand Athenian citizens, and Cyrus remembered the faces of his whole army.

Kossuth, Everitt, Macaulay, and Mazzini remembered words and languages. Bayard Taylor, Capt. Cook, Dr. Livingstone, Stevens, and Dr. Kane remembered places, scenery, and persons.

Blackhawk, Talleyrand, Lavater, Calhoun, Hon. Mr. Benton, John Quincy Adams, remembered facts and events. Agassiz, Sir Astley Cooper, Cuvier, Prof. Owen, and Dr. Mott remembered all about nerves, bones, muscles, and the organic structure of men and animals.

Mithridates, a Roman Emperor, ruled over twenty-two nations. He learned the languages that each spoke, and could converse fluently in all.

An ambassador of King Pyrrhus I. went to Rome. The next day after he arrived, he knew and saluted by their names all the Senate and the whole of the gentry of Rome.

Paganini, Ole Bull, Mozart, Haydn, Weber, Beethoven, Thalberg, and Jenny Lind remembered all about music. Rev. Mr. Jonas, of Sunderland, when a lad, could repeat five thousand two hundred and seventy lines.

Emperor Claudius could repeat the whole of the *Iliad* and the *Odyssey*. Gilbert Wakefield committed to memory the whole of Virgil and Horace, nearly all the Bible, and the greater parts of Homer and Pindar.

Herr Winkler, the blind calculator, gave a performance at the Marylebone Institute in London, one evening, to allow the audience to witness his remarkable memory. The Rev. Isaac Taylor presided at the meeting, and he wrote down at random sixty-five figures, which he read aloud only twice. Herr Winkler, after an interval which had been occupied in the solution of a variety of calculations, repeated these figures backwards and forwards without any mistake. An account in simple addi-

tion, consisting of six columns of figures, was read out once, and the correct amount was given almost instantaneously. A subtraction reaching as far as billions was performed with the same rapidity. He then solved a variety of arithmetical questions that were proposed to him, many being of a very complicated nature; he at last astonished the audience by recapitulating the whole performances of the evening, enumerating in order the various problems that had been proposed, together with their solutions; a prodigious effort of memory, involving as it did the repetition of several hundred figures.

Pope had an excellent memory, and could turn to the precise place in any book where he had seen a passage which he liked.

Scaliger obtained so perfect an acquaintance with a Latin book, that he offered to repeat any passage with a dagger at his breast, which could be used if his memory failed.

Gassendi learned by heart six thousand Latin verses, and the whole of Lucretius's poem "De Rerum Natura;" and to exercise his memory he recited six hundred verses from different languages every day.

Saunderson, a mathematician, could repeat all of Horace's Odes, and a great part of other Latin authors. La Croze, after hearing twelve verses in as many different languages, could repeat them in the order he had heard them, and could also transpose them.

If more pains were taken with developing the memory of children, the above cases would more often be the rule than the exceptions.

We come to the full stature of a man from various causes. There must be health and power of constitution as a foundation; then education and circumstances must be favourable. Parents and teachers must call out all the different faculties of the mind, remembering that to cultivate one faculty does not cultivate another; that each requires its own stimulus according to its own nature; that when a child attends the Sabbath-school only its moral brain is exercised; when it attends the day-school only its intellectual brain is developed. We want systems to cultivate not only the moral and intellectual faculties, but to cultivate the affections, the passions, and propensities. The wickedness and depravity of mankind are more often the result of the *wrong* use of the passions and propensities than of the exercise of the intellectual and moral brain.

Here is where many systems fail to make a good man of a naturally good boy. Many who graduate at college give way to the indulgence of the animal brain, because they are only partially trained. We need systems of education that shall recognize the whole brain and body, and then we shall have fully developed individuals. Let us learn to live as individuals; learn to spend our energies in accumulating knowledge that will be of importance, not only to ourselves, but to humanity; learn to use our whole mental powers aright, and to encourage a more thorough, useful, and comprehensive education, adapted to every individual child; then we shall begin to comprehend some of the purposes of life, and be better enabled to discharge our varied responsibilities to society. It is useless to attempt to work any reformation, or to attempt to exterminate any evil, unless we commence at the root of the evil.

We may cut off branch after branch, till we are weary with our useless labour, and yet find that we make no progress.

To bore a tunnel through the Alps, to carry a cable across the Atlantic, and to bridge a cataract, are all gigantic schemes that man by perseverance is enabled to accomplish; but these deeds are nothing compared to the education and development of a child. We must, however, begin first in the family, and teach the child to discriminate between right and wrong, lying and truthfulness, honesty and dishonesty, indolence and industry, kindness and cruelty, generosity and selfishness, drunkenness and temperance, arrogance and humility, duplicity and sincerity, vice and virtue, disobedience and obedience; and then, when the teacher takes the child in hand to train mentally and physically, if he or she understands the true functions and mission of a teacher, the work of education will go on to completion.

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