

and employment of the young, aid in the building up of a brain. On this basis Dr. Brown-Sequard proposed the systematic training of the left hand in children, in order to develop the right side power of the brain equal to the left. In fact it is necessary, for the building of a powerful brain, that all the bodily organs should take their part. Brain labor or exercise in the work of the school, now termed cerebration, is the problem which to-day is occupying the attention of close observers in the path of intellectual development. Taking into consideration the pliant character of young brain tissue in the very midst of the formative process of thought and ideality, the degree of exercise to the point of mental strain must be guarded most carefully and patiently. As the normal performance of a function strengthens and develops the organ itself, so the brain becomes similarly influenced. Here student life comes in, with its advantages and disadvantages, and in order to attain the highest degree of intellectual development, reason, rather than cramming, is likely to bring about the desired object. While brain tissue is in the elementary stage, let elementary education be the pabulum of thought. As Huxley has remarked, "freshness and vigor of youth must be maintained in mind as well as body." The more closely we examine the subject of mental hygiene, the more closely it partakes of the common-sense principles how best to educate and train to achieve the greatest degree of culture, embracing all the interests of man in his varied relations of life. To accomplish these desired results, an important question arises: At what age should children be admitted to school? In the consideration of this point the peculiarities of brain structure require at least a passing notice. Fat, phosphorus and water are important factors in the elimination of brain power. In the infant the chief mass of the brain is soft and uniform, with smooth ventricles and few convolutions. In the adult we find much better defined brain substance, with elaborate ventricles and more numerous convolutions, less regular in character. In the infant the peripheric nerves are larger in proportion than the nervous centres, excepting the sympathetic ganglia. The head of the new-born infant is one-fourth the length of the body and one-fifth the weight, and all the parts of the body have their most rapid growth within the first three years of life. Between the fifth and sixth years the base of the brain grows rapidly. The interior of the brain at this age also gives evidence of rapid growth. The receptive faculties here obtain power, and at this stage the foundation of education should be commenced slowly, gradually and cautiously, great care being bestowed to become acquainted with innate peculiarities of the childish brain, while being stamped with the first thoughtful impressions. From all the information on this subject, the seventh year is considered the period for the commencement of regular mental work, not however to strain the brain, but rather to bring about regular and gradual training of this intricate structure, having so many functions and taking so very important a part in the growth of the body. The brain is said to digest more than even the stomach in a sense, and certainly it governs largely the digestive process, and on that account how careful the teacher must be in observing the growth and vigor of youth, so necessary in the formative process of thought, the bases of the common sense principles of education. It is a well-known fact that children sent to school too young are more liable to the various diseases of childhood. Irregular temperature, defective muscular exercise, and tight lacing are powerful factors in the development of disease. Improper position, inclining to one side or the other while studying at the ordinary desk, frequently results in spinal deformity. How often it is the case that children when failing in health, when subjected to a skilled examination, are found to have a high shoulder and a curved spine, all of which have been permitted to pass unnoticed until advanced and seated as structural

disease. During school life, the points for close examination are numerous, and too great care cannot be taken in guiding the tiny structures of those frames, which afford such comfort in the home circle, and in time take their part in the intellectual development of national power and future greatness. To correct such difficulties and strengthen such sets of muscles as give evidence of failing power, McLaren, of Oxford, has established a gymnasium, upon the entry to which a close and careful examination is made and a systematic method of training is adopted, sufficient to meet the growing requirements of the system. Glasgow University has also its gymnasium, and, although not compulsory, its necessity is daily attracting closer inquiry. McNeill College is also adopting the same principle. The gymnastics of brain or body should not conflict with each other, and in the growth and development of power the results to be achieved will certainly be greater than by cramming, under a system of hot-house vegetation, through which both physical and intellectual vigor become warped, and practical usefulness for the varied spheres of life considerably lessened. Hospital statistics point out that the principal mortality in children has passed between the seventh and eighth year, which strengthens the argument very considerably as to the best time to enter school. Parents should not be anxious to convert schools into nurseries, and this point, I feel assured, has not escaped the attention of those whose immediate supervision the whole subject of school life is placed in our Dominion. To the ordinary observer, it must be apparent that the period between childhood and boyhood is one surrounded by constant anxiety and requiring more than ordinary care and watchfulness. For children under seven years of age the great proportion of the teaching should be conducted or conveyed as play; not as a play upon words, but a play, in the development process of germinal intellectual power. It is in these three years of childhood that education should not in any way conflict with health. Short hours of study, vigorous digestion, kept up by ample physical exercise, will assuredly bring about better results than the over-stimulation of young people by competitive examinations, inducing a degree of mental high pressure, which may make bright pupils in childhood; first in every class; laden with prizes, but oftentimes sapped as to the requisite physical power for the varied callings of after-life. Those who require to live by muscular power chiefly must develop the power early. In the cultivation of brain power direction should, as soon as possible, be given to the practical usefulness of the future. Thus preserved, child power, in time, becomes good man power, and in the march of intellectual progress affords strength and endurance to the future of our Dominion. In an address before the State Medical Society of New York, Dr. Agnew draws attention to the increasing prevalence of asthenopic, refractive, and neurotic difficulties among scholars at the present day. These diseases, he considers, are growing rapidly in schools, colleges, and other centres of civilization. In both England and Germany we have ample evidence of the same. The question arises, how are such diseases to be most judiciously guarded against? By careful scientific inspection, and the rigid enforcement of personal and local sanitation. Defective school architecture has much to do with bringing about defects of vision through unequal expansion and contraction of the pupils. Hence the importance of the proper adjustment of light in the school-room. To correct such difficulties, we are fortunate in having a city medical inspector, and the importance of such inspection cannot be over-estimated in carrying out efficiently the best working of our educational institutions. Dr. Cohn, of Breslau, examined the eyes of 10,000 children, and found that, in various degrees, there was a rapidly increasing near-sightedness, and in some of the higher classes the near-sighted students were nearly sixty per cent. of the scholars. From these facts it is quite