

then the pulse "ticks temperate music," the step is firm, the frame is upright, and all the functions of the body are those of a man. Now it is a remarkable fact, founded upon anatomical and physiological observations, that in infancy and early youth the nervous system is more perfectly and definitely formed than any other parts of the system, from which we may infer that the functions of the nervous system are especially necessary for the healthy growth and maintenance of the body. It has been shown that the desire for food is purely a nervous sensation, and is entirely dependent upon a proper supply of nervous power to the stomach. We all remember how acute the sensation of hunger was in our boyhood, and how unwelcome was the announcement, "dinner put back two hours." In those days we very rarely felt the bad effects of a hearty dinner, as manifested by inactivity and drowsiness, because the stomach had sufficient nervous supply to originate the desire for food, and likewise rapidly to digest and prepare for assimilation the food taken; and, as with the stomach, so with every other organ of the body whose functions were dependent upon a free supply of nervous energy. The action of the heart was soon accelerated, the cheek soon reddened from exercise or emotion, and the senses of taste, hearing, touch, &c. were acute, if not accurate. Another fact may be mentioned; it is, that in healthy infancy two-thirds of the child's existence is passed in sleep; and, even in boyhood and youth, the deprivation of rest and want of a proper period of sleep is hardly borne and acutely felt. During sleep the nervous system is not called upon for any manifestations beyond those which are directed to assist the various nutritive, assimilative, and secretory functions of the body. The senses are at rest, no objects are presented to excite the imagination, to exercise the mental powers, or to call forth any manifestation of the passions and emotions, and therefore the vital functions receive that which the growth and support of the body requires—an unlimited and uninterrupted supply of nervous energy. Even in the prime of life, sleep, rest, mental quietude, an idle brain, are absolutely necessary for the repair of the body and the restoration of its strength; how much more necessary then must sleep be, when not only the restoration, but the growth of the frame has to be sustained. After a time the body is so far built up, its organs and their functions sufficiently developed, and its integrity so far secured, that the brain can spare some of its nervous energy to be bestowed upon its own culture. The intellectual powers begin to manifest themselves, and, in addition to the functions of sensation and voluntary motion, the brain is sufficiently matured to evolve the faculty of thought, not that the germ and dawning of thought and intellect do not exist from very early days, but that they are in a rude and disconnected state, and not sufficiently defined to be made available, or to be directed to any useful purpose. In the paper before referred to, it was shown that there is sufficient of intellect, even in very early infancy, to require the fostering care of a parent to be guarded from hurtful impressions and bad examples, and to be prepared for future culture. What is now meant is a sufficient maturity of brain, which after the body has acquired a certain amount of healthy development and strength, is in a proper state to receive and appreciate regular and systematic education, and from eight to ten years of age is quite early enough to make the brain share its energies between our animal and intellectual existence.

We never saw a precocious child a healthy one; for although there might not be any evident disease, and his appetite was good, perhaps ravenous, still the shrunken limbs, the soft flabby muscles, the languid movements, and waxy complexion, plainly showed that the function of nutrition and assimilation, which are purely vital functions, were imperfectly performed. The brain monopolised the nervous energy; the body was impoverished. From the facts already stated, and from the remarks made when speaking of the effects of close mental application and confinement upon the adult constitution, it will be evident that the young are liable to suffer when placed in similar circumstances. Fortunately, however, there is in youth, not only a natural resiliency, a readiness quickly to change from the grave to the gay, and to play as well as to work in earnest; but there is also an aptitude in the constitution to recover speedily from depressing influences, and to maintain the bodily functions in their integrity under every untoward circumstance, the "*vis medicatrix naturæ*" exists in the plenitude of its power. Children and youths, when afflicted with acute diseases, generally recover rapidly when the complaint once begins to mitigate in its severity, and a short period of convalescence restores them to their accustomed health; whereas the same diseases occurring in the adult, or in the prime of life, are frequently for a long time doubtful as to their termination, and involving a long and tedious recovery. This healthy mental and physical reaction, natural to youth, is an important consideration to those who have the care of their education, for upon it the principle may be founded, that there is no harm in strict and close attention, during the period allotted to study, if there is likewise a sufficient time given for rest and relaxation.

Boys, when first sent to school—especially if they have not been previously subjected to control, or been called upon to exercise their mental powers—generally suffer from some form of gastric derange-

ment. This may be, and in some instances is, partly "home sickness;" but it may likewise be often traced to want of tone in the stomach itself, or to its becoming overloaded. The appetite for food does not at once accommodate itself to their altered circumstances, and the stomach is called upon to do its former amount of labour with a diminished supply of power wherewith to perform it: hence there is frequently nausea and vomiting, which is a healthy effort of nature to get rid of the offending matter; or else there is pain in the abdomen and diarrhoea, showing that some portion of the food has passed downwards in a crude and undigested state. These disordered states of the digestive organs are likewise often due to the cakes, sweetmeats, and other hurtful compounds with which a kind sister or fond mother furnishes the "school-box." Catarrhal and other affections of the organs of respiration are very common ailments during a boy's first school-year. The tone of his system generally is usually somewhat lowered by the change in his habits: he has less active exercise, is exposed to the effects of the different temperatures of the school-room and the play-ground, perspires freely when joining in the sports of his playmates, and does not get quite as much pure air as he has been accustomed to inhale—all these influences, together with the physical changes resulting from the determination of a portion of his nervous energy to the studies necessary for his education, exercise their effects, and render him more liable to suffer from atmospheric changes. But although these affections are sometimes attended with a considerable degree of fever, and appear sufficiently alarming, they generally yield to very simple treatment if noticed in their commencement. The eruptions and skin diseases from which schoolboys suffer may generally be traced to impurities in the blood, arising from the mal-assimilation of food, and the want of sufficient pure air to oxygenate the blood when passing through the lungs, and to inactivity and want of tone in the skin itself, by which its pores become clogged and its functions imperfectly performed. Much may be done to prevent the occurrences of these unsightly affections by the observance of precautions to be noticed by-and-by. There is such a thing among schoolboys as "shaming" to be ill; and although this morbid and depraved state of mind may generally be detected, still it is sometimes a great source of annoyance to the teacher. If the teacher will not believe in the existence of the boy's illness, his parents and friends often will; and if a bad state of health should accidentally supervene, the teacher is blamed for unkindness and want of sympathy, without deserving any censure whatever. Besides a disordered state of the system may be induced by fretfulness, discontent, pining, and ill-temper, and perhaps its first symptoms are manifested just before the boy is seen by his parents. The most prudent plan in these cases is to obtain the opinion of some experienced and conscientious practitioner, and to act upon it. It is true, we "cannot see a pain;" but from an examination of the pulse, the tongue, the state of the secretions, the appetite, and other evident indications, some idea may be gathered as to the general health of the body; and if, a long with these observations, the boy's natural disposition, his liking or repugnance to study, and his general conduct, are taken into consideration, an opinion may usually be formed not very far from the truth. A boy who will practise deceit of this kind is a pest to any scholastic establishment; for not only is he a constant source of anxiety to those to whose charge he is committed, but likewise he sets an example to his companions which they are apt to imitate, especially if they perceive that he receives any special consideration and indulgence. It must be a relief when the parents are sufficiently convinced of his ill health to remove him from school, for a boy who will for days, and perhaps weeks, practise a systematic falsehood, which requires a certain amount of ingenuity and self-denial to make it appear plausible, has a mind so depraved and an intellect so perverted that it is not likely that he will ever reflect any credit upon those who have the care of his education. He never can be treated with confidence, and he is another instance in which the "*suaviter in modo*" must give place to the "*fortiter in re*."

Thus, then, the causes and circumstances which influence the health, both of teacher and pupil, have been briefly considered. It has been shown that to possess the "*mens sana in corpore sano*" is (as Horace Mann observes) "the instrument" by which all good work and sound education is to be accomplished, and the various functions of the body most likely to be disordered by confinement and mental application have been noticed.

It is now proposed to suggest means by which health may be preserved under these circumstances, so that the body may be maintained in its integrity whilst at the same time the mind is cultivated and stored with knowledge.—*English Journal of Education.* W. P.

IS "TEACHING THE GRAVE OF THE INTELLECT?"

Many, doubtless, of the brotherhood to which it is my glory to belong—the ancient Society of "Schoolmasters"—will sympathize with me in an attempt to establish the negative of the question which stands at the head of this paper. I will premise that I heard it at the mouth of one who had himself been a schoolmaster, and who, by the