

and stupid all the afternoon. Now, whether this is true of early risers in the common acceptation of the word or not, I will not pretend to say; but it is too often true of the unhappy children who are forced to rise too early in their classes. They are conceited all the forenoon of life, and stupid all the afternoon. The vigor and freshness which should have been stored up for the purposes of the hard struggle for existence in practical life, have been washed out of them by precocious mental debauchery,—by book-gluttony and lesson bibbing. Their faculties are worn out by the strain put upon their callow brains, and they are demoralized by worthless childish triumphs before the real work of life begins. I have no compassion for sloth, but youth has more need for intellectual rest than age; and the cheerfulness, the tenacity of purpose, the power of work which make many a successful man what he is, must often be placed to the credit, not of his hours of industry, but to that of his hours of idleness in boyhood. Even the hardest worker of us all, if he has to deal with anything above mere details, will do well, now and again, to let his brain lie fallow for a space. The next crop of thought will certainly be all the fuller in the ear, and the weeds fewer.—*Prof. Huxley, in Popular Science Monthly.*

*Unwholesome Reading*.—The land is full of unhappy examples of the influence of unwholesome reading. High-colored and highly flavored fiction for young people crowds aside much that is heartily good and healthful. It behoves parents and guardians and teachers to look well to the reading of their charges. Men do not gather figs of thistles, nor can we expect a well-ordered life to come after a youth familiarized with blood and violence and crime.—*New York Times.*

*The Essentials*.—Our common schools attempt too much, and they attempt that in the wrong way. Their chief business is not to cram a little of everything into the heads of their pupils, but rather to train them to the right use of their powers, and thus lay the foundation and inspire the right disposition to make life a perpetual school. A few essential, fundamental things should be done, and well done. Their work should be limited to the essentials, and not until these are accomplished should the schools be allowed to undertake the desirable.—*Educational Weekly.*

Sewing is now taught to more than a thousand girls in our intermediate and primary schools, and is accomplishing a vast amount of good. Could this branch of instruction be extended to older girls in our grammar schools, who need such instruction, and could these be taught to cut and make garments as well as to sew, the value of this instruction would be very greatly enhanced. None but those who are familiar with the true condition of the hundreds of girls between the ages of twelve and fifteen, who are leaving our schools, can justly estimate how great a blessing such a practical skill would be to them.—Daniel Leach, LL. D., Supt. Schools, Providence, R. I.

*A New Telephone*.—A modification of the telephone is described in the *Moniteur Industriel Belge*. The receiving instrument is in all respects identical with that known as Professor Bell's. The transmitting instrument is thus constructed: The bobbin of wire in the ordinary instrument is dispensed with, and the magnetised core replaced by a bar or screw of copper. This is brought as closely as possible to the vibrating iron disk. The copper is connected with one pole of a battery, the other pole being to earth. The vibrating disk is connected with the line wire, which is attached at the other end to the receiving instrument, the circuit of course being completed through the earth. This form of telephone will sing, but will not articulate.

*A New Projectile*.—Messrs. Charles Cammell & Co., Cyclops Steel and Iron Works, Sheffield, have forwarded, for trial by the British Government, specimens of a new projectile from which important results are anticipated. It consists of a shot made of steel. In the manufacture of shot chilled cast iron has previously been used. Sir Joseph Whitworth has an invention for the use of steel for this purpose; but the specimens sent from the Cyclops Works differ from the Whitworth shot in one important particular. The Whitworth shell is cast solid and has to be bored; the Cyclops shell is cast in a mould and needs no boring. The company have been experimenting upon this speciality in war material for a considerable time, the experiments having been to the order of the British military authorities.

—No child up to the age of nine or ten should be confined at his tasks more than three hours a day. As he grows older, the number of hours should be increased. At seventeen and eighteen, the boy, if he has come to that period with strong nerves and healthy organization, might be employed at his tasks thirty hours per week without injury, and perhaps longer if a sufficient variety is presented. But, all through the age of childhood to boyhood, no restraints should be placed upon the physical growth, either directly or indirectly. The future of American life depends more for the healthiness of its moral and social tone upon the school life of the rising generation, than the superficial observer would probably admit.—*Boston Herald.*

—An article of a very interesting and instructive nature, on the physiological action of baths, was published in a late number of the *Lancet*. Summing up, the Writer notes that warm baths produce an effect upon the skin directly contrary to that which is brought about by cold water. The cutaneous vessels dilate immediately under the influence of the heat, and although the dilation is followed by a contraction, this contraction is seldom excessive, and the ultimate result of a warm bath is to increase the cutaneous circulation. The pulse and respiration are both quickened in the cold bath. The warm bath increases the temperature of the body, and by lessening the necessity for the interproduction of heat, it decreases the call which is made upon certain of the vital processes, and enables life to be sustained with a less expenditure of life. While a cold bath causes a certain stiffness of the muscles if continued too long, a warm bath relieves stiffness and fatigue. The final effect of both hot and cold baths, if their temperature be moderate, is the same, the difference being, to use the words of Braun, that "cold refreshes by stimulating the functions, heat by physically facilitating them, and in this lies the important difference between the cold water system and the thermal mode of treatment."

*A Dangerous Item*.—We do not remember in what journal we first saw the following extract as an *original* item; but, since it has recently been copied without comment by several contemporaries, attention should be directed to it. The article states that: "A poison of any conceivable description and degree of potency, which has been intentionally or accidentally swallowed, may be rendered almost instantly harmless by simply swallowing two gills of sweet oil. An individual with a very strong constitution should take nearly twice this quantity. This oil will most positively neutralize every form of vegetable, animal, or mineral poison with which the physicians and chemists are acquainted." The idea that sweet oil will neutralize such poisons as prussic acid, nicotine, strichnine, curare and a host of others less speedy in their action is almost too absurd to demand refutation. In some cases, when taken into the stomach in large quantities, it may serve to involve acrid and poisonous substances and mitigate their action, until the arrival of a physician with specifics shall relieve the patient from danger; but it is not to be used in all cases, for its administration, for instance, immediately after the swallowing of a corrosive mineral acid, such as oil of vitriol, would be followed by most fearful results. As the great multitude of poisons known to the physician and chemist are classified according to their varied mode of action on the animal economy, it is evident that the method of treatment in cases of poisoning must like advise vary. There can be no one specific for all. It is to be hoped that no one will be simple enough to try this antidote; for if he does, the absurd person who penned the quoted statement may have a human life to answer for.

—Education is the normal, and therefore harmonious development of all human faculties; the harmony is to be tested as all proportions are tried, by *ratio*; and that development is harmonious in which "any phase of ability is but a phase of general ability." A man, then, is completely educated when he naturally and readily discharges all of his functions as a human being; an individual is fully educated when he has reached the limit of skill possible to him as an individual; and a man is properly educated in proportion as his instruction leads him toward the full possession of his faculties. —*Am. Jour. of Ed.*

—The best results of Education ensue not from trying to put something called knowledge into our scholars, not simply from stowing away in compartments of the brain so much history