

life: (1) Children are taught history too soon. (2) The want of good books for beginners. (3) Inferior teachers. (4) The cramming for examinations. (5) The employment of the lecture system in teaching history too exclusively and for too long a time.—*Jour. of Women's Ed. Union.*

—A new nautical instrument, called a *navisphere*, has been brought before the French Academy by M. De Magnac. It is meant to indicate, without calculation and promptly, the names of the stars above the horizon at a given moment (with altitude and azimuth), the angle of route for going from one point to another by the arc of a great circle, and the distance between these points (approximately). Spherical triangles may also be solved with it. The instrument consists of two parts, the one a celestial sphere with stars marked on it, resting on a spherical zone, to which all possible positions may be given; the other comprises the system of the horizon, the meridian, and the vertical, represented by a circle, a semicircle, and a quarter of a circle in metal. With this system of arcs one can trace arcs of a great circle on the sphere, and measure their lengths, also measure the angles formed by two great circles. The second part of the apparatus is called a *metrosphere*. The experiments with the *navisphere*, made on board the Atlantic steamship *Washington*, appear to have been highly encouraging.

—A recently published French work, "Les Peuples Etranges," give some curious information about medicine among the Chinese. A regular gradation, it appears, is established among medicines; there are 120 remedies of the first order, holding the rank of sovereign in the medical empire; 120 of the second order, with rank of ministers or higher mandarins, and 125 of the third and last order, like subaltern officers. In China, as in all Eastern countries, the physicians are made an object of raillery in stories. Here is a specimen:—Round the doctor's abode wander continually the shades of those whom they have sent to the other world; they glide along the walls, or crouch round the door, hoping to get back the body which the medical art has taken from them. One day a merchant's son went out to seek a doctor for his brother. He found such a multitude of dolorous ghosts round the doors of the fashionable doctors that he shrank from entering, as he did not wish to see his brother swell the number of victims. He went through the whole town, and at length perceived the sign of a druggist's shop in a small obscure street. There were only two ghosts before the modest abode. The youth knocked resolutely; the *savant* opened. "How long have you practised medicine?" asked the young man. "Only since yesterday," was the reply!

*Signalling by Sunlight.*—The system of signalling by which Colonel Pearson, in Ekowe, has succeeded in communicating with the Commander-in-Chief in Zululand is, though well known by name, little understood. It consists in flashing an image of the sun to a distant receiving mirror, and spelling out words by the equivalents of the Morse dot and dash telegraph signals. Thus, the reflected image of the sun, if instantaneously extinguished, represents the dot, and an image allowed to exist for a second, say, represents the dash. If a brief flash represents the letter E, and a longer reflection the letter T, a short and long flash the letter A, and so on throughout the alphabet, it is easy while the sun shines to transmit a message to a distant station without any fear of the enemy being able to cut the communications. The system, which was developed by Mr. Morse, has been used for some years for telegraphing across the Straits of Gibraltar, but has been employed for the first time for war purposes in Afghanistan and Zululand. The instrument used is known as a heliostat, which, moved by clock work, keeps the sun as it were standing still in its mirror. A simple shutter is all the mechanism required for making the exposures long or short. The signalling is necessarily slow and tedious work, and the receiving mirror must be very closely watched to catch the true meaning of the flashes. It has been suggested that it is possible to make the flashes print themselves on a sensitive strip, thus obtaining a permanent record, free from accidental errors, but it is questionable whether the apparatus would not then become too complicated. The French have recently been experimenting with the view of utilising the electric light for night work with the heliostat, and they have, it is said, succeeded in reducing the requisite apparatus to portable dimensions.

*Care of Children's Eyes.*—It is no uncommon thing now to see or hear of mere children using eye-glasses, because of some defect of sight. Myopia (for near-sightedness) is the most common defect, and it is said to be manifestly increasing among school children, in other countries as well as in our own. The eyes of studious children are especially liable to suffer. Reading tires weak eyes, and eyes grow weak or diseased from too steady application to books. There are many disadvantages connected with learning the alphabet in very early childhood, and danger to the sight may be reckoned among them. The eyes of children like all their other organs and faculties, are adapted to the study of natural objects, or the phenomena of the world into which they have come. This study is play to them, and tends to healthy development of both mind and body. Their introduction to the fine long lines of little black letters in print should not come too early, or too rapidly—not until a love for nature and a faculty for observation have been so cultivated that reading will not be immoderately attractive. Then they must learn to read and study in a proper light, one that shines upon the book or paper, and not directly upon the eyes. A hanging lamp is much to be desired, and those who read in the evening can sit so that the light comes down upon the page from behind them. In gathering about the evening lamp upon the table, those who read should sit so that the light shines upon the book or paper from over the shoulder—the left shoulder if practicable. The eyes suffer severe strain from reading when lying down. One who is too tired to sit up, is too tired to read. When the body is too enfeebled by disease, the eyes are weak sympathetically, and should not be allowed close application. Reading in railway cars, or in any place where it is impossible to keep a steady focus for the sight, causes strain and injury to eyes. Children should be taught to avoid all these injurious practices. Most of the youthful cases of near-sightedness are those who begin to learn piano-playing when quite young, and it seems that the fixing of the sight upon the notes, while the energies are at the same time bent upon the schooling of the fingers, has a peculiar tendency to develop near-sightedness. Ought not a child's music lesson to be made very short, and the hours of practice few and of brief duration? We think so not only for the sake of the eyes, but also for the sake of the spinal column and the nervous system.

*Night Lamps.*—A writer calls the attention of all consumers of kerosene oil to the pernicious and unhealthy practice of using lamps filled with that article with the wicks turned down. The gas which should be consumed by the flame is by this means left heavily in the air, while the cost of the oil thus saved at present prices would scarcely be one dollar a year for the lamps of a household. His attention was called particularly to this custom while boarding in the country where kerosene was the only available light. A large family of children living in the same house were taken ill one night, and on going to the nursery the mother found the room nearly suffocating, with a lamp turned down; whereupon the physician forbade the use of a lamp at night, unless turned at full head. He says he could quote many cases, one of a young girl subject to fits of faintness, which, if not induced, were greatly increased by sleeping in a room with the lamp almost turned out. Besides the damage to health, it spoils the curtains, soils the mirrors, and windows, and gives the whole house an untidy air and an unwholesome odour.

*Too much Sleep.*—The effects of too much sleep are not less signal than those arising from its privation. The whole nervous system becomes blunted, so that the muscular energy is enfeebled and the sensations and moral and intellectual manifestations are obtunded. All the bad effects of inaction become developed. The functions are exerted with less energy, the digestion is torpid, the excretions are diminished, while, in some instances, the secretion of fat accumulates to an inordinate extent. The memory is impaired, the powers of imagination are dormant and the mind falls into a kind of hebetude, chiefly because the functions of the intellect are not sufficiently exerted when sleep is too prolonged or too often repeated. To sleep much is not necessarily to be a good sleeper. Generally they are the poorest sleepers who remain longest in bed—i. e., they awaken less refreshed than if the time of arising were earlier by an hour or two. While it is true that children and young people require more sleep than their elders, yet it should be the care of parents that overindulgence be not permitted.