

Intellectual Education.—A system of prizes, or emulation, and the fear of punishment, do not afford the strongest motives to intellectual exertion. Experience shows that places in a class may be dispensed with. It is possible to develop a taste for knowledge, a respect and attachment for teachers, and a sense of duty which will take the place of any lower motive in inducing the requisite amount of study.

In the higher departments of instruction it is better to confine the task of the teacher to giving instruction merely, placing the pupil under the charge of a special *director*, at times when he is not engaged in the class-room.

With the other, and more useful branches of instruction, correct ideas of natural history and phenomena should be communicated to children, and require, first, that they shall be duly trained to observation by calling the observing faculties into frequent exercise. Second, that they shall be made acquainted with the elements of natural history, especially in reference to familiar objects. Third, that the most familiar phenomena of nature, such as thunder and lightning, the rainbow, &c. ; and further, the most simple principles of the mechanic arts, trades, &c., should be explained to them. Fourth, they should be taught to draw, in connection with the other instruction. Accuracy of conception is favored by drawing, and it is a powerful aid to the memory. The most important principles of physiology, and their application to the preservation of health, should form a part of the instruction.

Physical Education.—Pure air, a suitable diet, regular exercise and repose, and a proper distribution of time, are the principal means of physical education. It is as essential that a pupil leave his studies during the time appropriated to relaxation, as that he study during the hours devoted to that purpose. Voluntary exercise is to be encouraged by providing suitable games, by affording opportunities for gardening, and by excursions, and by bathing. Regular gymnastic exercises should be insisted on as the means of developing the body; a healthy action of the bodily frame has an important influence on both mind and morals. Music is to be considered as a branch of physical education, having powerful moral influence. The succession of study, labor, musical instruction, or play, should be carefully attended to. The hours of sleep should be regulated by the age of the pupil. Experience has taught me that *indolence* in young persons is so directly opposite to their natural disposition to activity, that unless it is the consequence of bad education, it is almost invariably connected with some constitutional defect. The great art of education, therefore, consists in knowing how to occupy every moment of life in well-directed and useful activity of the youthful powers, in order that, as far as possible, nothing evil may find room to develop itself."

M. de Fellenberg died in 1846, and his family discontinued the educational establishments at Hofwyl, in 1848, except "the Poor School," which is now placed under a single teacher, and the pupils are employed in the extensive operations of the farm to acquire a practical knowledge of agriculture. But the principles developed by the distinguished philanthropist and educator, have become embodied in the educational institutions of his native country and of Europe. This is particularly true of the great aim of all his labors to develop all the faculties of our nature, physical, intellectual and moral, and to train and unite them into one harmonious system, which shall form the most perfect character of which the individual is susceptible, and thus prepare him for every period, and every sphere of action to which he may be called. — [Abridged from "Normal Schools, &c., by the Hon. H. Barnard, pp. 157-162.

RELIGIOUS EDUCATION.—As "the chief corner stone" of a religious education, the minds of the young should be very frequently directed towards our blessed Saviour. They may not be able to appreciate all his labours of love, to understand all his divine instructions, to comprehend all the gracious purposes of his death, and resurrection, and mediation; but I know that, at a very early age, they may become truly interested in his character and sufferings. I have seen the cheeks of an intelligent child suffused with tears whilst reading the indignities of the judgment-hall, and the awful sufferings of Calvary. And when the heart is thus impressed, every word from the lips of the gracious Being who has become such an object of affectionate interest, is received with reverence and respect.

For the Journal of Education.

ON SOME OF THE COLLATERAL ADVANTAGES WHICH MAY BE DERIVED FROM A WELL ORGANIZED SYSTEM OF PUBLIC SCHOOLS.

(Continued from page 129.)

In the last number of this Journal we stated our intention of endeavouring to indicate what and how to observe in Canada. It is almost needless to remark, that in any attempt to deduce general laws from the results of simultaneous observations made at different posts, over a wide tract of country, it is of the utmost importance that there should exist no difference whatever in the mode of observing and recording the phenomena to which meteorologists attach importance. It is equally essential that the collator and theorist should be able to place implicit reliance on the truthfulness of the observations they may be engaged in arranging and interpreting. With regard then to observers, trustworthiness is the first quality to be asked for; indeed without this character, their observations are worse than useless, they are highly injurious.

The third class of observers recognized by the Smithsonian Institution is composed of those who observe without instruments the progress of vegetation, the course of the winds, the time of rain-fall, and the state and appearance of the sky and atmosphere.

Quetelet in his instructions for the observation of periodic phenomena, published by the authority of the Royal Academy of Brussels, lays much stress upon the progress of vegetation. He considers that it is especially by means of the simultaneousness of observations made at a great number of stations, that these researches are invested with a high degree of importance. A single plant studied with care presents us with the most interesting facts. We are enabled to trace on the surface of the globe, synchronitic lines for its leafing, its flowering, its fruiting, &c. The lilac, for instance, flowers in the neighbourhood of Brussels on the 5th of May; we can easily conceive a line traced on the surface of the earth, upon which the flowering of this shrub occurs at the same period of time, as well as the lines on which its flowering is advanced or retarded, ten, twenty or thirty days. Quetelet asks, are these lines equidistant from one another? Are they analogous to the isothermal lines, or lines of equal temperature? What are the relations which exist between them? Again, have the lines of simultaneous flowering a parallelism with the lines relating to simultaneous leafing, or to other distinguishing characteristics in the development of the vegetable in question. We may suppose that while the lilac begins to flower at Toronto on the 2nd of June, there exist a series of places towards the North where this shrub only begins to push forth its leaves at that date—but the line which we may conceive to intersect those localities has a certain connection with the line of simultaneous flowering and fruiting to the South. We are led to inquire whether those localities, where the leafing of certain shrubs or vegetables takes place on the same day, witness also their flowering and fruiting at the same relative epoch. If not, what effect has the difference in point of duration upon the flowers or fruits of vegetables? What effect has it upon the sample and yield of grain-producing crops? What on root crops? What on pasture and hay? These are important questions, in their bearings upon agriculture: these are also especially important in Canada West, where vegetation advances some degrees to the north of its corresponding curve to the east and west of the great Lakes which ameliorate the climate of the peninsula portion of the Province—and thus give it very marked advantages in many respects over other portions of this continent, lying between the same parallels of latitude. We thus see how the most simple phenomena may afford us many curious and interesting results, and establish in a manner most conclusive and satisfactory the character of our climate in favourable comparison with those of surrounding countries; besides exhibiting a distinct outline of those harmonious laws which govern the existence of every thing that has life in the vegetable and animal worlds.

For the phenomena relating to the animal kingdom, and especially those which concern the migration of birds of passage, afford results equally remarkable and interesting. To the honour of the Regents of the University of the State of New York be it spoken, that they are the only scientific body who have for a considerable period of time (26 years) given due attention to a system of simultaneous observations extending over a large extent of country, and have at the same time published collected results from year to year.