

nations; we see social and political conditions abroad, and return to find that we possess all that they do, without their great objectionable features.

*Thursday, March 29th.*—The Institute resumed its session, when the following subjects were taken up seriatim:—

By J. George Hodgins, LL.D.:—"Recent amendments to the School Law."

By W. R. Riddell, B.A.:—"The First Book of Euclid."

By Rev. Mr. Carroll:—"Past and present state of Education, with advice to teachers."

Dr. Law, B.A. then delivered an admirable lecture on Geology, of which the following is a synopsis:—

The introduction showed the relation of Geology to the other sciences, as Chemistry, Mechanics, Botany, Zoology and Mineralogy, to be that of mutual dependence. Then the crust of the earth was described, consisting essentially of rocks, the nature and character of which, and the lessons that may be read from them in the great pages of nature were then explained, after which were taken up seriatim, the principle geological agencies which are and have been at work in remodelling the crust and surface of the earth, the main division of which is as follows, viz.: the igneous, the aqueous, and the organic. These main divisions were again sub-divided: 1st, the aqueous into marine and non marine, the latter including the atmospheric agencies of rain and frost, rivers, lakes, springs and glaciers—the former including icebergs, waves, tides and oceanic currents. After dwelling at some length upon these various agencies and showing their great tendency to be level all the inequalities of the earth's surface, the next division, namely:—the igneous, was shown to have the directly opposite tendency, that of elevating the surface of the earth into mountain chains, &c. These agencies consist of volcanoes, earthquakes, thermal springs, &c. Several instances of these mighty influences were cited to illustrate their conduct and the phenomena which attend them in their action in modifying the surface of the earth.

Proceeding to the third and last division—the organic,—a description of the coral and the huge structures erected by that tiny insect, was given. The dangers to the mariner and the extent of these coral reefs were pointed out, some reefs extending many hundreds of miles.

The lecture concluded by a fine quotation from Montgomery on the coral insect and its work, the last lines of which were as follows:—

"Compared with this amazing edifice,  
Raised by the weakest creatures in existence,  
What are the works of intellectual man,  
His temples, palaces and sepulchres?  
Dust in the balance, atoms in the gale,  
Compared with these achievements in the deep."

The concluding subject was by Mr. John H. McFaul:—"Symbolic Arithmetic."

On motion it was resolved that Dr. Hodgins, Prof. Riddell and the Rev. J. Carroll, be elected Honorary members of the Institute, a cordial vote of thanks being also given for their invaluable assistance on the occasion.

Opportunities were afforded the teachers and trustees present of questioning Dr. Hodgins on the school law, many availing themselves of the privilege and receiving satisfactory information. The Deputy Minister, on returning thanks to the members of the Institute, expressed himself delighted with the practical nature of the teaching, and complimented the Inspector, Mr. Bigg, on the manner in which he handled the subject of history, advising the teachers to adopt the plan recommended, both in imparting and acquiring the information sought.

At 8 P.M., at Dufferin Hall, which was crowded, the last lecture of the course was delivered.

The Revd. Father Casey was in the chair. The chairman introduced the lecturer, W. R. Riddell, B.A., B.Sc., Mathematical Master, Normal School, whose subject was "The stuff that dreams are made of."

The lecture began by an investigation of the manner in which the human body and mind are connected, without pausing to speak of the ideas on this point of the ancient philosophers, the conclusions of modern science were given, viz.: that the body and mind are connected through the cerebro spinal nervous system. The necessity of sleep was then discussed, and shown to be a consequence of the weariness of this system. As to the immediate physical cause of sleep, three theories were mentioned: (1) the hyperæmic; (2) anaemic, which considers sleep as a consequence of an excess or deficit respectively of blood in the brain, and (3) "Sommer's chemical theory." The second of these theories was adopted. The condition of the mind was then considered, and the lecturer gave his reasons for supposing, contrary to most metaphysicians, that the mind during normal sleep is not absolutely at rest, but in a semi-passive way occupied upon one idea. An objective impulse would

partially destroy this inane condition of the mind by causing a vibration of a portion of the brain, and thereby determining a flow of blood to the part. The sensation produced by such impulse would be referred to a physical cause which had previously produced a similar sensation, reason being suspended and observation impossible, the mind by association of ideas would run from thought to thought. The total absence of all sense of incongruity was shewn to be the result of the mind considering one conception by itself, and not in connection with the data supplied by observation. After alluding to the absence of moral sense in dreaming, the lecturer spoke of "dreams coming true," and endeavoured to explain this on scientific principles. The lecture was concluded by a brief glance at the opinions of the ancients on the origin of dreams, Virgil and Homer being quoted as authority for the great regard paid to premonitions supposed to be thus received, and the marked respect in which interpreters of dreams were held.

The Town Council of Gananoque displayed its liberality by defraying all expenses connected with the Hall.

The next meeting was appointed to be held at Brockville, in September or October, to be determined at a subsequent meeting of the Directors, an earlier meeting not being deemed necessary, as the teachers were desirous of utilizing and attending the three days' session of the Eastern Provincial Association, to be held at Brockville in August, and of which due notice will be given.

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