

We cannot help remarking the use of the word science as an adjective, both in the title page and throughout the lecture is a serious blemish. "Science education," "science teaching," "science school," "science workers," and "science study," are expressions which, to say the least of them, savor of pedantry. They do not however seriously detract from the value of the lecture, and we only allude to them by way of protest against the introduction of expressions of this kind into our Canadian literature.

Dr. Dawson confines his attention to physical or natural science, which is susceptible of experiment, and is therefore founded on experimental evidence. He protests against the idea of science being taught simply from class books, and insists on the necessity of bringing the students into actual contact with the objects of study, and training them to the modes of obtaining the practical results of observation and experiment. After giving an account of the efforts put forth in Great Britain and other countries to promote education in the sciences, Dr. Dawson devoted the close of his lecture to the consideration of the necessity of schools of practical science in Canada. With mining resources of great value, there is no school where a young Canadian can obtain a competent knowledge of metallurgy and mining. With immense public works and enormous surveys of new territories, very little is done for the training of civil engineers and surveyors. We are equally defective in the means and appliances for teaching mechanical engineering, practical chemistry and the art of design. Our young men are practically shut out from the opportunity of attaining a professional education except in the schools of theology, medicine and law.

In order to meet the necessities of the country, it is necessary that the study of physical and practical science should form an essential part of all our liberal education, and that provision should be made in connection with our present colleges and universities for special duties designed to qualify students for particular scientific professions. From the time of his entrance on his duties as Principal of the McGill University, Dr. Dawson has set before him as his great life work the application of the educational institutions of Canada to the training of our young men in scientific methods necessary to qualify them for the applications of science to art. In his efforts to promote education in science we heartily bid him God speed.

We call special attention to the value of education in the elements of natural and physical science in our common schools. Even where children do not pursue these studies with a view to a professional life, the habits of observation and experiment, and the knowledge of causes and effects which such

an education will develop, would open up a thousand sources of gratification, which tend alike to the strengthening of the intellectual powers and to the cultivation and regulation of the moral affections. Ours is a world full of beauty, yet how few of the multitudes who spend a life among its beauties recognize them, or realise how much they minister to human happiness? One man walks abroad in the fields and tramples unconsciously upon flowers, the beauty and fragrance of which fill another with delight. These have the organs of sense alike, but they have not alike the power to enjoy. To teach our youth, to relish a beautiful object in nature, to train them in the observation of the simple and common phenomena of the outer world, will not only open up to them an unfailing source of pleasure, but will tend to enlighten the understanding, to correct the temper, to form the manners and habits of our youth, and so fit them for usefulness in their future station; and it may, in not a few cases, develop that special aptitude for observation and perception and method which fit men to pursue original investigations, and which according to the bent of mind in each, will enable some to add to our scientific knowledge and others to utilize our natural resources and improve our arts and manufactures.

ART GLEANINGS.

The Egyptians 2,000 years ago made as fine linen cloth as any that is made now.

In France they are building two-story railroad cars.

Chloride of aluminum is now regarded as a much more efficient disinfectant than even carbolic acid.

The iron resources of Russia exceeds those of any other country in the world: the iron is of every variety, and is always near the surface.

In the up-river countries of Maine, old-fashioned spinning wheels are still so much used that Bangor does a large wholesale business in them.

An exchange tells us that pulverized borax is the best cockroach exterminator yet discovered. It is easy to test the matter, if you have the roaches to experiment on.

The Japanese manufacture a paper which closely resembles leather. The surface is an imitation of a finished skin, and the paper has firmness and elasticity, and can be washed without injury.

A new arrangement of boiler and flues has been successfully tested at Barnsley, England, for preventing the formation of smoke and for burning gases; the saving in fuel was one-third.

Almost any kind of cotton cloth, tweed, etc., it is said can be made water-proof by saturating it in a solution of equal parts of sugar of lead and alum—dissolved in soft water. For many purposes, like farmers' overalls, summer coats, etc., it is a useful expedient.

At the Norfolk Works, Sheffield, a casting has been made of a single piece of steel, for the beam