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EDITORIAL.

An Important Educational Announcement.

Nature Study and Domestic Science Training at the Ontario Agricultural College.

Two or three years ago, Sir William Macdonald, the Montreal millionaire, with a generosity marked by equal wisdom and patriotism, devoted \$75,000 to the purpose of introducing Manual Training into the Public Schools of Canada. Later, he gave \$10,000 to provide prizes for boys and girls in the seed-grain competition. Last week his munificence received another practical exemplification in his placing the sum of \$125,000 at the disposal of the Ontario Government, to be devoted to the furtherance of Nature Study and Domestic Science in the Public Schools.

We have not at hand the text of the conditions governing the last gift, save the semi-official announcement that it is to be expended, in part at least, in the erection of suitable buildings in connection with the Agricultural College at Guelph, in which instruction will be given to teachers in Nature Study and to women in Domestic Science in relation to agricultural life; and that the donor hopes by this means to prepare teachers to train children to understand and love nature so that life on the farm, for both men and women, will become attractive, enjoyable, and successful.

The acceptance of the gift places a heavy responsibility on the shoulders of its immediate recipients, since the use of it will be watched and criticized by the farmers and educators of the country as well as by the maker of the gift. There will be no disagreement as to the laudability of the purpose to which it is designated, but there will be strongly-marked diversity of opinion as to the best means of accomplishing such purpose.

In the crisis of Prussia's humiliation succeeding the disastrous days of Jena and Friedland, the schoolmaster, Fichte, taught the King and his counsellors that what they would desire to see in the nation's life they must plant in the nation's school. Frederick William, convinced of the truth, declared that although territory, power and prestige are lost, his people must strive to regain them by acquiring intellectual and moral power; national education was immediately elevated to the rank of a separate and important branch of state administration, and to-day the world stands astonished at the progress Germany has made as a result of the adoption of that wise policy. There are a good many people in Canada who, with Sir William Macdonald, believe in Fichte's doctrine, and who think also that our present educational system is not sowing the seed in the schools best adapted to the life of this nation. It is foolish to close our eyes to the fact that the traditional school—the school of the present day—does not prepare for life on the farm or in the factory so well as it prepares for a non-industrial life. The "Farmer's Advocate" does not desire to see our Public and High Schools converted into trade schools. It claims as much general culture for the farmer and mechanic as for the merchant or teacher, but it contends that without sacrificing literary culture or mathematical training in the least degree, methods of teaching and subject matter of in-

struction can be so modified as to prepare the future industrialist—be he farmer or manufacturer, lumberman or miner—for far more efficient living, for a life richer in enjoyment and usefulness. At the present moment, to mention one particular, there are hundreds of young men and women preparing to become teachers in the Public Schools of the Province of Ontario who are spending a great deal of time in memorizing the vocabularies, conjugations and declensions of Latin, French, and German. Few of them will go far enough to turn this learning to practical account, while the disciplinary or cultural value of the smattering is insignificant compared with what they would derive from a similar investment of time and effort in a more extended knowledge than they are getting of general history and geography, English literature and those subjects that Sir William Macdonald desires to see taught in the new school about to be founded. The quarter of a million that he is giving to the cause of elementary education in this country is witness not only of his wise and princely generosity, but also of his conviction that the present system is leaving an important work undone.

But, "What is Nature Study, anyway?" will be asked, and the answers will be various. The term is even more likely to be misunderstood than "Manual Training," which no longer ago than last year a Canadian university principal confused with Technical Education.

The new educationist says that the proper center of study is the child, but a more common opinion is that there are two centers, viz., man and nature. The man-studies, or humanities, as they are commonly called, are such as language, literature, history and ethics, while the nature-studies are those based on the objective environment—the sciences. The formal or expression studies—reading, drawing, writing, numbering, etc.—are or should be subsidiary to the two groups named, although they are pretty commonly given paramount place in our Public Schools.

Man, in his attempts to gain knowledge of nature, divides it into more or less related groups of objects, and the truths that he has discovered pertaining to each is called a science. Botany is the science of plants, entomology of insects, astronomy of the celestial bodies, and so on through a long and increasing list. Agriculture, domestic economy and the various other trades are applications of the truths taught in the pure sciences, and may be called applied sciences. In each of the sciences there are truths within the comprehension of the little child as well as those that tax the understanding of the ablest thinkers. To many people nature study means simply elementary science, and nature study taught under the aegis of an agricultural college is likely to be the elements of the sciences peculiarly applicable to agriculture.

This rather prevalent idea is true only thus far, that elementary science is for the most part the subject matter of nature study. Prof. Bailey, of Cornell, happily says that when a teacher is thinking mostly of his subject he is teaching science, but when he is teaching genuine nature study he is thinking mostly of the child. To put the child into right relations with his environment, or surroundings, and to give him power to make the best use of his faculties, are the primary purposes of nature study; the scientific knowledge acquired is secondary. The "how" the fact is taught is more important than the

"what." It is the method of teaching far more than the subject-matter of his lessons that will measure the efficiency of a nature-study teacher. A nature-study school will fail to accomplish the purpose of its existence if it is not a real model school in which the students-in-training will be directed in the actual practice of teaching children. Not every one who knows the alphabet can teach it successfully; there is even a wider step between knowing elementary science and teaching nature study. It is vastly easier to teach a grown person a fact in science than to teach him how to deal with that fact in training a class of young children. Lectures on learning to ride a bicycle would be about as useful in acquiring that art as lectures on the pedagogics of elementary science would be in acquiring the art of teaching nature study. If there is not to be actual model-school practice, then the school should be called an elementary-science school, and it will but do the work which should be done in every High School and Collegiate Institute that pretends to give the academic preparation for intending teachers.

But, again, nature study correlates with reading, mathematics, English composition, geography, and literature; indeed, they correlate so intimately that they must go hand-in-hand to avert serious harm to both classes of studies and consequently to the child. If the intimate unity and interdependence of the man-studies and the nature-studies be adequately realized, and the proper methods of teaching them be acquired by practice, the new Nature-study School for teachers will be nothing short of a Normal School. There is no valid reason why the existing Normal Schools at London, Toronto and Ottawa should not be made as genuine nature-study schools as the one projected at Guelph, and, conversely, that the latter should not be as real a Normal School as any of the former. If this desirable possibility become a fact, Sir William Macdonald's generous gift will produce rich and far-reaching results. It will enlarge the usefulness of all the Normal and Model Schools, hasten reform of the High School course for Public School teachers' certificates, and in a short time improve the standard of teaching throughout the Public Schools of the country. But an isolated academic course in science in the new school will fall far short of these glorious possibilities. Recent addresses of the Hon. Mr. Harcourt, Minister of Education, show that he is abreast of the best thought in the matter of adapting the system of education to the needs of the country, a fact that increases our hopes of great things from the proposed school.

Note.—Since the foregoing article was put in type, an outline of the conditions governing the employment of Sir Wm. Macdonald's gift has been published, but it is not yet made clear whether or not the attendants at the school are to receive practice in teaching nature-study work. We will deal further with the subject in next issue. There is also an intimation of legislation in the Province of Ontario this season, making it permissible on the part of groups of rural school sections to consolidate and establish graded schools, which would mean discarding the present small schools in use, the pupils all attending one large, graded school, with more modern building and equipment and larger staff. What say our readers to this proposition? It is said to be in operation successfully in several Western States localities.