Macdonald Institute, Guelph.

By Miss Georgina G. L. Dickson.

In January of 1902, Sir Wm. Macdonald, of Montreal, assisted by Prof. James Robertson, of Ottawa, made an offer of assistance to carry out a plan for the improvement of education in rural schools, and for the establishment of courses of instruction and training in domestic science and nature study at the Ontario Agricultural College, Guelph. The plan included the establishment of a model consolidated school in Ontario, and one in each of the other four provinces of the Dominion, the providing of courses of study and training in nature study for teachers of rural schools and for instruction and training in domestic science.

To give effect to the plan, the sum of \$175,000 was offered to the province of Ontario, and accepted. As a result of this gift there was erected as a part of the Ontario Agricultural College at Guelph, Macdonald Hall, a residence for lady students, and Macdonald Institute to give instruction in different branches of domestic science, nature study and manual training.

Domestic science in all its branches is thoroughly taught both as a preparation for house-keeping and teaching; but it is of the nature study department that I wish to speak more particularly.

Nature study is now engaging the attention of educators everywhere, both as a necessary part of a general education and as a preparation for intelligent agriculture. To equip Canadian teachers with the necessary knowledge and skill for the teaching of nature study was one of the aims of the Macdonald Institute.

The department aimed especially to prepare teachers for taking up the nature study in connection with school gardening. The classes were under the control of the professor of nature study, assisted by the different professors of the college, and as often as possible the services of special lecturers along nature study lines were engaged.

In regard to school gardening, each student was required to plan and keep a school garden plot, to keep a garden record, to study the growth of different plants, the control of weeds, insects, etc. As opportunity offered, any school gardens in operation within reach were visited and methods of work among the children observed. For this purpose the school garden of the Macdonald consolidated school was most convenient.

Besides the school gardening proper, the other branches of nature study were taken up, through the medium of field excursions, lectures, observation, and class and individual experiments.

Part of each day was devoted to a field excursion, aiming at a practical acquaintance with the common birds, trees and shrubs, wild flowers, insects, weeds, rocks, etc.

Besides the field work, courses of lectures were given by the college professors along particular lines of nature study, as botany, chemistry of soils, entomology, astronomy, etc., while all spare time was taken up in laboratory work.

Each student was required to prepare a small nature study collection, including wild flowers, grasses, leaves and fruits of trees, noxious weed seeds, groups of insects to illustrate the principal orders, etc. The necessary apparatus for this purpose was prepared by the students under the direction of the teacher in manual training.

Outside of the regular line of work, each student was supposed to be carrying on experiments in any line which possessed particular interest, and such as could be made use of in teaching the subject in a rural school. In addition, each student took full and accurate notes on all lectures, field excursions and experiments, illustrated as fully as possible by drawings.

Visits were made to the various departments of the college, and the work of each observed. Visits were also made to any schools within reach, which gave an excellent opportunity for students from the various provinces to compare teaching methods and to exchange ideas. From time to time visits were made to the manufactories of the city.

One morning each week was devoted to manual training, one to art, and an hour to literary work.

The work was interspersed with very pleasant outings, which gave an opportunity of acquiring a knowledge of the surrounding country. These outings, under the direction of the professor, were really a part of the course. In this connection the most interesting trip was a visit to Niagara Falls and the surrounding country, taking in such historic places as Queenston Heights and the battlefield of Lundy's Lane.

The informality of the course served to make it more beneficial to teachers, as the interchange of ideas along all lines was encouraged, while the shortness of the course made it mainly suggestive. Ideas were given as to how the teacher could study with the pupil making use of the material at hand.