

fact, that at the Ontario Agricultural College a great deal of opportunity is given for such individual observation, experiment, and practice.

For example, in the department of *live stock practice* not only, as has been said, are many specimens of pure breeds kept for observation and study; but the students are required to make their own observations upon them and draw their own conclusions; and neighboring herds and flocks are frequently visited for purposes of observation and study as well. The opportunities for useful, practical, individual work in this department are unlimited, and we are glad to know that the department is in the hands of an instructor (Mr. Day) who thoroughly believes in modern methods of teaching.

In fact, teaching in the old sense of the word, is not what is needed at all. It is carefully prepared suggestions as to study; carefully prepared and logically arranged courses of reading and observation, first mapped out before the students and afterwards thoroughly watched; carefully prepared questions to be first investigated, and then answered; and careful reading and valuating and criticising of the results of these studies and observations when expressed in writing by the students. This, indeed, is the sort of teaching which should be done in all the departments of the course; not merely in the purely scientific branches of study, but in the practical departments as well, and we are informed that it is the sort of teaching which is largely pursued.

Resuming our examination of the facilities provided at the college for individual observation and practical experiments work in the various departments of instruction, we find that in *horticulture* the students have not only the advantage of having before them specimens in actual cultivation of all the varieties of useful trees and shrubs, especially fruit-bearing ones, with gardens for small fruits, vegetables, and flowers, and conservatories, greenhouses, forcing-houses, etc.,

where every sort of horticultural operation is practically performed; but they are also required to assist in all the work of caring for and maintaining this complex cultivation. Not only so, but they are given specific lessons in the arts of slipping, potting, bedding, budding, grafting, pollination, crossing, hybridizing, mulching, manuring, transplanting, spraying, pruning, etc., and required to practice these arts for themselves, and to explain orally and in writing the scientific principles upon which these arts are based.

In *agriculture proper*, a somewhat similar course is pursued; although it seems to us that the department of agriculture, including, as it does, live stock practice also, is overweighed. The practical instruction given in agriculture, so far as it goes, is of the highest character, being the results of the experience of one of the very best practical farmers that Canada has ever produced, the present farm superintendent, Mr. Wm. Rennie. The students also, in their manual work on the farm, get familiar unconsciously with the farm superintendent's methods, and receive the benefit of his personal supervision and direction; but we should like to see the teaching side of this department strengthened, and the scien-



Practical Work in the Bacteriological Department.
Students at work with their microscopes in vegetable histology, under the direction of Mr. F. C. Harrison.

tific principles upon which the farm superintendent's methods are based more practically demonstrated than they appear to us to be.

In *veterinary science* the work is very practical in its scope and aim, and perhaps as practical as