

is no loss of moisture through them in spring. Leguminous plants are, on the whole, best for cover crops, as they take nitrogen from the air, but often oats and rape are used to good advantage.

Arrangements are being made for the Provincial Fruit, Flower and Honey Show in Toronto during the second week in November, in the two big rinks on Church Street. The fruit and honey exhibits will be shown in one rink, while the flowers will be on view in the second. A display of machinery and implements used in the cultivation of fruit and flowers will be made in an open piece of land between the two rinks. The prizes offered for the floral section amount to over \$1,200. The fruit-growers will expend over \$1,000 in their part of the show. The Fruit-growers' Association will hold its annual convention, as will also the Beekeepers' Association. There will also be a meeting of delegates from the Horticultural Societies in the Province, as a result of which it is expected that a Provincial Horticultural Association will be formed. The management of this show will be largely in the hands of H. B. Cowan, of Toronto, Provincial Superintendent of Agricultural Societies, to whom any requests for information may be sent.

DAIRY.

An English Agricultural College.

Reading College and British Dairy Institute—Excellent Home Dairy Training.

(Special correspondence to the "Farmer's Advocate.")

On my way to London, I stopped off at Reading, Berkshire County, to inspect the Agricultural Department of the University College located there. It was an interesting visit. To one who had received the major portion of instruction at Ontario's most excellent institution, who has also spent six years as a student and instructor in two of the best agricultural colleges in the United States, nothing could be more interesting than an insight of the methods and work of an English institution.

England has something in the neighborhood of a dozen colleges or institutes where agriculture and its kindred branches are demonstrated in a more or less scientific and practical manner to the youth. All of these colleges or institutes are, in a measure, supported and directed by the Royal Agricultural Society. The remainder of the support is derived from tuition fees, and fees obtained for work of a scientific nature. The majority of the colleges have been established in connection with some college or university, or, at least, affiliated with one in some way. In this respect many of them are not very much different from the so-called agricultural colleges connected with the State Universities of several of the States of the Union.

The institution at Reading was founded in June, 1892, with the co-operation of the House of Christ Church, Oxford University. It was incorporated in 1896. By authority of decrees of the University of Oxford, a joint committee, consisting of representatives of the Oxford delegacy for extension teaching, of University College, Reading, and the Royal Agricultural Society, supervises the instruction and examinations in agriculture, horticulture and aviculture, and awards diplomas and certificates.

The college at Reading is affiliated with the University of Oxford, and consists of five distinct departments—letters and science, music, fine arts, agriculture and horticulture. Most fortunate for the college, and for the institute also, is the fact that the British Dairy Institute is located in part of the same building. This affords excellent facilities for practical instruction along dairy lines. In all the departments of the institution there are something in the neighborhood of one thousand students. Only a small portion of these, some one hundred and fifty, are enrolled in the Department of Agriculture. In this connection I shall confine myself to the work of the Department of Agriculture and the British Dairy Institute, which might quite properly be termed a division of the Agricultural Department. This work is new and meager, when compared with similar branches in the leading American institutions. At the present time, three quite distinct lines are being drawn: First, the division of practical agriculture, which includes live stock, field crops and grasses; second, the division of dairying, which includes the manufacture of butter and cheese, the care of milk, and the feeding, breeding and care and management of the dairy herd; third, the division of poultry, which includes the breeding, feeding and marketing of the various classes of poultry.

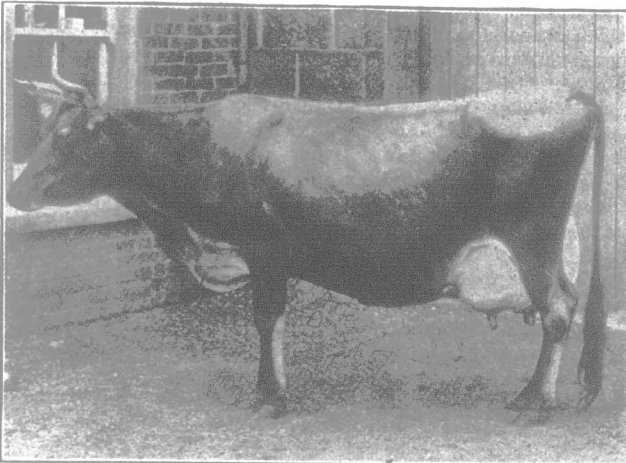
THE AGRICULTURAL DEPARTMENT

is under the supervision of Professor John Percival, whose college title is that of Agriculture and Agricultural Botany. He is a very pleasing gentleman, and has a very fine knowledge of botany. The more practical side of the agricultural work is conducted by Prof. John O. Peet. He seems to be in sympathy with his work, thus should do much good. These two gentlemen teach the botany, field crops, and the live-stock work. Up to the present time they have been very much handicapped in their work, due to the fact that the college did not have enough land at its command. This objection will be removed in the near future, as

they have just purchased a new farm. This will provide grounds for field crop experiments, also an opportunity of carrying some live stock, a privilege which they have in the past been denied.

Three courses are open to the agricultural student: First, a course leading to the degree of Bachelor of Science. This requires three years of regular prescribed college work, largely taken from the science course. There is hardly enough agriculture in this course to distinguish it from a science course. This course is intended for those who hope to become teachers in agriculture, specialist farmers, or estate agents.

The second course leads to the diploma in agricul-



Jersey Cow, Blue Bell, Imp.

Aged 14 years. Photographed six months after calving. Sold for \$3,600 at the T. S. Cooper sale, Coopersburg, Pa., May 30, 1904.

ture, awarded at the end of a two years' course in scientific and practical agriculture, and designed for students who hereafter may become tenant farmers, farm managers and land agents, landlords, or be engaged in occupations connected with agriculture.

The third course leads to a certificate in agriculture, awarded at the end of a six-months' course (October to March) in strictly agricultural study. It is designed for students who will hereafter be practical farmers, and who are unable to take the two-year or diploma course.

The work given in these courses would not prove very attractive in an American institution. From all appearances it is not any too popular here. The field crop work is very largely studied and taught from a botanical point of view. The really practical application, which is so attractive and eminently useful, is in a large measure lost sight of. Perhaps the lack of a college farm might in a large measure be responsible for the existing conditions. In this respect this college is in very much the same position as were many of the American colleges a few years ago; in fact, some of them are not very far removed from it at present. They apparently believed that a course in agriculture should consist of those branches of study which are furthest removed from the actual life and environments of the boy who comes from the farm. Perhaps it may indicate learnedness on the part of the Professor, to as-

sound the youth with terms which he has never heard of before, but history shows that it will not attract him as would a course where science and practice are always combined.

LIVE-STOCK DEPARTMENT.

It is impossible to teach the judging, breeding, feeding and management of animals in a recitation room from lectures, no matter how well they may be prepared. It is absolutely necessary to have the animals before the class. They must examine the animals, pass their judgment upon them, and receive corrections when necessary. Continuous work of this kind will make a stock judge. No other method, in which the animal is omitted, is of any use. In the study of the breeds the same thing is true. The student who has seen a Tamworth pig will always remember the same as being red in color, having a long nose, and other characteristics of the breed. He will be able ever afterwards to pick one out at a moment's glance. No teacher, without the animal, could stamp so firmly upon the mind of the student the characteristics of the breed. Then, too, in the study of animal breeding, animals are necessary to illustrate such terms as masculinity, femininity, and other terms which are indispensable. It is also impossible for a man who has not or is not in direct charge of the feeding and management of animals, to teach these subjects in a useful manner. He may have a knowledge of the chemistry of feedstuffs, but that is just one of the necessary things with which the teacher must be perfectly familiar. The cost of feedstuffs, their palatability, and the different methods of preparation and combination can be best learned in the feed lot.

THE POULTRY DEPARTMENT

is under the management of Mr. Edward Brown, Secretary of the National Poultry Organization Society, London, who is ably assisted by his two sons, Messrs. E. T. and W. Brown. The work in this department is of a different nature to that just described. It is taken up from both the theoretical and practical side. It is a most useful work, and will be of great value to the poultry interests of England. The practical work is given on the college poultry farm, which is located a few miles from the college. It is the intention of those in charge to have students desiring work remain during the vacation periods, and spend the entire time on the farm. Some four different courses are offered in this department. The first, a ten-weeks' course, given from April 21st to June 29th, at the college and on the farm; second, a five-weeks' course, at the college and on the farm; the third, a twelve-weeks' course, the first seven of which must be taken at the farm, and the last five at the college; the fourth course provides for practical work only for periods of three or six months, to be taken at the college poultry farm, by special arrangement as vacancies occur. Examinations are held and certificates granted for courses one and two. The work is well outlined, and takes up in a systematic manner the study of the breeds, the feeding and management of the different classes of poultry, the houses, egg production, preparation and dressing of fowls for market, poultry diseases, and almost every detail of the work which would in any way be helpful to poultry raisers. True it is that some of our American colleges have given attention to poultry; the great majority, for some reason or other, have neglected this valuable enterprise. It would mean millions of dollars to our people if each and every Province in Canada, and each and every State in the Union, had such a



British Dairymaids in Training at the British Dairy Institute, Reading, England.