

the development of new methods in hygrometry. (3) On the comparison of some simple anemometers under open air conditions.

Poultry Husbandry.—*I.—Green Duck Production.*—In a series of experiments in the production of green ducks for market it was found that an average of 3.073 lb. of grain were required to produce one pound of gain in flesh production in Pekin ducks up to eight weeks of age, at the end of which time the ducks averaged 3.712 lb. each in weight. The growth of the ducks proceeded regularly as is shown in the following weekly average weights in lb. from hatching time to the end of the eighth week:—.103, .166, .353, .519, .876, 1.564, 2.153, 2.153, 2.851, 3.712. *II.—Roaster Production.*—In a series of experiments in the production of roasters for market the experiments in 1917 involved a comparison of a ten day and a fourteen day period of fattening, a comparison of two fattening mashes and a determination of the amount of grain required to produce one pound of gain in flesh production. In the ten day period an average of 3.4329 lb. of grain and in the fourteen day period an average of 3.3596 lb. of grain were required to produce one pound gain in flesh production in Barred Plymouth Rock, Rhode Island Red and White Wyandotte cockerels. It required an average of 3.4288 lb. of mash No. 1, composed of 36 p.c. oatmeal, 36 p.c. cornmeal, 18 p.c. shorts and 10 p.c. beef scraps, and an average of 3.3636 lb. of mash No. 2, composed of 32 p.c. oatmeal, 32 p.c. cornmeal, 16 p.c. shorts and 20 p.c. beef scraps, to produce one pound of gain in flesh production. The results of all fattening tests for the season with cockerels of the breeds mentioned above, and weighing 3.5 lb. each on the average when put in the fattening crates, showed that it required an average of 3.3962 lb. of grain to produce one pound of gain in flesh production. *III.—Egg Production.*—For a period of seven months, October 1, to April 30, inclusive, the average amount of feed consumed per bird for 240 Barred Plymouth Rock and forty Rhode Island Red pullets was as follows:—whole grain, 40.164 lb.; mash, 9.074 lb.; field mangolds, 17.154 lb.; oyster shell, 1.026 lb.; grit, .737 lb.; and green bone, 1.771 lb. For the same period and for the same birds the average egg production per bird was 63.488 eggs. While positive conclusions cannot yet be drawn, nevertheless the general results this year are comparable with those of previous years, inasmuch as egg production in flocks of twenty birds each is considerably greater than in flocks of forty birds each, which in turn is much better than in flocks of eighty birds each. The average cost of feed per bird, for the seven months, was \$1.97, and the average value of eggs produced per bird, for the same period, was \$3.17, thus leaving \$1.20 as the average profit per bird over cost of feed only.

Other Departments.—Other investigations are being carried on in the animal and cereal husbandry departments, a brief outline of which was given in the Canada Year Book of 1916-17, pp. 241-242.

Oka Agricultural Institute.—This, situated on the Lake of Two Mountains, about 20 miles from Montreal, is one of the oldest experimental farms in Canada, and is fitted to board 150 pupils. A large number of dairy cattle is kept, and experimental work is