

Poultry-Raising for the Average Farmer

The poultry industry is fast becoming a most important one in this country. Its future development will depend largely upon the attitude of the average farmer towards it. If he takes hold of the matter as he should and as he has ample opportunity for doing, there is no question that our dressed poultry and egg trade can be enormously increased. But there are many signs that go to show that the Canadian farmer is more interested in the question than ever before. Realizing this and believing that some definite and practical information would be helpful at this juncture, we submitted the following questions to a number of experienced poultrymen :

- (1) How many fowls, including turkeys, geese, ducks, etc., might be kept on the average Canadian farm without interfering very much with the other farming operations?
- (2) What kind of fowl would be most profitable for the farmer to raise for egg production? for fattening purposes?
- (3) Can fowls be profitably kept on the farm without a proper hen-house?
- (4) In fattening poultry, would the average farmer be able to produce all the feed required on his farm?
- (5) What would be a fair income for a farmer to realize every year from his poultry?
- (6) Will the average farmer be able to successfully fatten poultry for the British market?

The answers to these questions will be published during the next few weeks in our correspondence columns. Farmers should read the reply of Mr. A. G. Gilbert, manager Poultry Department, Central Experimental Farm, Ottawa, which appears in this issue.

Government Encouragement to Agriculture in Switzerland

By F. C. Harrison, B.S.A., Bacteriologist, O.A.C., Guelph (now Studying in Switzerland).

Switzerland, with a total area of about 24,300 square miles, or half the size of Ontario, has a cultivated area of 17,500 square miles. This arable land is generally in a high state of cultivation, although the methods to attain this end might appear very primitive to a Canadian farmer; very few modern implements are used, but as labor is very cheap the want of them is not generally felt. The country is divided into twenty-two cantons, each looking after its own affairs, and almost equivalent to our provinces in Canada. The seat of the Federal Government is at Berne, and I shall give, briefly, a few statistics and facts relative to the assistance given to agriculture by the Federal Department of Agriculture.

Theoretical and Practical Schools of Agriculture. There are four of these situated in different parts of the country. They give what is equivalent to the two years' course at the Ontario Agricultural College and also do experimental work. The number of pupils in these schools during 1898 was 137, and the total expense \$20,000. These four schools also give short winter courses, lasting from November to May, and in addition, there are five others which only give the shorter course. The number of pupils in 1898 was 364, and the total expenses about \$20,000. I should also note that at four of these places the agricultural school is in connection with the University, many of the members of the University staff being also teachers in the school. The horticultural school is at Geneva, and costs about \$5,000 per year.

Dairy Schools. There are three of these, with forty-eight pupils in 1898, and cost \$8,000 per year.

Experiment Stations. Whilst there are no experiment

stations as we understand them in America, there are several places at which experimental work along one or two lines is done. For instance, there are five viticultural stations, which also accept a few pupils (21 in 1898); they cost, in 1898, \$24,000, and they are principally engaged in studying the fungous diseases of the vine, the faults of wine, and also measures to be used in combatting the phylloxera. This insect is a terrible pest, and although very drastic measures have been taken, they have not been altogether successful. In the cantons of Tessin and Geneva, the conflict with this insect has been abandoned, and the vineyards are being replanted with American vines. In the other vine-growing cantons severe measures are still taken, and if the phylloxera is found the vines are often at once destroyed, a subsidy of 50 per cent. of the value of the vines being allowed the owner. This amounted to the sum of \$54,000, and a further sum of \$80,000 was employed in combatting this insect.

The San José Scale having been found on California fruits imported into Switzerland, the importation of fruit and living plants from America is forbidden. At one of these viticultural stations the principal work consists in furnishing the necessary stocks to reconstitute the vineyards in which the fight against the phylloxera has been abandoned. There are three stations in which cultural experiments are carried on, but at one of them only pot or vase experiments are tried. There are also three stations for testing the purity and germination value of seeds. These cost during the last year, \$35,000.

A very fine and well-equipped laboratory is now in course of construction for the dairy bacteriology and chemical analysis. Only research work will be done, as there is no provision made for students.

Farmer's Institutes, etc. A sum of \$11,000 is devoted to agricultural conferences and special courses in agriculture, given by different cantons. The number of meetings held was 243, but no information exists about the number attending. As a rule, they last two, or even three, days. The number of principal societies is 5, and they received in 1898, \$12,000, which was expended on the distribution of agricultural publications at a reduced price, meetings, prizes and exhibitions.

Improvement of Horses. The Federal Government entirely supports a large depot of stallions, which are stationed all over the country. This has been done for many years and, judging from the horses I see, it has brought about a great change in the character of the stock. On account of the mountainous nature of the country, horses are much used for carting, postal service, etc., and I can say with truth that I have seen extremely few really bad-looking horses. The cart horses have plenty of substance, with good bone and short to medium legs. They are also well broken; reins are seldom used, and, when employed, generally on the off-horse only. I also had the opportunity of seeing several cavalry regiments. The horses were gathered from all over the country, as the soldiers, there are virtually militia, with compulsory service. These horses were a very useful looking and serviceable lot, many showing marked hackney or thoroughbred breeding. Last year 11 stallions were purchased, at a total cost (including expenses of transport, the commission, etc.) of \$2,225 each. Altogether the state owns 112 stallions of the following breeds: Thoroughbred, Anglo-Normans, Hackney, and Percheron. In addition there are a number of "Approved Stallions" belonging to private individuals to whom the Government pays so much for their use. During 1898, these horses covered 6,218 mares. Their total value is estimated at \$109,000 and the expenses for forage, grooms, veterinary needs, shoeing, etc., was \$32,000. The service fee which was \$3 in 1898, has now been reduced to \$1.20.

Improvement of Cattle. A similar system to that outlined above is also instituted for bulls, but the Government does not buy or keep the animals, but "approves" certain animals. These bulls are selected at the monthly cattle fairs held all over the country, and after careful judging certain animals are approved, and the owners of these receive