

The old saying that "the male is half the flock" has its weight. Never use anything but a pure-bred male. Scrubs are hard to feed, and the results are very unsatisfactory and discouraging, both in the line of egg production and fattening. Generally speaking, some of the general purpose breeds, such as the Plymouth Rocks or Wyandottes, are the best fowls for the farmer. It is not necessary to have a show bird. They are very expensive, and are not a mite better for grading up a flock than a good pure-bred male whose feathers do not happen to be of the exact shade. Every breeder has these, and is willing to part with them at very reasonable prices. Get the shape and constitution, together with parents of good egg-producing qualities, and you will have a good sire in all probability.

These fowls should have a roomy pen; at least seven square feet of floor space to each fowl. The pen should have plenty of light, should be dry, have a dust bath, etc., or, in other words, have all the little things that go to produce health, for it's vigor you want in the chicks. Too many fowls lack in constitution, and, if the best results are to be obtained, this must be watched. Do not inbreed.

Set the eggs from this pen only. Mark each day's eggs, with the date of the month, and set only the freshest ones, as these are likely to have the strongest germs in them. Give the fowls *plenty of exercise*, also a liberal diet of meat or green cut bone. These will help to get plenty of strong, vigorous chicks.

In another article we shall write about the setting hen and her family.

Institute Work in New Brunswick

(Special Contribution)

In this province the work is only well begun, and there is a wide field. The meetings are under the direct control of the Farmers and Dairymen's Association of the Province, which receives a yearly grant of one thousand dollars from the Provincial Government. While the farmers of the province, as a class, are intelligent, they are much behind their brethren in Ontario in up-to-date agriculture. Up to the present time, they have been more interested, as a rule, in lumbering and fishing than in the development of their farms. Large quantities of beef, pork, and grain are still brought down from the western provinces.

Owing to the work of the Government Dairy Instructors and the F. & D. Association slow but steady advance is being made in dairying, for which many sections of the province are splendidly adapted. A fine new dairy school will soon be opened at Sussex, with Superintendent Mitchell at the head, assisted by Dairy Superintendent Hopkins, of the Dominion Dairy staff, and Mr. W. W. Hubbard, with other capable men as assistants.

The Institute Corps has met with good success at all the meetings held during the past month. Messrs. Hopkins and Hubbard discuss dairy matters; Mr. W. S. Blair, of the Experimental Farm, Nappan, deals with fruit culture; J. J. Ferguson, B.S.A., of Smith's Falls, Ont., talks on "Breeding and feeding bacon pigs"; Superintendent Robertson, of the Nappan Farm, treats of the work of that institution, with special reference to dairying. Mr. W. A. Jack, a practical poultry breeder, of St. John, discusses "hen matters" in general. So far, the weather has been exceptionally favorable for the carrying on of the work. There is still a couple of weeks of work ahead of the delegations.

The Best for a Farmer

Bowmanville, January 31st, 1899.

DEAR SIR.—In renewing my subscription I would say I am much pleased with FARMING, and consider it one of the best papers for a farmer he can procure. I have found it very helpful to me, as I have been buying in some purebred stock. Hoping it may have continued prosperity, I remain,

Yours,

SAMUEL SNOWDEN, JR.

An Everlasting Fodder Plant

A Mr. M. C. Ginster, of Erdington, Birmingham, England, describes this plant in a recent issue of the *Lincoln Mercury* and speaks of it as furnishing a means to the British farmer for overcoming the agricultural depression which seems to be hovering around him. He points out that after the second year this plant will yield from six to seven tons of hay per acre on poor stony, sandy land. Further on the writer says: "This plant requires no manure, and, after the second year, no care; it is independent of all weather, and when the sun has burnt up everything else it keeps on growing. It yields abundant crops for fifty years, and, according to analyst's report, is richer than pure oil cake; so rich that to one ton of lathyrus hay must be added two of straw chaff. It is suitable for all cattle, notably milking cows. Farmers thus need not buy oil cake and other feeding stuffs, but can save the money formerly expended on them, and by merely using up land totally valueless for any other purpose whatsoever. If their land is swampy the plant known as 'polygonum,' and quite as nutritious as the 'lathyrus,' would be of service." If this plant, which Mr. Ginster calls the "lathyrus," will do one-half what he claims for it, it is just what the dairyman and cattle feeder of every country requires. If any of our readers know anything about this wonderful plant or have had experience with it we should be glad to hear from them. A plant known as *Lathyrus Sylvesteris* has been grown on the Experimental Farm, Ottawa, for several years in small plots.

Butter and Egg Co-operation in France

A movement is on foot in France to attach an "Egg department" to their system of co-operative dairies. The plan is simple and works well. Each member of the Dairy Association undertakes to send not less than 200 eggs per week on two fixed days; a distinction is to be made between eggs for consumption and those intended for hatching. Members can only send the product of their own hens and at their own expense to the creamery office. To secure that the eggs be in a fit and proper condition the members will bind themselves to remove the eggs daily from the nest, and leave as the nest-egg one of porcelain. There is a heavy penalty for sending old or spoiled eggs. The creameries undertake the sale of the eggs and secure the best market price. Associated with the egg industry that of poultry will be added later on.

This is extending the co-operative system in a practical way. If it were practicable to do the same work in connection with our co-operative cheese factories and creameries it would go a long way towards solving the problem of how to collect the eggs from the farmers in a perfectly fresh condition. Cold-storage facilities could be provided at the factories, where the eggs could be kept in a fresh condition and packed ready for shipment to the large cities or direct to Great Britain.

Oil in Road Making

Along a certain clay road in Pennsylvania there was an oil pipe line which sprang a leak and spouted a considerable quantity of oil over the road. It was noted that on the spot where the oil had spilled the roadway showed a marked improvement over the parts of the road where there was no oil. The explanation of this was that the oil formed a water-tight covering to the road, and the earth beneath being dry no ruts or mud could form and the road became good.

This led Mr. M. Meig, an engineer in the employ of the United States Government, to make an experiment. This experiment was conducted last November with crude oil. A newly graded piece of dirt road was coated with oil, distributed by means of an improved sprinkler over a strip about 12 feet wide by 200 feet long. A second part of the road was sprinkled a little lighter, making about 500