

be no profit in feeding summer-milked cows very long after stabling, even with advanced prices for milk and cream. In feeding both milkers and dry cows this winter, there is a possibility that economy may be practiced in feed—chaffing the straw and inferior hay, and mixing it with the silage, when silage is available. This makes a cheap, palatable and nutritious food. Where no silage is available, this chaffed feed, with a small quantity of beet-pulp or molasses food, moistened and mixed with the chaffed feed, I have found to give good results. This, along with a small feed of hay each day—and, when near the freshening period, add about one pound each of bran and oil cake to each animal—will be found to make a cheap and nourishing ration. When concentrated foods are fed to any extent, the question will arise, what shall I feed, taking into consideration economy in feeding, and at the same time giving me a balanced ration? Two of the staple foods are almost out of reach, viz., oats and bran. As a substitute for them, we believe that ere long there will be much frozen wheat come from the West, and offered later at a price that will be within our reach, which, with the addition of some of the grains raised on the farm, and perhaps a small quantity of oil cake, we will have about as economical a feed as can be secured this season. These have a high food value, being rich in protein, and have a high manurial value as well.

At "Springbrook," this winter, we have cut down our stock slightly; but, having a fair hay crop, a lot of nice oat straw (cut on the green side), and a full silo, with some corn stover as well, we are in the position to carry most of our stock through the winter, but we too will have to practice economy in feeding. Our corn stover and our straw will be passed through the cutting-box; equal quantities of this (by measure) will be mixed with the silage, and allowed to stand for 18 to 24 hours before being fed. This allows the dry corn and straw to become moist and seasoned with the aroma from the silage, making a palatable ration, of which the cows are very fond. This is fed to all cows, whether milking or dry, at the rate of two feeds per day, night and morning, with a small feed of hay at noon. The milkers will be fed, in addition to this, a mixture of 2 pounds of bran, 2 pounds of oil cake, 2 pounds of gluten meal, and 3 pounds of oats and barley. This amount will be fed to all cows giving over 30 pounds of milk per day, bringing it down as the milk flow decreases, allowing 1 pound of grain feed for every 4 pounds of milk. Our approximate ration to every cow giving over 30 pounds of milk will be about 40 pounds silage, 8 pounds straw, 8 to 10 pounds hay, and 9 to 11 pounds grain feed. With hay at \$16 per ton, silage at \$4, straw at \$6, and grain feeds at \$30 to \$35, makes the daily ration of each full milker cost about 35 cents. So that, even at enhanced prices for milk, there will not be a large profit, and, where the profit is going to come in with strippers, I am unable to determine. We may get from them sufficient to pay for their keep for at least two months yet; in other words, "they will have to work their passage." My idea will be to get as much protein in my concentrated feeds as possible, as our roughage, composed of silage, timothy hay (largely) and straw, are all lacking in protein, and, if we are going to get the best results in the dairy, we must have the protein feeds. I have no doubt that, where economy in feeding and blending of foods is practiced this winter, the results will be very satisfactory. This does not mean we must shorten our feed up on the stock, but utilizing all the feeds formerly considered of little value, such as straw, poor hay, and corn stover. These, by a little work and a small addition of grain, may be turned into a palatable and nourishing ration. Huntingdon Co., P. Q. W. F. S.

THE DIFFERENCE IN COWS.

Current records of the associations organized by the Dairy and Cold-storage Commissioner are:

Bagotville, Que., 152 cows, 20th September, average 618 lbs. milk, 4.0 test, 25.2 lbs. fat. The total yield of these 152 cows was 94,160 lbs. milk, but at St. Armand, Que., 160 cows gave only 64,675 lbs.; that is to say, eight fewer cows at Bagotville yielded 29,485 lbs. milk more. Shearer, Ont., 22nd September, 106 cows, average 561 lbs. milk, 3.7 test, 20.8 lbs. fat; highest yield, 840 lbs. milk. Woodburn, Ont., 26th September, 128 cows, average 503 lbs. milk, 3.6 test, 18.2 lbs. fat; best yield of milk, 850 lbs. East and West Oxford, 27th September, 125 cows average 649 lbs. milk, 3.6 test, 23.6 lbs. fat; highest yield, 1,377 lbs., testing 3.2. Spring Creek, Ont., 1st October, 213 cows, average 600 lbs. milk, 3.7 test, 22.5 lbs. fat. Twelve cows have records of over 1,000 lbs. milk; highest yield, 1,320 lbs. St. Prosper, Que., 23rd September, 113 cows, 694 lbs. milk, 4.2 test, 29.2 lbs. fat; best yield, 1,280 lbs., testing 3.4. Rockford, Ont., 30th September, 134 cows, 718 lbs. milk, 3.4 test, 24.5 lbs. fat; highest yield, 1,320 lbs. milk, testing 2.9. C. F. W. Ottawa.

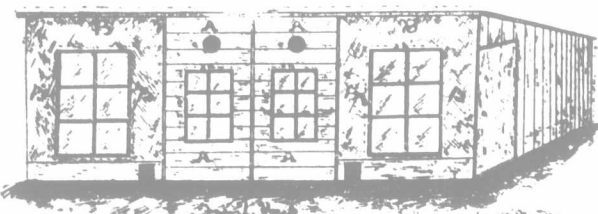
POULTRY.

POULTRY HOUSES.

FAULTS FOUND WITH THE OPEN-FRONT SCRATCH-SHED ATTACHMENT—WERE THEY WARRANTED—CANADIAN EXPERIENCE—A PAT-TERN HOUSE.

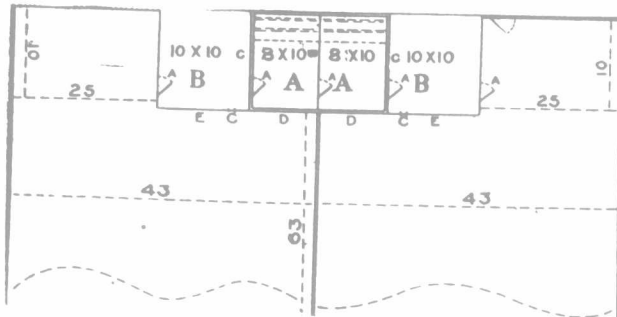
By A. G. Gilbert, Manager Poultry Department, Experimental Farm, Ottawa.

It is interesting to trace the development of the poultry house with scratch-shed attachment. First, we take its history in the Eastern States of America, where it originated. On its introduction, it certainly found many friends; but, two or three years after its



Front View of Poultry House.

A, A.—Roosting room; front and other parts of wood. B, B.—Scratching sheds, with cotton front. Size of building, 36 x 10; accommodating 26 birds, with seven square feet floor space each. Floor, cement. Window in center of cotton front of shed.



Ground Plan, Showing Outside Runs.

A, A.—Roosting rooms, 8 x 10. B, B.—Scratching sheds, 10 x 10, with cotton front.

adoption by numerous poultry-keepers, it was vigorously assailed by a portion of the Eastern U. S. poultry press as being "unsuitable for winter use," "it was too open," "too extreme," "the change too radical," and a compromise scheme was loudly called for. There were doubtless modifications in several instances, while others stayed by the original pattern. But how fared it in Canada? For, after all, we are more concerned about our own interests than any other!

CANADIAN EXPERIENCE.

Canada is a broad Dominion, with many Provinces of varied climates. "The Farmer's Advocate" circulates from one end of the Dominion to the other. In the interests of its readers, it is very essential that it should be acquainted with these climatic exigencies. Officially, I have to be the same. Neither can be sec-

tional in discussing this subject of poultry houses, or any other matter of Dominion scope. The style of poultry house suitable for the greater part of British Columbia, or portions of Ontario, would not be so for those parts where the winters are much more rigorous. We speak, then, on this occasion, of what has been found suitable to cold-winter districts. What about Ottawa? "You are perhaps the most Northern experiment station in America. What do you know?" Were the objections to the cotton-front scratch-shed attachment, made by the Eastern U. S. papers, warranted or no? We answer, at once, that our experience does not permit us to say that the objections were deserved. From a farmer's standpoint, we quote the statement of Mr. Wm. Moe, of South Franklin, Quebec, who, in a letter to the writer in the fall of 1901, shows good results from the poultry house with scratch-shed pattern. As the letter may be useful in other respects, it is reproduced from an official report as follows:

"The cost of keeping 80 fowls, out of which I made \$219 in one year, was for one year, \$39.35, which, deducted from \$219, leaves a net balance of \$149.65. This is not counting the eggs or dressed poultry used in our house.

"The feed we gave the fowls was as follows:

"Morning—Mash, composed of cut clover, potatoes or turnips, all boiled together, and rounded up firm with ground wheat or other ground grain. This was fed warm in winter.

"Noon—Grain thrown in litter on the floor of the scratching sheds. We have the scratching-shed plan of house. We threw the grain in the litter to make the hens exercise in scratching for it.

"Afternoon—A good feed of grain so as to send the birds to roost with their crops full.

"We had green food in the shape of small apples or turnips. We had also grit, lime and pure water before the layers all the time. We paid strict attention to the details, and kept strict account of expenses and receipts. We sold our eggs in Montreal during the winter at 40c. to 45c. per dozen, and in summer at 15c. per dozen; chickens at 58c. to 64c. per pair. Our fowls are pure-bred. I do not believe in mongrels, for they do not make good winter layers. Much of this success is due to the help I receive from my wife."

Other instances might be given, but the former is from a cold-winter part of the country. The prices quoted are moderate indeed.

A QUESTION ANSWERED.

We are asked above "What do you know?" In relation to the pattern of modern winter poultry houses, the experience of many years has shown that it must permit of: (a) Profitable egg laying (during winter); (b) economy in construction, use of rations, etc.; (c) health (of stock, strong germs in spring, etc.).

Mr. Moe's letter answers the first. It may also be said to fairly answer the second requirement. The third condition, as to health, our own experience answers satisfactorily, but "strong germs in spring" has not yet been secured.

NOTHING DECIDED AS TO THE BEST.

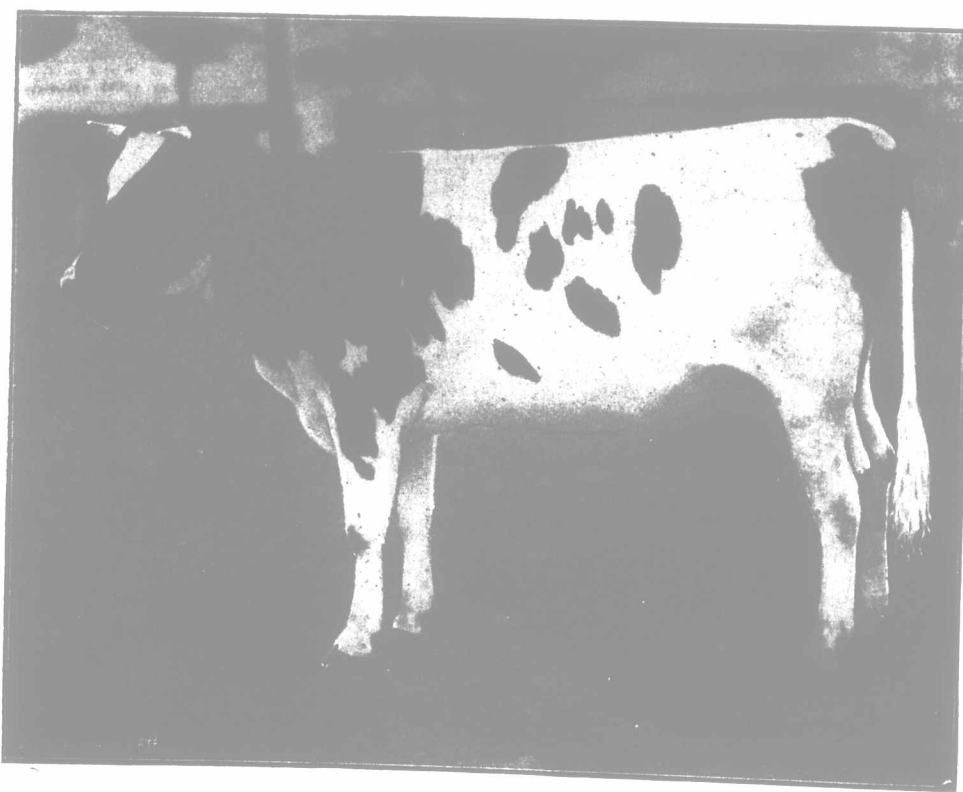
It is to be remembered that this cold-house principle vs. warm is still on trial. Poultry-keeping must be commercially profitable, and the methods of housing and feeding that will bring the largest margin of profit will win the day. Another interesting process, in connection with the cold house, is the building up, by selection, of prolific egg-laying strains and correct market types of the utility breeds, and then hardening them so as to fit them for the cold house. So far, this work has been encouraging.

On another occasion, it will be interesting to show the passing of the scratch shed, but the retention of the principle in the single house. Meanwhile, the following is submitted:

A SATISFACTORY COLD HOUSE WITH SCRATCH SHED.

The illustrations are front and ground plans of a winter house with scratch-shed attachment that has been on trial at the Experimental Farm for the past two winters, with satisfactory results.

A single house without scratching shed and with modern style of ventilation will be given again. This style of house has been adopted singly, or in a continuous row, by several poultry companies, among them the Lee-Hodgins Poultry Yards, of Pembroke, Ont.



Minnie Rooker's Poem (7204).

First-prize yearling Holstein heifer (out of milk), Canadian National Exhibition, Toronto, 1907. Bred and exhibited by Logan Bros., Amherst Point, Nova Scotia.