

finished and corn was fed twice a day, there was no further increase. We might explain that lack of fencing has prevented us pasturing more than two fields and a small piece of new ground this season, a considerable feeding has been necessary since early July.

On the whole we do not regard the experiment as much of a success, and would hesitate to repeat it even in similar circumstances. With a larger quantity, cut up fine and well packed into the silo, and with either a larger stock or a silo of smaller diameter, results would no doubt be better, but the experience goes to confirm the view expressed by almost every one who has tried other crops, viz., that corn is the crop for the silo, and that clover or alfalfa had better be cured as hay.

THE DAIRY.

Points on Dairy Feeds.

Alfalfa meal, more convenient to handle than hay, much easier to adulterate, price usually excessive, rich in protein.

Beet pulp, soaked up, a good substitute for silage or roots but higher priced.

Bran (wheat), light, bulky, appetizing, high in mineral matter, high in crude fibre. Relatively expensive at present prices.

Buckwheat, low in protein—usually pays to sell it and buy back the middlings.

Buckwheat middlings, heavy, usually economical source of protein, tend to make soft, oily butter.

Bulky feed, bran, gluten feed, distillers' grains, corn and cob meal.

Constipating, cottonseed meal, corn fodder and hay.

Corn, easily digested, usually cheapest source of energy. Pays to grind.

Corn and cob meal, bulky, considerable crude fibre, nearly equal to corn meal in ration because of bulky nature. Grind fine.

Cottonseed meal, high in protein, heavy, should be fed with something else, makes for hard butter, relatively cheap source of protein, ordinarily should not constitute more than one-third of the mixture.

Distiller's dried grain, rich in protein, very variable in composition, bulky, must be fed with other feeds.

Dried brewers' corn grains, light, bulky, high in protein, not readily eaten alone.

Dried brewers' rye grains, similar in character to the corn grains, lower in digestible protein.

Hominy chop, usually economical source of energy, low in protein, palatable, heavy. Good substitute for corn meal if needed.

Laxative, oil meal, bran slightly, silage, roots. Molasses, a non-protein feed, good appetizer, usually high-priced for its food value.

Not palatable, gluten feed, brewers' and distillers' grains, cottonseed meal.

Molasses feeds, usually high in waste materials and too high priced for their feed value.

Oats, good feed, rich in mineral matter, high in crude fibre, not high enough in protein to use for balancing ration, too expensive to feed at the past year's prices, good for calves, especially so if ground and hulls sifted out.

Proprietary feeds, usually variable in composition, frequently contain weed seed and useless waste material, high in fibre and relatively expensive for the amount of energy furnished, save labor of mixing.

Silage, succulent, appetizing, economical, low in protein, should be fed after milking, a little hay or dry fodder should always be fed with it. One of the best farm-grown feeds for milk products.—William Frear, Experiment Station, State College, Pennsylvania.

POULTRY.

In the 46th week of the North American egg-laying contest at Storrs (Conn.) Experiment Station, a pen of Rhode Island Reds distinguished themselves by laying 32 eggs in the seven days. There was a slight drop in the total yield, 1,302 against 1,350 the previous week. Yost's White Leghorn pen are still in the lead, with 985 eggs, every bird laying. Beulah Farm (Hamilton, Ont.) White Wyandottes are a close second, with 942 eggs.

If it has not already been done, no time should be lost in preparing the poultry house for the winter. Clean it out thoroughly, whitewash and disinfect it before putting new birds in the house. Cleanliness is essential, and it is imperative that the house should be thoroughly sanitary before the poultry go in for the long winter. Go over it carefully and stop all sources of drafts. This does not mean that the house must be made airtight. Not at all. Open front houses give good results, but these houses are not drafty.

Drafty houses are usually those houses which are very long, or have a high ceiling, or have openings in more than one side. See that sufficient roosting space is allowed for each bird, and if the pen is supplied with high roosts or roosts on different levels, pull them out and put in new ones eighteen inches or two feet from the ground, and all on the same level. Wash the windows. Light is essential to the health of the birds, so let there be light by taking the season's collection of grimy dirt from the glass. Allow a period of a few days to elapse between the cleaning operations and the housing of the fowl, to permit the place to become thoroughly aired, and to accomplish this leave the doors and windows open to ensure thorough air circulation and ventilation.

determines to a great extent their usefulness as winter layers.

The poultryman has only two classes of fowl which he should keep for winter layers, viz., pullets and birds rising two years of age, and rarely three-year-old hens. Older birds of the heavier breeds, unless it be a few kept for their value as breeding stock, seldom prove profitable egg producers. Some individuals of the lighter breeds are good producers at three years of age, and judgment must be used in selecting the winter layers, as good, tried and proven three-year-old hens may beat the poorer type of late-hatched pullets. Pullets must be culled, and culled closely, for there are always many among them which will be "boarders" throughout the first winter. Many

writers claim that age and egg production are not directly correlated, but they all agree that egg production depends upon constitution and conditions of feeding, housing and general care; and with the forcing of pullets and hens, age, when it exceeds a certain point, must affect the general condition and vitality of the hen, which limits the production of more eggs, so that age may be rightly used as a determining factor in the selection of laying stock each fall.

Selecting the pullets is no easy matter, but it may be accomplished with quite satisfactory results if started in time. The best method to follow is a gradual weeding out of the inferior birds as soon as they attain sufficient size for table use. This must be fol-

lowed up later on by the disposal of all those which from time to time show an evidence of lack of development. The best pullets should be laying well in October, and any that have not commenced by November are not likely to lay to any appreciable extent until the approach of spring. Late pullets should always be sold off because they have not, as a rule, reached a stage of maturity to begin laying at this date, and the cold weather checks growth and stops development of the birds, shutting off all chances of profitable egg production. Where trap-nesting is done and only eggs from heavy laying strains used for hatching the pullets intended for replenishing the flock, breeding has some place in pullet selection, but on the ordinary farm no such measures are taken, so that there is no standard to go by excepting the development of the birds themselves. Choose only the fully-developed, attractive birds, which have short backs, broad bodies, short, wide heads; short, thick beaks and bright, clear eyes; birds which are good rustlers, not found on the perch most of the day, but rather down scratching in the litter, seeking more food to further their development and at the same time getting

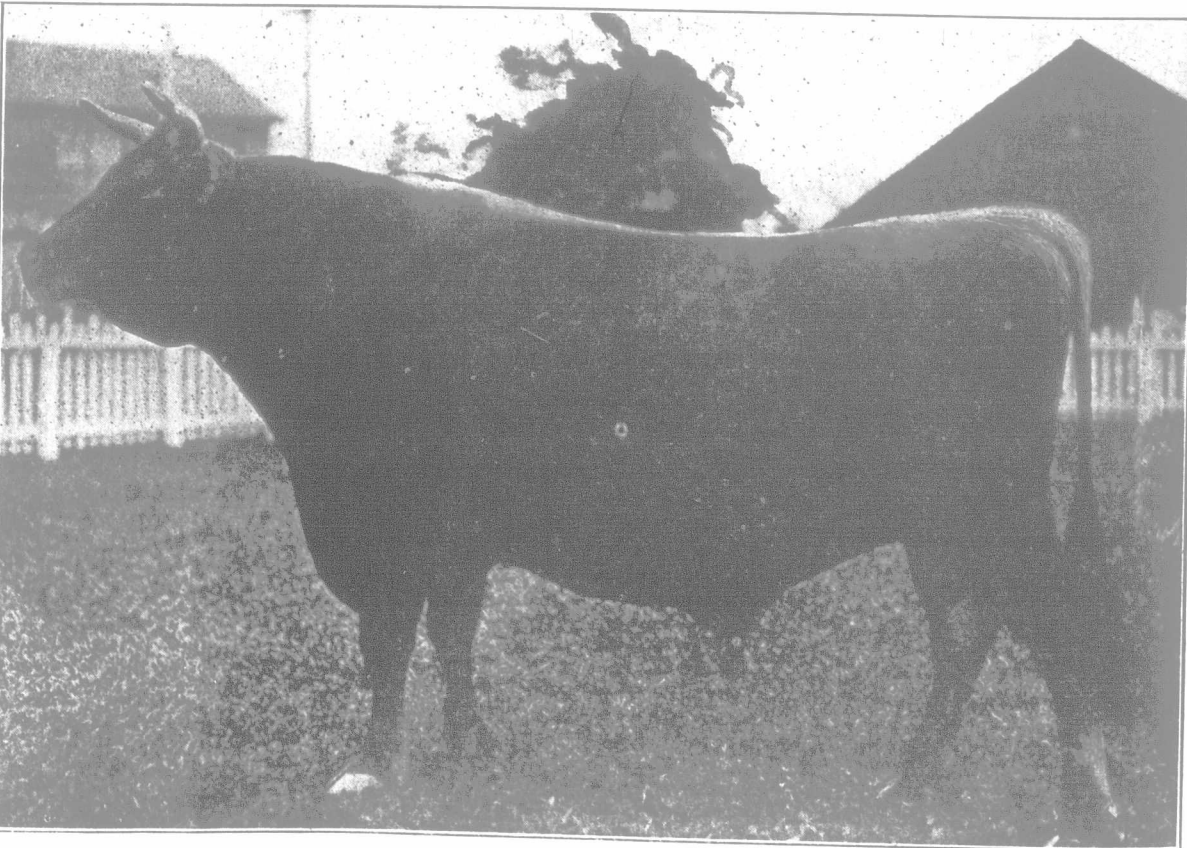


Clara Minto.

Five-year-old Jersey cow, owned by Ira Nichols, Woodstock, Ont., included in auction sale at Simcoe, October, 17, 1912.

What Birds Shall Constitute the Laying Pens.

Egg production is the chief aim of the average poultryman or farmer keeping a flock of hens, and winter egg production is the highest ideal toward which our best poultrymen strive. To get eggs when eggs are scarce is no easy matter, for it is necessary to a certain degree to combat nature, for the winter months are not the natural laying time of the hen. The primary use of eggs was for reproduction, and as the spring and summer season is the most suitable period for this, naturally then is when eggs are most abundantly produced. The reproductive organs of the female are the source of all eggs, and it is necessary to have these organs functionally active in order to get eggs. The problem, then, is to force the hen to extend her period of reproductive effort over a greater period of the year, especially the cold weather. In a normal state it is believed that laying begins when growth ceases. Here is one of the determining factors in the time for hatching pullets, and the time the pullets are hatched



Sultan's Raleigh.

First-prize aged bull and champion at Toronto, owned by B. H. Bull & Son, Brampton, Ont.