

ciated as it should be. Yet despite all these difficulties the energetic egg producers have made the handsome advance in export value of nearly \$200,000 over last year. Grand as the sum total is, I, for one, feel sure by giving this department the care and attention which it deserves, it could be doubled in a very few years, and the profits more than doubled.

At certain times of the year the price of eggs in some sections is lower than it should be. This has in some cases been attributed to the egg combine or the local combination of the dealers. Farmers and country merchants by closely watching the New York, Montreal, and Toronto markets (deducting therefrom the P. R. charges to these markets and five per cent. for selling), can easily calculate whether they are getting the proper price or not. In case the dealers are obstinate, a little united action on the part of the farmers, will quickly bring them to time. Combines are the order of the day, but the farmer is king of the situation if he will join hands with his brethren, and unitedly fight for his rights, he is bound to conquer, but it is an imperative necessity that he reads, thinks, and discuss all the details of his business freely. The mode of feeding and managing the different kinds of poultry is too wide a subject for me to undertake in this essay. I will therefore pass on to the varieties, mentioning only those which I consider most valuable. From among the larger breeds I would select either the Light or Dark Brahmas, according to the taste of the individual. I prefer the light variety because of their color, I think, too, their feathers are generally more fluffy or downy, and therefore more desirable; they are larger than the dark variety, and the pullets mature earlier, though they are no better layers if as good. Both breeds are alike hardy, excellent winter layers and good mothers. They will lay sooner after incubating than any other breed with which I am acquainted, except the Langshans. In speaking of the Brahmas, Mr. John Pares, a recognized English authority, says:—"When properly cared for the pullets will lay when six months old, and usually produce 30 to 40 eggs before they want to sit but I have repeatedly known pullets to begin to lay in the autumn and never stop until the next spring. I have kept several breeds such as the Dorkings, Spanish and Hamburgs, but to farmers I always recommend the Brahmas." Mr. Wright, in his excellent work on poultry, speaks very highly of their hardiness, early and rapid growth, and their excellent laying qualities, and says "on the whole there is no more profitable fowls than the Brahmas."

Closely allied to the above, in valuable qualities, is the Langshan, a beautiful black bird, not quite as large as the Brahma, generally speaking, nor as hardy when young, but perhaps surpassing them as a winter layer and the habit of laying at a very early age.

Among the Games the Black Breasted Reds are the best layers, as such they rank in the very first class. The eggs and birds are small but excell all other kinds in flavor. They eat very little; as mothers they are unsurpassed, but for farm use I consider them too small and altogether too vicious.

The Dorkings are popular with English people everywhere. They are fairly good layers, and as table fowls they lead all others, being ready to kill from the time they are large enough until

mature, always yielding an abundance of meat of the best quality. I find them moderately hardy and very profitable as farmer's birds, but when young they are not as hardy as some of the other breeds, and should not be hatched early, unless we are prepared to make them very comfortable. Hatched after the middle of May they succeed better with less care than any other breed I have ever handled. There is no sort, however, that will degenerate so fast by inbreeding or careless, slipshod handling; generally speaking, they are not winter layers, still I have found them very fair in this respect. I find that farmers who have had experience with this breed rarely exchange them for any other.

The Plymouth Rocks are first-class birds in all respects, very suitable for the farmyard. They partake to a certain extent of the good qualities of both Brahma and Dorking and are great favorites with many.

Houdans have the table qualities of the Dorkings with less offal; are more hardy when young, are non-sitters, and are excellent layers in the summer season, but lay little in winter. In size they should, and in many specimens do, equal the Dorkings, but in a large collection numerous small ones will be found.

The Spanish family, which embrace White Faced Black Spanish Minorcas (white and black), Andalusians, and some minor kinds, are all grand summer layers of large white eggs, but are not a good table bird.

The Leghorns resemble the last mentioned, but are smaller and hardier. As egg producers they cannot be excelled. They are also non-sitters.

The Hamburgs are small, hardy, non-sitting fowls, and wonderful layers, perhaps excelling any other variety in this respect except Leghorns, but are even more hardy than they. Of late there have been several new breeds introduced, chief among them are the Wyandottes, which are good as layers and for the table.

In selecting a kind get the one best adapted to your requirements. There are so many good varieties the most fastidious can gratify his tastes, and still have a profitable sort. Always remember that there are different families in each of the kinds, which are better than their fellows, select only from these for breeding purposes. Kill off all birds before they are two years old. Study the habits of your fowls and their requirements. Adopt the feed and management which is most profitable. Breed some pure bred variety of a good strain. Generally speaking it is better to keep only one variety and attend to them well. Stick to the old and well tried kinds; be exceedingly shy of the so-called new and much puffed breeds, which are frequently old kinds reintroduced. Do not go into poultry raising on a large scale until you thoroughly understand the business and have found it profitable when conducting a small yard, then you may increase gradually as your profits warrant.

#### DISCUSSION.

After the conclusion of the paper a large number of members expressed their astonishment at the facts these figures revealed, especially at the difference in the dimensions of the export of hogs and that of the poultry industry. To this Mr. Hodson replied that under the heading of hogs he had not included pork or other products of the swine industry, but simply the living swine exported; but that the poultry and

egg exports still exceeded that of the entire swine industry by over \$1,000,000. Prompted by the remarks of some members, who said that they had kept an account of their poultry business and had not found it profitable when eggs were selling at 12c. per dozen, Mr. Bartlett said that these gentlemen had probably not managed affairs properly; perhaps they had fed them corn instead of buckwheat, wheat, or oats (this they admitted). These latter foods were, in their order named, those that could be most economically fed to fowl. He had found corn to have a bad effect on the male birds, and the eggs produced by the females fed on this food were not so abundant and did not hatch so well as when the other foods had been fed. Peas, fed alone, were also not a very desirable food. In feeding buckwheat great care had to be exercised not to feed too much of it, for they were very fond of it. If too much of it was fed the fowls became too fat and ceased laying, and if too little was given the injuries would be obvious. Scattering their midday ration of grain among some cut straw was a good plan. This necessitated their scratching for it which gave them the necessary exercise for the most profitable production of eggs. During one of his first years in the poultry business he had a very good opportunity of keeping an accurate account of them, which he did, and which showed him that he had made \$3.00 on each of his original birds above all expenses (including a new poultry house), excepting his own labor. The eggs were sold at the current market price, and the fowl were all weighed when dressed (excepting the birds left in stock, the weight of which was estimated from those actually killed), and calculated to bring ten cents per pound, the price of beef steak at that time.

Mr. O'Brien said that he had found poultry raising very profitable. That as a general rule the damage done by them was much over estimated. That he let his fowl run loose all the year round. The damage done by geese he had, however, found to be great and had therefore got rid of them. He had his poultry house so arranged that he could clean it out easily, for frequent cleaning out was necessary for the welfare of the inmates. Ducks he had found to be very profitable.

Mr. Bartlett said that a convenient way to keep the house clean was to have a wide board under the perches, this would catch all the droppings of the fowl when roosting on their perches, and as the greater part of the time when they were in the house they were on the perches, these boards would catch more than two-thirds of the total manure dropped in the house. The perches should be low to the ground, especially for the heavier varieties. They should be carefully examined for the red mites which could be seen in more than one-half the houses during the summer days, congregated in myriads under them. These could be easily destroyed with a weak solution of carbolic acid. (See article on vermin, page 176). The lighter varieties of fowl were of course good layers during the summer months, but they did not lay well in winter. It was a general rule to get chicks as early as possible, but he preferred them to hatch the latter part of April, they would then commence laying in the fall and continue to do so all winter (the cold weather preventing their clucking), whereas when hatched before this time they were very