

and molasses, and after a time of hay, bran and roots, the following facts are gleaned: "That an average calf of 72 pounds at birth, getting two gallons of skim-milk per day—the average of an Ontario cow by factory records—with varieties of other food as named, and kept on such for ten months, will consume in value \$11.82. This is charging half the price of full milk for the skim. . . . At the end of that period the average calf weighed 376 lbs., a daily rate of fully 2 lbs., not including birth weight."

Other chapters dwell upon the food cost of producing dairy products; milk from permanent pastures; abortion among cows in relation to milk production; butter from milk and cream of different breeds, winter and summer; possibilities of the centrifugal separator, in addition to various other and exceedingly important subjects, for which we have no space at present, but which we hope to dwell upon at another time.

The report is but a fresh testimony to the unwearied diligence of Prof. Brown in those fields of research and experiment in the avenues of farming on its scientific side, which have as yet been so little trodden, and where, therefore, so rich a harvest is yet to be gathered.

Every person at all interested in dairying should have a copy of this report, and would be not only much interested, but also profited by giving it a careful perusal.

Poultry.

FOR THE CANADIAN LIVE-STOCK JOURNAL

Poultry Notes.

BY J. W. BARTLETT, LAMBETH, ONT.

In the August issue of the JOURNAL Mr. Gain alludes to the general failure this season in hatching and raising chicks. As far as our own experience goes we have lost more eggs and more chicks this season than in all our previous attempts, extending over some eleven years. The fact of failure being general would lead us to suppose that it was due to some atmospheric cause or epidemic; but when we find occasional exceptions where unusual success has been attained, we feel disposed to attribute each individual failure to some individual cause. For instance, our hens were too fat by far, which we only fully realized when a weazel killed one, and it was broiled for the dog; and when this occurs in a case like ours, where the hens are handled every day or two, it might occur much more easily when they are seldom or never handled.

Owing to the excessive cold weather of last winter we fed much more corn than usual, and the fact that corn was cheap made it still easier to over-feed, which occurs much more frequently when corn is fed than any other grain. The temptation to give them just a little more because the weather is cold came so very often, that we now believe we fed much too heavily. So, to summarize, *our* failure was due (we think) to over-feeding, and, as we have said, it is much easier to do so with corn than with any other grain. We have before noticed that when corn was cheap and plentiful we have heard much about failure in hatching, also in raising chicks; and no doubt both are due to one cause. As the chick during the later stages of incubation, derives its nourishment from the egg, it is not strange that the same cause should effect the death of some before hatching and some after. We only speak of our own individual case, and do not attribute the failure of others to the same cause; but we believe that we might safely, in many cases, do so. Owing to the unusual cold of last

winter the fowls were kept in close confinement by many, which is also a fertile source of trouble in hatching as well as rearing.

We should be pleased to hear the experience of others in this matter, as in that way only can we avoid falling into these errors.

Raising Poultry—Commencing.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

DEAR SIR: I am a boy fourteen years of age, but I have read a great deal in your LIVE STOCK JOURNAL and other agricultural papers and books about thoroughbred stock, and take a great interest in it. I would like to start with poultry and work my way up to pigs and sheep. Having seen your essay on keeping boys on the farm, I thought you might give me some information about how I could best obtain a start in poultry, and the means to carry it on. Any suggestions you may see fit to give will be thankfully received.

St. George, Ont.

Our young friend should first visit one or two of our leading fairs and note well the different breeds, reading at the same time what may be gleaned in regard to their comparative qualities. Having decided which breed to keep, purchase a trio from some reliable breeder and have them pure and good specimens. It is by no means necessary that they be show birds. At the same time visit the poultry houses of some of our most successful breeders, and get a good house ready. It need not be an expensive one. Mr. Gain has described one in the June number of the JOURNAL for 1884. A building of less dimensions will of course answer, and an apartment of some other building may do to begin with.

A large number should not be purchased at first, as we have to learn many things by experience in spite of all that we may read and plan from the labors of others, and oftentimes the success of first efforts is not encouraging. But where a boy is of the right stuff, he will not be discouraged.

We favor commencing with pure breeds from the fact that they will sell much better than others for breeding and will bring as much when not sold for this purpose. The same may be said of their eggs. We shall be pleased to hear as to the results of the effort of our young friend.

Poultry Raising.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

DEAR SIR,—I was pleased to read in your last issue two very concise and sensible letters in the interest of poultry. The remarks of J. W. Bartlett on chicks are just right. And Mr. Gain says truly that vermin "Harass their victims to the verge of death." Verily some of the fowl houses in this land are anything but "home, sweet home." It is astonishing that such an important item as poultry raising should be so neglected by all classes in this country. How much the farmer's wife might add to her pocket money by careful attention to, say, a hundred fowls? I do not say there is money in *scrub stock*; there is not; and I am one who has proved it. Say that a farmer buys a trio of thoroughbred fowls for his wife to make a start this fall; the progeny of these, next fall, with anything like management, will give her an excellent start in the business with good stock, of course being careful to get good general purpose fowls, such as Plymouth Rock, Langshan or Light Brahmas and Wyandottes, so that the carcasses of the crows, being plump and tender, would fetch the highest market price. If either Plymouth Rocks or Langshans were the chosen fowl, the pullets, if raised early, will be laying in the fall; and that farmer's wife would have a nice little sum to spend at the end of the season, in the little etceteras that go to make up a woman's shopping bill.

If any woman will take one-half the care of poultry (in feeding for best results, ensuring for herself plenty of eggs and poultry for market), half, yes, less care than that, that she does to make good butter, I

venture to say there will be a great difference of profit in favor of poultry. I know lots of fowls are kept by farmers and others; but how? Sometime since I was visiting at a farm, and one morning went to see them feed the stock. They fed and watered the horses, cows and pigs; the sheep were grazing in a lovely meadow near to a nice cool spring. Seeing a number of fowls about getting nothing, I said, "You have forgotten to feed the hens," "Oh, the blatherin, dirty things, they get plenty without feeding them," said the girl I spoke to. Now no doubt they may have picked up a living just then, as it was summer, but in fall and winter how would they fare? If they are cold and ill fed, they will not lay in winter when eggs are worth selling, and thus it is so many come to the conclusion that hens do not pay. It seems to me that poultry raising is exactly adapted to be a lucrative business for women. The gentle movements of a woman do not frighten them like the bustling, business ways of a man; and the patience that enables her to care for a little, helpless infant, is one of the greatest elements of success in raising and caring for poultry, and the attention to little things so necessary in the home, which is an attribute of woman's nature, ensures her success in a calling where it is all important to give close attention to details. I firmly believe it will be one of the coming pursuits for woman. Another great thing in its favor is, that a first-class beginning can be made with very little outlay. A sitting or two of eggs can be purchased for a few dollars, if the money at command is too little to buy birds; but the process is slower.

One word I will say in conclusion, get good stock. It may seem that the eggs or birds are dear, but those who purchase the stock have no idea of the trouble, time, thought, patient and intelligent observation and care, that have been bestowed on his stock by the breeder, so as to insure satisfactory results both to himself and customers. Trusting you will continue to give some attention to this branch of farm and home industry, of so much importance, and that I have not trespassed too much on your valuable space, I am, yours respectfully, W. C. G. P.

Wheat as Fowl Feed.

EDITOR CANADIAN LIVE-STOCK JOURNAL.

SIR,—I kept over nearly 100 hens, a dozen turkeys, geese and ducks, intending to raise a large number of their young this season. Last winter and into spring the lot were fed on wheat, some meat and roots, and we have not a single chicken, gosling or duckling. The turkeys were bred from so-called wild ones from Chatham district, and before the snow left they took to the woods and have been probably killed by foxes. Lime, dust boxes and water were abundantly supplied in a very large warm building. For some, to us, unknown reason, wheat of itself seem: to kill the germinating power of the egg. No doubt mixed food is the remedy. G. LAIDLAW.

The Fort, Victoria Road.

The Apiary.

THE article in last issue on "Modus Operandi of Curing Foul Brood," was by mistake credited to D. A. Jones of Brantford, instead of D. A. Jones, of Beeton. Our readers will please notice that though Brantford has a G. B. Jones, he is in no way connected with D. A. Jones, of Beeton.

Wintering Bees.

FOR THE CANADIAN LIVE-STOCK JOURNAL.

MR. EDITOR,—Although a bee-keeper of only three or four years experience, I have been very successful in wintering my bees. And being invited to give my ideas and method, for the JOURNAL, I will do so as briefly as possible. The wintering problem among bee-keepers is an absorbing theme, inasmuch as success or failure depends upon it. A great many experiments have been tried by experts, and yet no method has been found entirely successful for a series of years.

The causes of trouble are so various, and combine in so many forms, that it is not likely we will ever be able to winter bees with that certainty that we do other kinds of stock. Still I believe some methods