

hogs required would be at least 200,000. The possibilities of further increase, as well as the indications of interest of farmers in this industry, are very encouraging. As to the number of live stock in the country, the following figures for the years 1890 and 1900 are interesting, and show an increase in each list, except sheep, which have fallen off over 7,000:

	Horses.	Cattle.	Sheep.	Pigs.
1890	102,655	220,248	33,082	66,011
1900	118,629	237,560	25,806	77,912

The dairy statistics are of particular interest. This part of the report reads as follows:

	Pounds.	Price, Cents.	Value.
Dairy	2,083,920	14.45	\$301,145.61
Creamery	1,254,511	19.18	240,515.10
	3,338,431		\$541,661.04
CHEESE.			
Factory	1,021,258	10.02	102,330.05
Total value			\$643,991.09

Although the past season has been unfavorable to the production of dairy products, on account of the drought and the extreme heat in the early part of the season, the business shows a thriving condition and a rapid increase. The price of dairy butter remains about the same, but the production has increased about 50 per cent. over last year's figures. The price of creamery butter is forty-three hundredths of a cent higher than last year, which is higher than any year in the past five years for Ontario creamery. The production is 25 per cent. greater than last year, with little complaint as to quality.

The price of cheese is twenty-three hundredths of a cent less than last year, but the price of 10.02 cents per pound is greater than any year in the past ten years in Ontario.

The production is about 20 per cent. greater than last year, and of seven dealers in Winnipeg, two report the quality slightly inferior to last season. It is well known that the progressive farmers of Manitoba are keeping up with the times.

Some adverse criticism has been directed against the dairy industry of the Province, but the foregoing report clearly shows that the industry is in a good healthy condition.

### The Shorthorn in Dairy Districts.

Prof. Curtiss, of the Iowa Agricultural College, who is announced to address the Pure-bred Cattle Breeders' annual convention next month, when speaking before a meeting of Shorthorn breeders in his own State recently on the Shorthorn in the dairy districts, is reported as follows in the *Wallace Farmer*:

"He referred to Iowa's advanced position as a dairy State as compared with fifteen years ago, and also thought that high-priced lands would, from henceforth, affect this question, because it has been demonstrated that beef-raising on high-priced lands is not profitable; while, on the other hand, no lands in Iowa or Illinois would stand continuous cropping. He thinks these conditions will force the farmer to get more out of the cow, and thinks the solution is in the cow that will be good for the dairy and yet raise a good calf. They have demonstrated at the Experiment Station that this is possible. A picture of a Chicago cow was exhibited that had produced 355 pounds of butter last year and yielded a net profit of \$11.42 from milk alone, while the calf was sold to head a Shorthorn herd in Minnesota at a top price. Another cow at the College Farm, College Moor, gave 8,888 pounds of milk during last year and averaged 4.56 per cent. butter-fat. Her calf went to head a herd in Wisconsin. The professor thought the entire herd at the Farm would average 350 pounds of butter per year. He favors Shorthorns bred for milk, as he found them in England, where they are the leading dairy breed. He stated that Duthie, the noted Shorthorn breeder, of Scotland, had told him that his best milkers were also his best breeders, and that he paid much attention to milking qualities. Mr. C. S. Barclay, of West Liberty, in the discussion that followed, stated that in his thirty years' experience as a Shorthorn breeder he too had found his best milkers to be his best breeders. Prof. Curtiss thinks that the milking qualities of the Shorthorns of this country can and should be developed. He does not favor the crossing of Shorthorns with any of the distinctive dairy breeds, although he thinks the distinctive dairy breeds have their place. To properly raise the calf by hand, he advocates the use of the cream separator, and to the ration of warm milk from the separator he would add corn and oats and a little oil meal to balance up the ration. He thinks in this way the cow will pay a profit in milk and raise a calf nearly as good as the strictly-beef cow.

### A Subscriber for Thirty Years.

To the *Farmer's Advocate*—the tried and the true:

Enclosed please find \$3 for renewal and two new subscribers, this being our 30th year for the *ADVOCATE*. The new subscribers wish to get the Xmas number. Please send prize, boy's watch No. 1. Wishing you every success.

JOHN BROOKS & SON.

Glen Ross, Dec. 22nd, 1900.

### Poultry Raising in Assiniboia.

THE WINTER CARE AND FEEDING OF A SMALL FLOCK FOR PROFIT.

To the Editor *FARMER'S ADVOCATE*:

I have been doing for so many years just what most of our farmers and their wives do—that is, keeping poultry in a sort of desultory way, without regular methods, without proper means, and without really being able to see clearly where I lost or gained—that I fully realize my lack of knowledge and disability to write on the above subject which you have suggested to me, but I will do my best.

I am aware that there are many farmers who keep and raise cattle, hogs and horses in this same shiftless manner. They never know exactly the cost of feeding, and it altogether depends on their feelings at the time of talking on the subject whether they consider their stock has paid or not. When they have made a sharp bargain, it pays; when the other men have been the sharers, it does not pay. Most of these men at the same time are thoroughly convinced that hens do not pay. They do well enough to consume the waste on the farm, and the cooking cannot well be done without eggs, but pay? Of course not. Now, to divide my text into sections, as the old-fashioned preachers used to do, I will begin at, firstly:

**Winter Care.**—As I am writing in Assiniboia, I take for granted that on or about Nov. 1st we shut up our fowls. I am also writing for the benefit of people in moderate circumstances; therefore, I will consider, if possible, what care can be given in such cases. Any farmer, if he has the will, can build or provide a warm henhouse. This is essential. When fowls are kept in a place so cold that their combs or feet are in danger of freezing, they may exist, but they will not thrive, and certainly will not pay. The building should be large enough to allow convenient room for feeding without too much crowding, and without having to pick the food from under the roosts. There also must be light, plenty of it, if possible from the south. Not too large windows, but enough to show light in every corner, from sunrise to sundown.

I do not approve of a place at the back of the horse and cow stable for hens. It is not good for either the animals or the poultry, and though the fowls may get some of their living from picking around the other animals, they are apt to be stepped on and maimed or killed. Then, in stables where no better provision is made for fowls, there is not likely to be a window from which they can get a ray of sunlight. A good henhouse can be built adjoining the stable and not opening into it. Now, supposing we have settled about the building, we ought to keep it dry and clean. Once a week, in our hard winter weather, a thorough cleaning is necessary. If there comes a thaw, it must be done oftener to be at all comfortable. A large box should be placed where the light during the greater part of the day will fall directly upon it, and kept two-thirds full of dry dust for the hens to roll in. They enjoy this quite as much as a healthy baby does its morning bath. Ashes, especially coal ashes, will answer this purpose very well, but they must be changed frequently, for as soon as they become damp their efficacy ceases. From coal ashes the fowls get cinders enough to supply the grit which grinds their food, and from wood ashes they pick bits of charcoal, which greatly assists their digestion. Of course, it goes without saying that the ashes must be cold before carrying to the box, or you may some day see the whole business go off in smoke.

**Drink.**—Good pure water they require every day. Fowls do not drink as much in winter as in summer, but they must have it always. I have known people who threw in a shovelful of snow once in a while, and thought because the chickens picked at it they were satisfied. I wonder if those same people ever tried for even one day eating snow instead of drinking! The drinking vessels may be of whatever pattern is most convenient, but they should be so arranged that they cannot be spilled, and so that the fowls cannot get their feet wet. I have found small pickle pails answer the purpose very well, when they can be obtained. If the house is warm enough to keep water from freezing, the fowls will live and do well.

**Feeding.**—This is a much vexed question. There is such a diversity of opinions on this matter that I scarcely know how to approach it. But as I know of no kind of fowl that will live without food, I presume we are bound to consider ways and means. I have found that with the average farmer this is where the shoe pinches. He recognizes that his horses need straw, or even hay, and, yes, oats, even in winter. There are a few men, I regret to say, who think if a horse works not, neither shall he eat, but these men are few and far between, for which I am sure the equine race are truly thankful.

Any farmer knows that his cattle will not come through a winter and be of service the following summer on scanty and poor food. He also sees that his stock hogs have enough to eat; but the one thing he does not see, is why hens must be fed when he is getting no eggs. He begins this theme early in the fall, as soon as the "nasty, ragged-looking things" are going about "eating their heads off." Perhaps the poor, misguided being does not know that if the bird is cared for better than usual during moulting season it will feather out all the

sooner and be better prepared to face the cold. Well, we give him this information just now and here. Then when we have them comfortably housed for winter, they must be fed regularly and with a variety of food. Now and then we see a generous farmer who believes in feeding his hens, not because they pay, but for the reason that he will not have any starved animals around his place. He will throw a pailful of wheat down in a heap, perhaps twice as much as the flock can eat at a meal, and when remonstrated with, replies: "Well, if they do not eat it now they will some other time." This is not proper feeding. If at all possible, have the feeding floor covered with chaff or some loose litter, then scatter the grain so the hens must scratch for it. You will at once hear their cheerful, busy conversation, as they keep up the exercise. This is healthful feeding. Once a day, I prefer at noon, give them cooked food. Where there is stuff such as pigweed seed, potato parings, and scraps of food of any kind, cook it all together and see how eagerly they will gobble it up. I have disposed of bushels of pigweed seed in this way, when I have known of farmers who were burning it up to get it out of their way. For Northwest feeding of fowls, I would like wheat for morning meal, cooked food at noon, and oats at night. Oats are stimulating and not so fattening as wheat, therefore for fowls which have no outdoor run in winter, and from which we hope to get some eggs, I prefer one meal of oats. About once a week throw them a half dozen whole raw turnips. They will enjoy them immensely.

Now, I think I hear someone say, "But she is forgetting the thirdly—for profit." Not at all. Just let me ask a question or two. Can some of you farmers tell me what is the use of throwing away feed on all those cows that give no milk in winter? I can easily see why you feed chop and hay in the spring, when you get the full pail, and when there is a nice little calf to raise. And that old sow! Is she not a perfect nuisance, always grunting for more, just when it is so icy that you slip every time you carry her a pail of slops? "Why," you say, "this woman must be crazy, if she is a farmer's wife, not to see the ridiculousness of these questions." Not a bit of it. Your hens will pay for their proper winter care all next spring and summer, just as surely as will your cows and hogs. Try it this winter and see. Grain, this winter, is a high price, but for good eggs and poultry there is always a ready market, and even with the high prices of grain, I am sure, if properly managed, hens pay. I have not said a word of who is to care for the fowls on the farm in winter. That is according to circumstances, but women can do it all, if in moderate health and if so inclined. I think it is healthful and cheery work for women on the farm in winter.

MRS. A. NEVILLE.

Central Assiniboia.

### The Live Stock and Dairy Conventions.

Arrangements are being completed for the annual conventions of the live-stock associations which are to be held in Winnipeg on February 19th, 20th and 21st. This will be bonspiel week, and it is expected that very low rates over all railway lines will be offered. Tuesday, February 19th, will be the Sheep and Swine Breeders' day; Wednesday, the Pure-bred Cattle Breeders'; Thursday, the Horse Breeders', with joint meetings each evening. The Dairy Association will meet on Thursday for ordinary business, and hold their open convention on Friday, February 22nd.

Among the prominent speakers that are expected are: Prof. Curtiss, of the Agricultural College, Ames, Iowa; Prof. Carlyle, of the Agricultural College, Madison, Wisconsin; Alex. Galbraith, the Clydesdale breeder, of Janesville, Wisconsin; Prof. Robertson, Live Stock Commissioner Hodson, Prof. Ruddick, J. H. Grisdale, Prof. Day, Dr. Smith, and a number of prominent local speakers.

### More Money Needed for Wolf Bounties.

The *Medicine Hat News*, in a recent issue, endorses a proposition made by W. R. Abbott, of Maple Creek, to the effect that the Dominion Government give back to the ranchers, to be expended in the payment of wolf bounties, the money raised out of the land leases held by ranchers. The *News* points out that the Western Stock Growers' Association devotes a considerable portion of its funds toward the destruction of wolves, that the Territorial Government also makes a similar grant for this purpose, and contends that the ranchers would be encouraged to lease more land from the Government if the money was to be devoted directly for their own benefit. It further says: No one thing menaces the stock industry as does the wolf and coyote nuisance. The ranchman who finds that he is raising beef for the wolf market, instead of a more profitable market, is in a bad way, yet it is the experience of almost all ranchers to have losses from this source.

### Winter Poultry Show.

The annual winter poultry show held by the Manitoba Poultry Association will this year be held in Brandon, the dates being January 29 to February 1. The poultry fanciers of Brandon are devoting a great deal of energy to make the show a success, and it will doubtless be one of the largest and best ever held by the Association.