

dairymen of different counties, and even sections of the same county, as it is in commercial and business circles, so that the farmer and dairyman who is not wide awake and keeping himself well up and even abreast of the times, will soon be crowded to the wall. To my mind, these remarks apply more especially to the dairymen during the next few years. There seems to be a good deal of doubt and prejudice with regard to both fodder corn and ensilage, from the fact that there have been many failures. We often get a poor or even bad cup of tea because the cook carelessly or ignorantly stewed all the goodness out of it. We often see poor crops, even total failures, because the farmer did not take the trouble to prepare his land properly, or for some other cause. We could mention, and you could think of, bad jobs and total failures without number in every department of life, when "any way to get it done," and "almost right," was made to do, instead of "just right."

Nothing is said against ensilage by those who have given it a fair test, and all who have given it a careful trial are enthusiastic on the subject. The only opposition now-a-days is occasionally from a scientific or theoretical point of view, and not from the practical; but while the chemist finds no more nutriment in ensilage than in dry feed, it is an undeniable fact that cattle, horses, sheep, hogs and poultry do. And then, what is the use of going on the old way, buying hay—producing scarcely any milk in winter—coloring what little butter is made, bring herds out in the spring so thin and emaciated that it takes half the summer to get them in proper condition again—taking so much of this short life to determine whether a corn stalk dried in an oven is equal in feeding value to a corn stalk siloed, when practical experience shows that it is not; and even if it were you could not dry a large number of acres of corn in an oven, when you can put it in a silo and save it, have plenty of green feed all winter at small cost, plenty of rich, good milk and butter, and herds of cattle as round and sleek in the spring as in the fall. Read up all you can on this subject, and if your faith is small, build a small silo, and when your faith grows stronger, build a larger silo.

The rapid growth of silos not only in the United States but even in old Conservative England, proves most conclusively that this system is destined to eventually replace the old and unsatisfactory methods of feeding. In the U. S. in 1880 there were six silos. In 1885 they had increased to nearly 2,000, in 1890 to about 5,500, in 1897 to 8,000, and in 1898 to the very large number of 14,000. In England there were but 4 silos in 1880; in 1885 there were 1,183, and in 1887 over 6,000. The growth has been very rapid and regular every succeeding year since its introduction, and although the spirit of hostility which is always opposed to new things has been more than usually active, still, some of its former most active opposers are to-day among its most enthusiastic users and advocates. Because a few people every year are unfortunate in raising wheat, potatoes, or something else, is no satisfactory proof that these crops cannot be raised with success. So it is with ensilage. Science and experience with ensilage have made many improvements in its preparation and keeping since its introduction.

The discovery of the system of ensilage is just as certain to revolutionize feeding and become a necessity to the farmer, as that the telegraph and telephone have revolutionized the slower ways of business and become necessities to the business man. Do not say you will wait to see how "A's" or "B's" ensilage comes out. If intelligently prepared it can only come out one way, a perfect success. You will waste one or two valuable years, and life is too short and the years too few. Take a good agricultural paper treating on ensilage and read it. The cheaper and better you can keep your cows during the fall and winter the more money you are going to make out of them. The day for feeding hay to cows has gone by. It was never a profitable investment; but certainly it is not so now. All thinking and far-seeing dairymen will have come to the conclusion that unless you can find some way to change your methods of farming and in some way increase production, and that, too, in a way that will cheapen as well as increase it, unless this can be done farming and dairying in Ontario is somewhat in danger of losing its prestige. With from six to seven months feeding time in the year and competition with cheaper lands and milder climates, dairymen will have to wake up to the fact that they will have to meet this competition or go out of the business. The possibilities of this food (ensilage), in the present and future no man can tell. Just think of a man wintering his stock cheaper than he can pasture them in the summer. Ensilage has revolutionized the dairy business in Wisconsin and it is going to do the same in Ontario, and the beef interest will come in for a share of this change also, so that we may yet be able to compete in cheapness of food with the western ranches. We are advised by our physicians to raise and can fruit and vegetables for our families and I think it is good advice. In the silo we have a great canning institution or factory for getting good and cheap food for our stock.

The Kansas Board of Agriculture appointed a committee to investigate the claims of ensilage. The committee reported as follows:

1. That the time has arrived when the more progressive and economic methods of conducting the dairy and beef producing interests should command the thoughtful consideration of Western farmers.
2. That the method of preserving green crops, by means of silos, now common in the older states, is generally commended as practical and profitable by those having the largest experience in the business.
3. That ensilage, if intelligently prepared, is a good, wholesome article of food for cattle, and when fed

as it should be, in connection with dry feed, will materially increase profit of the dairy; make the production of beef more remunerative, and enable the farmer and stock grower to realize profits not promised by the methods now common in Ontario. 4. That corn is the most profitable crop for ensilage, and for this purpose, the seed should be drilled at from eight to ten inches, in rows three and one half feet apart. Good cultivation is required, and the crop should be cut just before or about the time the ears begin to glaze. 5. That corn planted, cultivated, and cut as above indicated, will average not less than twenty tons of ensilage per acre; that in feeding value, three tons of corn ensilage will equal one ton of tame hay, or that one acre of corn when made into ensilage, will equal about seven tons of hay; that the feeding capacity of a given amount of land can be at least doubled by the method proposed, and without adding materially, if at all, to the cost per head of the animals fed.

The following is a fair estimate of the yield of ensilage corn and a comparison of the difference between the cost of hay and ensilage: A fair average yield of ensilage corn would be at a fair estimate, 15 tons or 30,000 lbs. per acre. The average feed per day for a cow is 50 lbs. Now fifty pounds per day for a season—say of 200 days—would be 10,000 lbs. or 5 tons. At this rate one acre would produce enough to feed three cows for a season of 200 days. This same cow, if fed upon well-cured hay, would consume at the least calculation, two and one-half tons being 25 lbs. per day. Thus to keep a cow on hay would require the product of one and one-fourth acres of hay. This estimate is based upon the product of 2 tons of well-cured hay per acre. Thus an acre of fodder corn of fifteen tons, green weight would, if well preserved in the silo, keep one cow 600 days, giving her 50 lbs. per day. Thus you have one acre of corn feeding a cow 600 days, while the acre of hay would only feed her 180 days or about 1/4 the time. These may be rather startling figures to some of you, but they are not strained or extravagant in the least degree, but are fair, fairer indeed to the acre of hay than to the acre of corn, for the acre of ensilage corn can be made to weigh and often weighs 15 tons, than the acre of hay does two tons.

A leading Wisconsin farmer says:—Fifty pounds per day is an average ration for a cow, with the usual meal ration; \$5.50 will feed a cow ensilage for six months. It will cost \$18.00 to feed a cow hay six months, leaving a balance of \$11.50 in favor of ensilage.

Now, then, you can easily know what size silo you have to build by reckoning the size that would hold a hundred tons. You can very easily get at it by figuring—fifty feet make a ton. That depends somewhat, however, on the depth of the silo. In a silo 25 feet deep, 40 feet will make a ton; but the average is about 50 feet to the ton.

A farmer in the Elgin District, Ill., says that he would not swap the ensilage he has made the past two years, two tons for any ton of hay, and he grew on the average 20 tons per acre, which, if he is correct, gave him the value of ten tons of hay to the acre, feed value.

To sum up, the silo and ensilage furnishes a food for the cow that is largely similar to the pasturage grasses of June and October, and that it will give almost or quite as good results in the milk and butter products as they do. It prepares the farmer to laugh at the drought and to feed his cows as well when the pastures are all dried up as when they are at full productiveness and keep the flow of milk at its full. It enables him to make a uniform quality of butter the year round if he so desire. It enables him to keep twice or three times the amount of stock that he formerly could, and he can keep his cows and young cattle growing and thriving all through the winter months as in the summer, the better preparing him to meet the keen competition that is evidently before him, and that not very far distant. I believe the silo is destined to play a very important part in the farm economy of the future, and that it will be utilized to preserve all of our forage crops not only for winter, but for year round feeding, and that the days of pasturing on high priced lands are numbered. We have got to face low prices for all kinds of farm produce; and as with the manufacturer, so with the dairymen, the only way to meet this is to cheapen and increase production. The silo opens the way for the dairymen and stock feeders to do this.

In referring to silos, the Secretary said farmers do not pay enough attention to this important question. Thousands of dollars could be saved every year to the province, if our farmers would soil more and pasture less. He instanced the case of Mr. John Geary, a very intelligent man and an extensive dairyman and breeder, who kept 160 milch cows on 50 acres of grass, 10 acres of which was woods and steep side hills, the whole of which was not worth over \$3 rent per acre, a total of \$150 for the season's pasturage. In this field he fed the following additional green feed: two acres of rye, 13 acres of peas and oats, and 11 acres of corn, which were produced at an average cost of not more than \$15.00 per acre for the rye and peas and oats, and \$20 per acre for the corn, which would together amount to \$405, to this must be added the rent before mentioned, making a total of \$555, the total food cost of 160 cows during the summer months. Mr. Geary wholesales milk to city dealers besides converting considerable into cheese. His profits for the 160 cows, over labor and feed not grown on the farm, were over \$6,000 for the past year, and he expects a better margin this year.

Mr. McD. Allen, Goderich, the well-known authority on all matters pertaining to fruit, also gave a very entertaining address, which we will publish at an early date.

The meeting adjourned to meet again on Thursday, April 11th.

Stock.

Chatty Letter from the States.

[From our Chicago Correspondent.]

Mr. John Dunn, the Toronto cattle exporter, recently bought here one lot of 170 head, 1545-lb. steers, at an average cost of \$4.11; another lot of 142 head, averaging 1551 lbs., at \$3.93, and some fat bulls, 1600@1778 lbs., at \$2.94@ \$2.98. These are about the lowest prices at which good export cattle were ever bought in Chicago. At the same time a few carloads of very fancy 1600-lb. steers sold at \$4.50@ \$4.85 to New York and other eastern purchasers.

This spring there is quite a wide range in prices of poor to prime heaves, at least \$1.00 per hundred, while one year ago there was not more than 15c. Then, ripe fat cattle were more than abundant, but this spring there seems to be a scarcity of finely-finished heaves, but no end of rough, fairly fat 1400 to 1600-lb. steers.

One thing against an early improvement in the cattle market is the rush of farmers and feeders to clear their feed lots in time for the spring work.

Indications point to higher prices for good cattle late in the summer.

There are some who think that unless there is a speedy improvement in the cattle trade, that fewer cattle will be fed this winter than ever before. Experience has taught that when people generally think one way concerning the future, they are disappointed because they act as they think, and, naturally, bring about the defeat of their own well-laid prophecies.

The dressed beef war waxes warm. Thousands of men unreasonably think the dressed beef system is at the bottom of the cattle depression, and act as if they thought the cattle millennium would come with the return to the old system of handling cattle and meats.

The St. Louis convention of State legislative committees, which met at St. Louis, voted in favor of the adoption of State or local inspection—all animals to be inspected on the hoof in the State where the meat is consumed. This means that a State adopting the law will refuse to receive meats from any other State; and there is talk that the big packing concerns will refuse to buy cattle from States adopting such laws. It is simply the "protection" theory run mad. People have become so attached to "protection" (?) from foreign goods that the States now naturally take to the idea of protecting themselves against each other. It is very generally conceded that the State inspection laws are not constitutional; but it will take a long time to decide the question.

The dressed beef men are anxious to have the most rigid government inspection at place of slaughter. That they are sincere in this is evidenced by the fact that it often happens that Swift and Armour refuse to accept animals which the local inspectors and State Veterinarian pronounce to be perfectly sound.

The hogs are selling 50c. @ 80c. lower than last year. Old hogs are pretty well marketed, but every pig and brood sow is being carefully saved, and there is a crop of hogs coming that will look like old times.

Sheep are considerably lower than last year. Corn-fed westerns have been bringing \$4.40@ \$4.85; native muttons, \$4.00@ \$5.25.

The cattle and general stock raising business