the seed-bed and sowing the corn was \$96.50, and the cost of cultivating, \$44. We figured a man's time at \$3 per day, and a horse at \$1 per day. This field of corn came on very well right from the beginning. It was a uniform stand over the entire field, and the corn attained a good height. Half of the field was sown to Learning, and the other half to Bailey. Twentyeight pounds of seed were sown per acre, and at \$3.50 per bushel the seed cost \$26.25. When we commenced cutting, on Saturday, September 25, much of the corn was glazed. The silos, which, by the way, are 14 by 40 feet and 10½ by 38 feet, were filled on September 30 and October 2, and have a capacity of approximately 200 tons. The first day's filling there were four teams drawing the corn from the field, and on the second day five teams. Six men pitched the corn, and there were three men continually in the silo. With this force there was always a wagon at the cutting-box, and the corn was thoroughly tramped in the silo. By using a distributer pipe a good deal of labor was saved in the silo. These two silos were filled in two days and used only thirteen acres of the fifteen in the field

After the silage had settled we figured that we had approximately 175 tons of silage, estimating 30 lbs. to the cubic foot. This works out to about 131/2 tons to In figuring the cost of filling the silos men the acre. were paid \$3 per day and their board, and the horses This brought the were figured at one dollar apiece. labor bill for ensiling the corn to \$99, and the board to \$22.05. The outfit cost \$40, and two tons of soft coal, at \$16 per ton, were used in generating power. This brings the total cost of ensiling to \$193.05, or nearly \$1.10 per ton. We doubt if there is any other crop that can be harvested as cheaply.

The question frequently arises as to what a ton of corn placed in the silo actually costs. In arriving at this, the labor of cultivating the field, cutting the corn, ensiling, rent of land, etc., must be taken into con-sideration. The cost of cultivating has already been given, and cutting the corn took three days, with three horses and one man, which would come to \$18, on our basis of valuing time. A rental of \$4 an acre was placed on the land, and allowance made for shocking the two acres not ensiled. Our figures are: \$96.50 for preparing the seed-bed and seeding, \$26.25 for seed, \$44 for summer cultivation, \$18 for cutting the corn, \$99 for labor used in ensiling, \$22.05 for board of men at silo-filling time, \$40 for the silo-filling outfit, \$32 for fuel, \$60 for rent of land. \$6 for shocking corn, which makes a total of \$443.80, or approximately \$2.20 per ton. With a lighter crop of corn the cost per ton would be higher, and with a heavier crop it would be proportionately smaller. No allowance was made for rent of implements or depreciation on same. It is possible that in arriving at an accurate valuation of the silage this should have been done, but it is rather diffcult to know just what should be allowed for the cultivating implements.

At a cost of approximately \$2.20 per ton, high-class feed is placed in the silo ready for immediate use, or for use at any time during the year. There is practically no depreciation in feeding value if the feed is held over for summer use or if it remains in the silo a year or more. In comparison with the price of other feeds, there is no cheaper feed than this corn in the silo, and owing to its succulent nature it helps in the preparation of a ration that is highly acceptable to all classes

If the field had required more work in preparing the seed-bed, and there had been time to give more cultivation during the summer, the cost would have been increased, but the extra summer cultivation would possibly have increased the tonnage. No valuation has been given for the manure applied. The benefit of this fertilizer is distributed over a number of years and results will be obtained in succeeding crops. What we were principally interested in was arriving at the actual cost of ensiling a ton of corn, in order to see whether the expense was justifiable, and to get an idea of what a ton of corn cost us when ready to feed We know from experience that good silage has a high feeding value. Last winter, on silage and cut straw, with a very small amount of clover hay, the kept in excellent flesh without any grain.

and gone, and to anticipate the fall and winter campaign in dairying.

# SUMMER OF 1920 FAVORABLE FOR DAIRYING.

There are doubtless exceptions to the general rule of a favorable dairy season since the spring of 1920, but on the whole, dairymen have no great reason to complain. It is true that labor has been scarce and unsatisfactory; that purchased concentrate feed has been high in price; and that cheese, condensed and powder milk prices have been disappointing at times. Yet everything considered dairymen have reason to be thankful as compared with the summer of 1919, when, in most parts, pastures were burnt and blistered by the sun, little or no rain fell during the growing season, food was scarce and dear, and the profits little or nothing

Looking briefly at the chief lines of dairy production and manufacture for 1920, they stand out somewhat as follows:

## BUTTER.

The manufacture of butter, both as to quantity and In Ontario, quality, has been above the average. particularly, it is generally considered that creamery butter is larger in make and better in quality than it has been for some years. While it is true that the Western Provinces captured a large share of the best prizes offered at the leading Eastern fall exhibitions, Ontario makers were in the money to a greater extent than has been the case in other years. The pasteurization of cream for butter-making has become a more general practice, hence buyers have been more confident about their purchases turning out satisfactorily when the butter is taken from cold storage, three to six months hence. There is still room for improvement in the quality of cream delivered for butter-making. This improvement is not likely to be very marked until a systematic plan of grading cream is adopted by all creameries, and a difference of from three to five cents per pound fat made in the prices paid for cream of the This is a problem our creamery men different grades. have not as yet tackled in a serious manner. Competition is too keen at present for any action along this line, and practically all grades of cream are paid for at a similar rate per pound fat.

The markets for cheese have been somewhat irregular. There have been a number of slumps, followed by recovery, followed by more slumps, until the sellers and buyers of cheese scarcely knew where they were at. The cause for all this, is laid to "Exchange," that modern bugbear in marketing farm produce. Our financiers ought to be able to solve this problem, thus stabilizing markets, and making production on dairy farms more certain as a paying proposition. If the present uncertainty of prices continues for two or three seasons longer our cheese trade will receive a serious We are going back in production of cheese at the rate of about 100,000 boxes a year now, and it will be even worse in future, if cheese farmers cannot assured of a more steady and profitable market for their finished product.

So far as quality is concerned, we have heard nothing but good reports. Our cheese-makers, as a class, understand their business. One danger, seems to be that few young men are learning the business. Among our students in both regular and special dairy classes, very few wish to make cheese. They nearly all want to learn butter-making, condensing, powdering, or market milk, but no cheese for them, is the rule. This is a serious situation. Where are the future cheese-makers to come from, if few young men wish to learn the

The cheese factories are likely to receive additional supplies of milk this fall in certain districts where the manufacture of condensed and powder milks will be lessened. However, this in the total will have very little effect on our cheese production. A few thousand pounds of milk extra, made into cheese will have little or no effect on the cheese markets. It is altogether likely that the cheese markets will recover before the close of the season. They have a habit of doing this

# FOUNDED 1866

milk-not a "get-rich-quick" scheme by any means. but with a reasonable prospect for cheaper feed and labor, and less overhead costs, so far as we can see, there will be fair profit in producing milk from now until the spring of 1921. What will happen then is known only to the gods which preside over the destinies of farmers.

# CITY MILK AND CREAM TRADE.

The demand for milk, cream, ice-cream, milk con-fectionery, etc., has been good. People have been getting good wages and they have spent freely, both for the necessaries and the luxuries of life. Some diff culty was experienced in certain sections when the price of milk was advanced to winter prices a little earlier than usual, and in one case the Board of Commerce issued a restraining order, which was afterwards recalled, at least temporarily, but on the whole, dealers and con-sumers have been willing to accord farmers a fair price for their milk. It has at last reached the consciousness of those buying and consuming milk, that a dairy farmer who works 12 to 16 hours a day, rises at daylight seven days of the week and often works until dark, who risks money in feed and labor for cows, and bears the losses due to disease and disablement among cowssuch a man deserves to be well paid. If he is not, nothing is more certain than that milk production will be lessened, which will mean a serious loss to individuals, cities and the nation, as there is nothing which will or can take the place of milk as a food, particularly for children. Instead of curtailing production and con-sumption of milk, every effort should be made to increase these.

## THE FUTURE.

The man who prophesies in detail as to the future of the dairy business, runs considerable risk, but one is quite safe in making a forecast as to the future of dairying in general. There are bound to be ups and downs in the various branches of the business, but on the whole, dairying is on a sound basis. The consuming public is beginning to appreciate the value of milk and its products in a way which they have not done heretofore. Much, however, remains to be done. The plans of the National Dairy Council for educational work as to the cheapness and healthfulness of milk, butter, cheese, etc., ought to receive more encouragement from farmers who are cow-owners than has been the case up to the present. It is not creditable to the 300,000 dairy farmers of Canada, that only about \$2,000 has been contributed by them for this work. The President of the Council has appealed to cow-owners for a 50 cent yearly collection to assist in the work, but the response has been very meagre. I feel sure that if this matter were properly presented to dairymen and the machinery provided for collecting the money there would be no lack of funds to place the work on a sound basis financially. It would then be up to the council to see that the fund is wisely spent. As a result of similar work in the United States, it is estimated that the increase in milk consumed has been over one hundred million gallons during the past year.

As indicated previously, the feed and labor situation is likely to be very much improved during the coming winter and for next season. A large crop of coarse grain, good crops of corn and roots and a fair crop of hay and straw, ought to place our dairymen in a very much improved position so far as feed is concerned, as compared with the last two years. The prices of concentrates like wheat-bran, oil-cake and cottonseed meal are likely to be lower than they have been for some time. The United States Bureau of Markets is giving quotations around \$40 for bran, and \$60 for oilcake and cottonseed meal, which looks good to us, if we can get delivery in Canada without paying too much in freight rates. Co-operation on the part of farmers and the purchase in carlots from manufacturers, ought to lessen feed bills very materially for the winter

The closing of some shops, or reduction of the number of workmen, notice of which is already appearing in the press, and a general lowering of prices on staple commodities that have been soaring in the clouds for some time, indicate more favorable conditions for the farmer, though we need to bear in mind that a lessening and a lowering of wages 1 town, means that there will be less money to spend by the workers, and this is bound to affect prices of farm produce more or less adversely. Dairymen may find comfort in the fact that their goods are necessaries in the diet of our people, hence the lowering of prices for milk, etc., is not likely to be so great as in some other With the possible exception of condensed and powder milks, the prospects for paying prices for dairy lines of farm produce. products until next spring at least, look good. a great shortage of butter in the British markets. The supply of cheese in sight is no more than will be needed to tide over until the new cheese season. There is reported to be an actual shortage of cheese for the American markets, which means that a portion of our surplue is likely to fact of surplus is likely to find a favorable market south of the border before the winter is over. Taking everything into consideration, Canadian dairying is in a soun position, and there is no good reason why we should not go on developing the business along sane and safe lines. A steady growth is much preferable to one of the mushroom variety



The above figures are the amounts which we have arrived at when figuring the cost of our corn in the silo. Let us hear from some of our subscribers who have kept account of the growing and ensiling of corn.

# THE DAIRY. A Summary of the Dairyman's Position.

Editor "The Farmer's Advocate"

Just when the summer season for tanying closes and the winter season begins, is not easily determined. The milk producers of city milk are inclined to have the winter season start September 1, whereas the old rule was October 1, or even November 1. It seems to be a question of feed rather than of month in the year. partial stable feeding begins. Now is a good time to ook back over the dairy work for the summer past

#### CONDENSED AND POWDER MILKS.

On account of the unsatisfactory export trade, some of the condenseries and powder milk manufacturers have been seriously handicapped. The prices for raw material-milk, sugar, etc.-have been going up, labor exacted more toll, yet the finished product had to be sold at lower prices in order to make a clearance of the storage rooms and satisfy the claims of bankers, milk producers, and other creditors. Rather than continue in this way, at least one firm has decided to quit manufacturing their special line, but they will take in milk as usual and make it into butter, or sell it as cream, for a certain rate per pound of fat. The only difference is that instead of buying the whole milk outright and keeping all by-products at their factories, they will act

At first, farmers who were patrons of these factories regarded the change as being most unsatisfactory Those who were in a position to feed the skim-milk on the farm to hogs, calves, or poultry, will probably make as much money as if the whole milk were sold The present price of milk-fat is 60 to 62 cents per pound Milk testing 3 per cent. fat will be worth \$1.80 to \$1.86 per 100 pounds, less the cost of manufacturing. The skim-milk from 100 pounds of whole milk is worth from fertilizers for the farm where the by-product is fed at home. All these added together make a fair price for

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H. H. DEAN.

There seems to be a tendency for prices of some things to lower, but farmers who had to buy a corn binder to harvest their crop did not notice any price cutting in that necessary implement.

O. A. C., Guelph.