Automobiles, Farm Machinery and Farm Motors.

Points to Remember in Buying a Tractor.

1. Mechanical Design.—The design should not permit of the tractor injuring itself by improper handling. This is with special reference to the gear shifting device. It should have a range of speeds suitable for the work you expect to do with it. For satisfactory hauling on roads a somewhat higher speed may be desirable than used for farm work.

2. Simplicity.—The fewer parts there are to adjust and inspect, the more satisfactory the tractor is likely to prove. The design should permit of attaching drawbar or belt without inconvenience. Sometimes one part of the machine is where it interferes with operating the belt satisfactorily and needs to be removed when the machine is on belt work.

3. Accessibility of Parts.—Parts which are likely to wear out and need replacement should be as aceessible as possible. These items are, crank shaft, bearings, connecting rods, wrist pins, etc. Where bushings are to be replaced by babbit, in many cases it is desirable to pour the bearing with the shaft in place.

4. Lubrication.—All parts subject to wear should be lubricated by sight feed and perhaps force feed systems. These systems should be readily inspected. The time consumed in lubricating a tractor during the season's work is considerable. It should be possible to inspect this while the tractor is in operation without endangering the safety of the operator or the quality of the work.

5. Protection of Working Parts from Dust.—An enclosed tractor is likely to have a longer life than one which has the working parts exposed to grit and dirt. Most of the work which the tractor is called upon to do places it in very dirty conditions.

6. The standing of the company manufacturing the tractor should be investigated, as it has an important bearing upon the likelihood of securing repair parts. It also ensures the purchaser against loss in case a defective machine is purchased.

7. Length of Time on Market.—Very new types are likely to meet with considerable change, and unless the type has been well tried out it will be difficult to secure parts to replace those which are broken or worn out. Conservative companies usually test out good models before putting them on the market. Then they feel justified in keeping a good deal of money tied up in repair parts.

8. Adaptability to Your Special Conditions.—This pertains to size, type, weight, etc., as well as to the type of farming. Doubtless you will plan on operating ensilage cutter, threshing machine, corn sheller, feed grinder and plows as well as other tillage machines with your tractor. You should select one which is usable on as many as possible of these machines. In many cases the tractor is used for road grading work. Threshing machines now in general use as well as road grading outfits usually require a tractor which is larger than is justified for farm purposes. In this case it may be desirable for you to consider the purchase of special machines which will harmonize with your entire plant.

Write to the manufacturer from whom you have almost decided to buy and ask him for the names of six men to whom tractors have been sold. Write to the six men and ask them how they like their investment. Their answers will convince you, before you buy, that your choice is right or wrong. If wrong take similar action in your second choice. Every man decides very easily by the process of elimination what makes he would not buy. Then a little investigation will do the rest.

THE DAIRY.

A Well Equipped Dairy Farm.

Oxford County in Ontario has long been considered one of the best dairy counties in the Province and boasts of larger herds of dairy cattle and more universal use of the silo and fodder corn than almost any other section of good farming country in the Dominion. We venture to say, however, that it is doubtful if it would be possible to find, even in Oxford County, a dairy farm that is better equipped for the business of dairying than the one owned by Wm. Prouse of Mount Elgin. We refer particularly to the equipment in barns and buildings and the conveniences that are to be found therein for the comfort of the cattle and other stock and the convenience of those who have to take care of them.

Mr. Prouse has not been long on this farm, which is 200 acres in size, but last year he was milking 44 cows, sending the milk to the condensory at Tillsonburg. It was in June 1917, that he gained the distinction of receiving the largest milk cheque for the month that the company had ever paid out to one individual, and it was some cheque, as will be seen when the sum of $978 is mentioned. This year only 30 cows are being milked, since Mr. Prouse lost a man early in the season and it was found impossible to take care of as many cows as was the case last year. Nevertheless, at the time of our visit in June of this year, Mr. Prouse expected that his milk cheque for that month would reach $750, a very creditable amount indeed. At that time about sixteen cans of milk per day were being sold from the farm which, expressed in pounds, means 1,280 pounds at 80 pounds per can. The price received for this milk varies according to the test for butterfat and, starting at $1.85 for 3% milk, the price is raised 3 cents for each additional one-tenth of one per cent. of fat until a price of $2.30 per 100 pounds is reached for milk testing 4.5% or over.

The owner says that he has not been on the farm long enough to find out just how many cows it would pay to keep, but believes that it would be possible to keep from forty to fifty cows during any favorable season. Until last winter Mr. Prouse has always followed all-the-year-round dairying, but last winter, silage was so scarce and the price of concentrates was so high that he found it unprofitable to winter milk. He therefore sold his winter cows. His neighbors also found that they made little or no money last winter. The cows on this dairy farm are grades with but few exceptions and it has not been the practice to raise calves to replace inferior or old cows. Beef has been such a good price that it has been possible to replace unprofitable cows with but very little extra cost. One reason that there are a great many grade cows in the herd is that Mr. Prouse frequently sells cows in car lots and finds a greater demand for grades than for pure breds. There is, however, a splendid type of sire now at the head of the herd and it is the intention of the owner to raise a young herd from this bull. Some idea of the standard of milk production maintained for the herd may be gleaned from the fact that any individuals in the herd that do not produce 8,000 pounds of milk in a season must be disposed of as not sufficiently profitable. Although Mr. Prouse has been forced by circumstances to reduce the size of his herd by about one third he does not think that there has been any general reduction of the herds in the district since 1916.

The cows are milked by a mechanical milker, one of the popular makes which can be operated by one man. It is a three unit machine and the one man can milk 30 cows in about one hour and ten minutes. Last year the milking was done more quickly, but there was some udder trouble. This year the udder trouble has been avoided so far. Mr. Prouse is quite satisfied with his milker, but he believes that there are some men who should not own a milking machine because they do not know how to operate and take care of it. He keeps the tubes of the machine in cold water only. Once each day cold water is run through them and then, just before they are put in the vat, hot water is run through them; this takes place in the morning. In discussing the cost of operating the milker, Mr. Prouse said, "We figure that it costs us $6.00 per month to operate our milker. I do not think it would pay anyone to invest in a milking machine who does not keep at least 25 cows."

Two big silos each sixteen by forty feet furnish silage for the herd in winter and this year 28 acres of corn are being grown to fill them. Even during June pasture the cows never come into the stable without getting some kind of grain. At the time of our visit they were being fed oat chop night and morning and, in all, they were getting about five pounds of grain each per day. The stable is fitted up for comfort for the cows, with high-class stanchions, cement floor and mangers level with the floor, while the wide feeding alley between the two rows of stalls is raised about ten inches above the level of the stall and manager. There are 46 stalls besides two boxes for freshening cows and two large calf pens, all built from metal. The stable is neatly whitewashed and the windows open inward from the top, providing plenty of ventilation. A litter carrier and large feed wagon make the work of feeding and cleaning the stables easier and chutes from the granary above to the feeding room and feed alley below do away with the heavy work of carrying grain downstairs. Individual water basins provide water for the cows whenever they want it; in short everything is done, apparently, for the comfort of the animals and for the convenience and cleanliness of the stable.

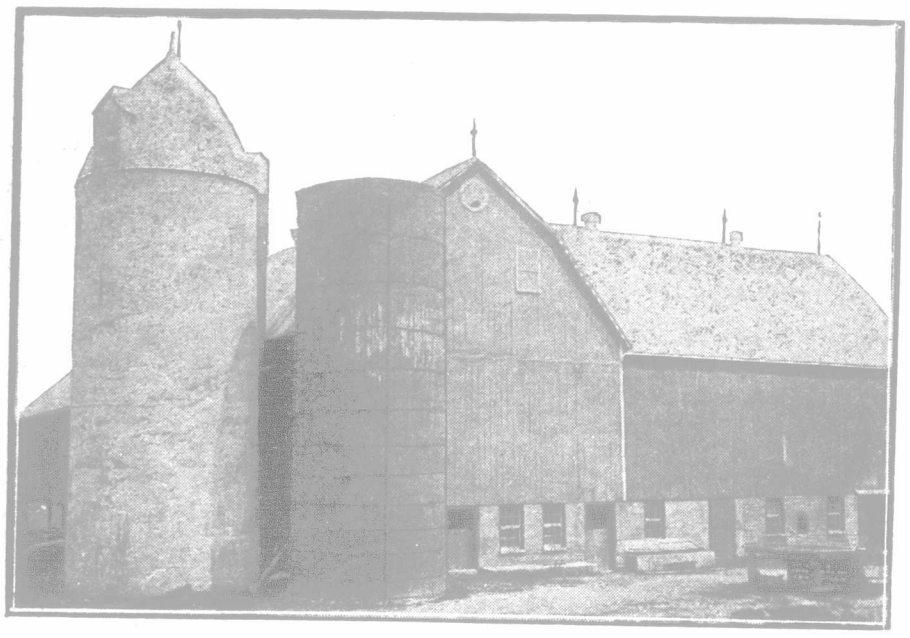
The water supply comes from a well situated near the house and a big cement supply tank beside it is filled by a wind mill. Hydro-electric power is also available for power on this farm but about the barn it is used chiefly for lighting. Water from the supply tank near the windmill is conducted to the splendid cement block milk house, situated conveniently between the house and the barn, and to the dairy stable as well as to the two cement watering troughs. One of these troughs is for the horses at the front of the barn and another round cement trough at the back of the dairy stable for the cattle when they are outside and the other stock.

The milk house is equipped with a cooler through the coils of which the water runs, fed from a smaller supply tank in the milk house, while the milk is poured into a receiver above the coils and runs down over them coming from the cooler at a temperature of 58 degrees. There are also water tanks large enough to hold ten 80-pound cans and in these the night milk is set to cool over night. Ice is added for the night milk so that in the morning it comes from the tank at a temperature below 60 degrees. So far this season there had not been a pound of milk lost. About sixteen tons of ice are harvested each season at a cost of about twenty-five dollars, work included. The ice house is only a rough building built of inch lumber, but there is no trouble experienced in keeping ice the whole season.

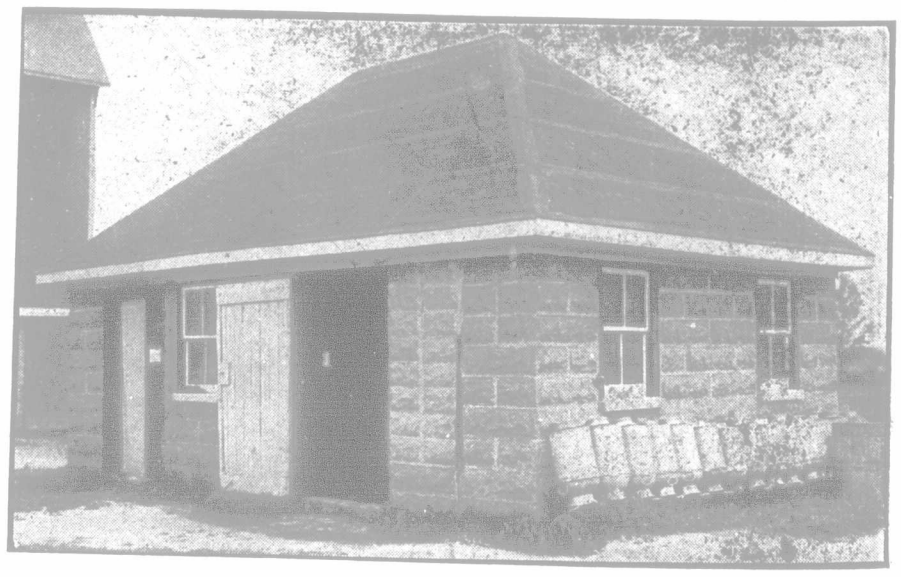
Mr. Prouse uses eight horses to work the 200 acres. Owing to the fact that the milk is sent to the condensory no hogs are kept of any account, although there is a splendid hog house on the place. Alfalfa has been tried out rather successfully during the last two or three years, but there seems to be a tendency for this crop to heave out on the level land of the district. Except for a few horses that are shipped West each spring the dairy cow is the only business proposition on the place.

Inheritance of Color in Jerseys.

During the past few years some very interesting studies regarding the inheritance of color among Jerseys have been made by Prof. J. J. Hooper, of the Kentucky Agricultural Experiment Station. This Station has a very good herd of Jersey cattle and has had for some years, but calves began to appear in the herd which were broken in color, in spite of the fact that they came



These Two Big Silos Furnish Plenty of Silage for the Herd.



This is the Modern Milk House on the Farm of Wm. Prouse, Mt. Elgin.