

What Dairymen Think of the Mechanical Milker.

If there is one job about the farm which is despised more than another by hired help, and even the dairyman's family, it is "milking". It is a chore which must be attended to twice a day for three hundred and sixty-five days of the year, and on the majority of farms it is done before and after the regular day's work. Milk is nature's best food. It is essential to the welfare of the race, and yet increasing the herd has resulted in the boy or girl becoming dissatisfied with the farm life, and hired help refuse to be tied to a cow's tail. Consequently, dairymen were face to face with a difficult problem, in fact, many are yet and are forced to decrease the herd to a number they can milk themselves. Where dairying is specialized in and thirty or forty cows are kept, it requires quite a force of help to do the milking, and should one member be absent it throws extra work on the others and prolongs the chores far into the night. It is not so bad on the average farm where only six or eight cows are kept. One person can milk that number in about an hour. It is generally recognized that the good dairy cow is the most efficient machine through which to market farm crops, and many more cows would undoubtedly be kept were it not for the time taken milking night and morning, Sunday and Monday.

Milking by machinery has been under consideration for many years and about two hundred patents for mechanical milkers have been issued. The first machines turned out were prohibitive in price for the average man, besides not doing the work as it should be done. It was necessary to manufacture a machine that would draw the milk from the teats without in any way injuring the teats or udder; it had to be made so that the parts could easily be cleaned, and the price had to be within reach of the average dairyman. It is hard to make a machine that will imitate a calf or hand milker. By use of rubber teat cups, a combination of suction and pressure on the teats and lower part of the udder has been secured and the experience of many users is that cows are milked as satisfactorily by the mechanical milker as by the average man, without any more danger of udder trouble resulting, and that where twelve or fifteen cows are kept it will pay to have a machine.

The labor shortage has led many dairymen to consider installing a mechanical milker. Already there are many satisfied users. It is but natural that a machine of the nature of a milker would prove unsatisfactory in some instances. But, failure to make good is as often the fault of the operator as it is of the machine. Simplicity of construction, durability of parts, efficiency of milking, and ease of keeping clean, are some of the points to be considered in a mechanical milker. It seems reasonable that milk drawn from the teats and conveyed to a covered pail through tubes should be more free from contamination, due to stable dust and odors, than milk drawn by hand into an open pail. The chief danger is in the tubing not being thoroughly cleaned. The porosity of rubber makes it difficult to keep clean; hot water does not dislodge minute spores clinging to parts of the cups or tubing, and live steam injures rubber. The most satisfactory method is to rinse the tubing in clean water and then submerge the parts in a good sterilizing solution. Several solutions are in use, but chloride of lime has proven the most effective. Care must be taken that the solution is not too strong, as it may injure the parts. If it is too weak it does not destroy germs. One pound of chloride of lime dissolved in ten gallons of water and the clear solution used retains germicidal properties for about two weeks. The parts must be completely covered by the solution between milkings and it is necessary to change the solution every ten days or two weeks. It is also essential that the teat cups be taken apart frequently and scrubbed. The quality of milk obtained

depends primarily upon the care which is exercised in manipulating and cleaning the machine. Poor quality of machine-drawn milk is an indication that the operator is falling down on the job of cleaning the parts. If a man is not prepared to go to a little trouble in looking after the parts and keeping them in a proper solution, he had better not bother with a machine. He will not be satisfied and his experience may keep other men from purchasing something which will enable them to increase their herds, and at the same time decrease the labor connected with milking. The mechanical milker is proving to be efficient; most cows take kindly to it, and milking can be done in about half the time. It is a machine made up of a number of what might be considered delicate parts and is not fool-proof. The following paragraphs give the opinions of prominent dairymen regarding the mechanical milker. Some are perfectly satisfied; others are not. Read what they say:

Milking Machine Pleases Hired Help.

Dr. C. A. Cline of Middlesex County, has a herd of forty cows and has used a milking machine for two seasons. He is satisfied with the work that it does. At the time the machine was installed he had grave doubts as to whether or not some of his cows would take kindly to the mechanical milker. However, when the machine was put in operation his fears were dispelled as no difficulty whatever was experienced in getting the cows accustomed to its use. When changing from hand to machine milking, the heifers in the herd showed a slight increase in milk yield and the mature cows held their own. Dr. Cline estimates a saving of fifty per cent. in time by using the machine, and this is a great consideration especially during the rush of seeding and harvest, when help is never any too plentiful. So far no udder trouble which can be attributed to the use of the machine has been noticed. The cows are all stripped by hand to make sure that the milk is all drawn. Very little milk is secured by stripping from the average cow, although with some which do not give an even flow from all quarters there is a considerable quantity. It is found that the machine does its best work when the cows are fresh, and that it is advisable to milk by hand when the cows are nearing the end of the lactation period.

The quality of milk is believed to be better when machine-drawn than when milked by such hired help as is available. The tubing is kept in a solution of chloride of lime between milkings. The herd of forty cows are milked and the utensils cleaned in one and one-half hours. So far very little repairs have been required; in fact, new rubbers for the cups are all that have been needed so far. The rubbers need renewing about every six months. After two seasons' use, the machine appears as good as when it was first installed, except for the depreciation in the rubber parts. Dr. Cline considers that a herd of twenty cows should warrant the purchasing of a machine. Hired help appreciate the milker, and the Doctor finds he has less trouble in keeping help since he secured the machine.

Prefers Hand Milking with Cows on Test.

T. H. Dent & Son of Oxford County, had a milker in use continually for two years, but two years ago they discarded it and have not used it since. Mr. Dent says: "We found that the cows on official test did not give as much milk as with hand-milking, and they had a tendency to dry off sooner with machine

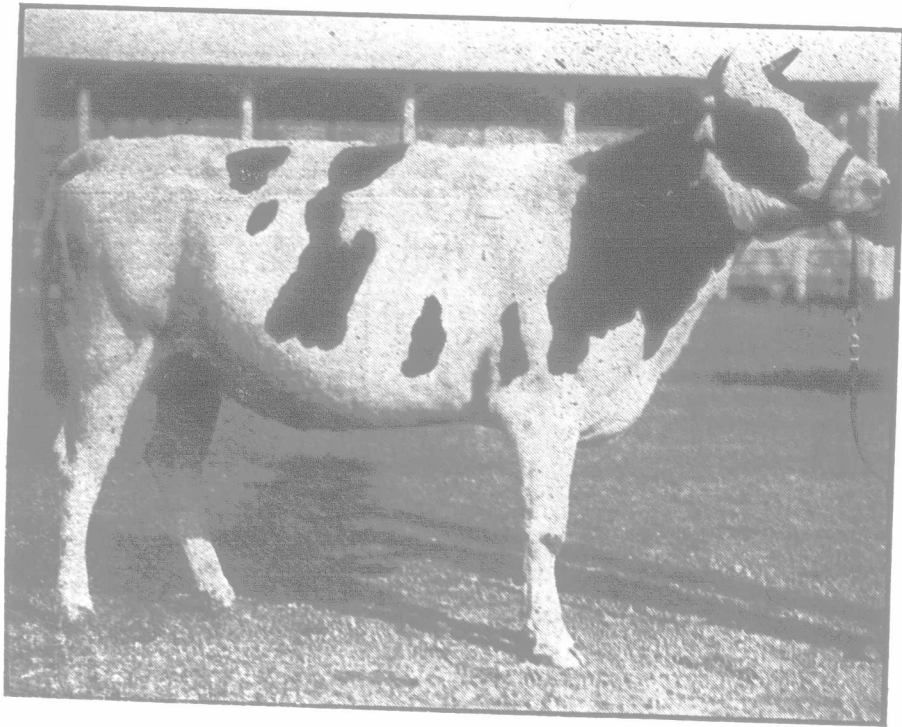
milking than by hand. The machine apparently gave satisfaction and we had absolutely no udder trouble caused by the milker. However, we desired to get all the milk possible from the cows when making yearly records, and we found that the only way to get that was by hand milking. We do not condemn the mechanical milker, and in many cases it is of great value as a time and labor saver."

Better Work with Machine than with Average Help.

Some dairymen are very enthusiastic over the mechanical milker, but others, while not condemning the machine, find that they have more satisfactory results by hand milking. J. Butler, a Middlesex County farmer, has a herd of fifty cows, part of which are pure-bred and part grade. He has been using the same make of machine as Messrs. Dent & Son for about a year, and it has given very satisfactory results. However, he is not running his cows on a test. Three units are used and a two-and-a-half horse power gasoline engine furnishes plenty of power. Mr. Butler claims that the machine does better work than is done by the average person whom he could hire at the present time, but it does not do better work than a good hand milker. Owing to greater uniformity of milking, production increased if anything. The udders are massaged just before the teat cups are removed and the cows are stripped at every milking, although they seldom give much milk. Mr. Butler claims that it takes practice for a man to be able to operate the machine quickly and efficiently. Care must be taken to get the teat cups on straight in order to get fast milking. If put on a little sideways the point of the teat is liable to touch on the side of the cup, thus interfering with a full milk flow. He claims that it is possible for one man to look after two units and strip the cows. After a year's use, there is no udder trouble; in fact, not a lump can be found on the cows' teats while before using the machine some of the cows appeared to be losing their quarters. This is claimed to have been due to the work of inexperienced hand milkers. It has not been found very difficult to keep the machine clean. After finishing milking, water is drawn through the cups and tubing and the rubber parts immersed in a chloride of lime solution. The pail and other parts of the machine are scalded. The milk is sold to a condenser and no complaint has been heard regarding the quality. Mr. Butler claims that it requires common sense to run a machine satisfactorily. He has had to adjust the pulsator a little in order to obtain good results. Repairs in the year amounted to \$1.80. The monthpieces of the teat cups are practically the only things which give out. It requires in the neighborhood of six dollars per month to supply power to operate the machine to milk a herd which would average between forty and fifty cows for the year.

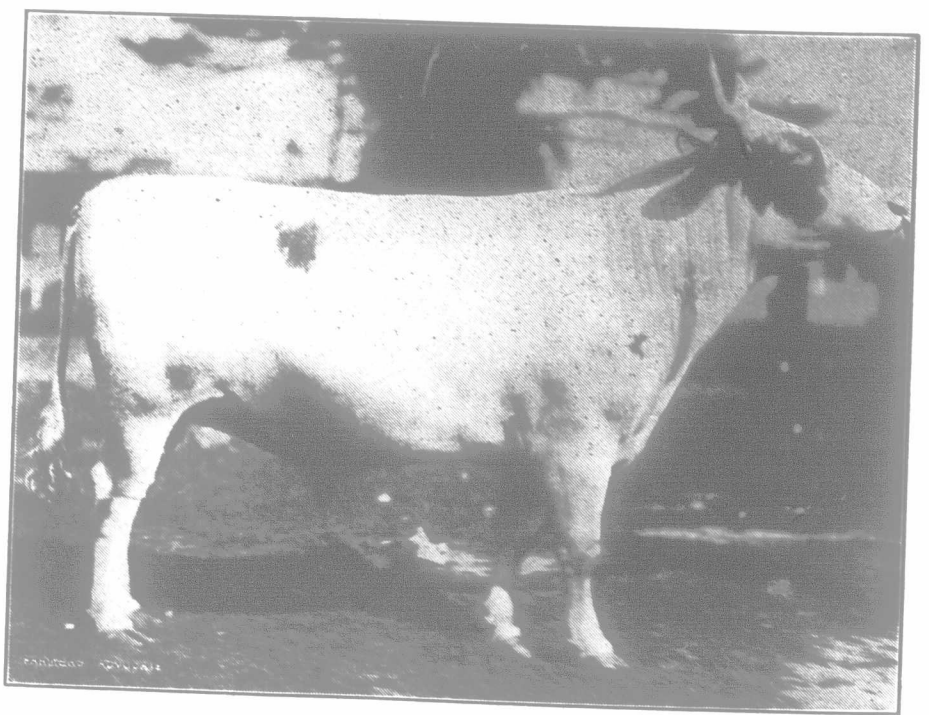
Machine Most Valuable When Cows are Fresh.

R. M. Holtby of Ontario County, writes: "We have used a milking machine for three years and a half and in spite of the fact that prominent farmers have turned this particular make down for several reasons, the main one of which was that the cows went wrong in their udders, we are still using it and have never had any trouble with cows going wrong in the quarters. We always strip after the machine so that if a cow does not give down her milk freely, the milk will all be removed and there will be no bad effects. Some cows continue to hold up a portion of their milk, while others are milked as dry by the machine as the average milker will leave them. We find that heifers usually respond to mechanical milking the best. Our experience has been that there is very little expense for repairs; power is the main item. I would rather have a three-unit



Sadie Vale Posch

First in two-year-old class at Toronto and London, for A. E. Hulet, Norwich, Ont.



Humeshaugh Invincible Peter

Junior and Grand Champion Ayrshire bull at London, for A. S. Turner & Son, Ryckman's Corners, Ont.