

Storing Farm Machinery.

For a great many farmers storing farm machinery is no problem. They do not store it. For others it presents difficulties, for they would like to store it and have not a suitable place. Still others have the implement shed, but are more or less careless in getting their machinery to it and in packing it away; and a fourth class have the shed, know that it pays to keep their machinery inside and keep it there in first-class order so that no time is lost when any machine, implement or tool is required.

The first class of people mentioned are more or less hopeless; they do not seem to realize that rust and decay quickly consume the best of implements and machinery which represent their good money. They are just careless and indifferent about their binders, mowers, rakes, cultivators, disks, plows, harrows and the whole business, and these may be found scattered about the place, under trees, in fence corners, down the lane or behind the barn, rather than inside. They have the biggest implement shed in the world—all outdoors—and they scatter their valuable property around as though they owned all the shed.

The second class of farmer is generally a careful man who keeps most of his machinery inside, even though he has no regular implement shed. Crowding in his barn or drive-shed is all that keeps him from having all his machinery and implements well-stored at all times. This man usually finds time to gather up all the implements and machinery about the place and pack them away on a part of the drive-shed floor or on one of the drive floors in the barn before winter sets in. He is the man who will have an implement shed before long, because, by taking care of things on the farm, he will soon make money enough to build an implement shed, for he understands the benefit such would be. For the man with the big implement shed badly arranged and whose implements and machinery are found in the fields when they should be inside, there is little excuse, and there are altogether too many of this class in Ontario. Why anyone will allow plows to freeze in at the back end of the farm, cultivators to stand in the fence corner for weeks at a time, and even more expensive machinery to be exposed to the weather for many days when they have a large enough implement shed to house them all is almost beyond conception, and yet such is the case. We have been in implement sheds where the machinery, implements and tools were so badly jumbled up that the shed was a nuisance, too much time being lost in getting at what was wanted from time to time.

For the man who has the shed and keeps his implements therein at all times very little need be said. He knows what the shed is for and uses it for that purpose. His binder and mower and such machines as are used only at a certain season and are not wanted at any other are put in the most remote corner, while those machines and implements, such as cultivators, disks, manure spreader, plows, etc., are arranged at the front of the shed where they may be hitched on to at any time without moving half a dozen other machines or implements out of the way. His implement shed is an orderly place, or, if you like, simply a well-arranged file of his farm necessities.

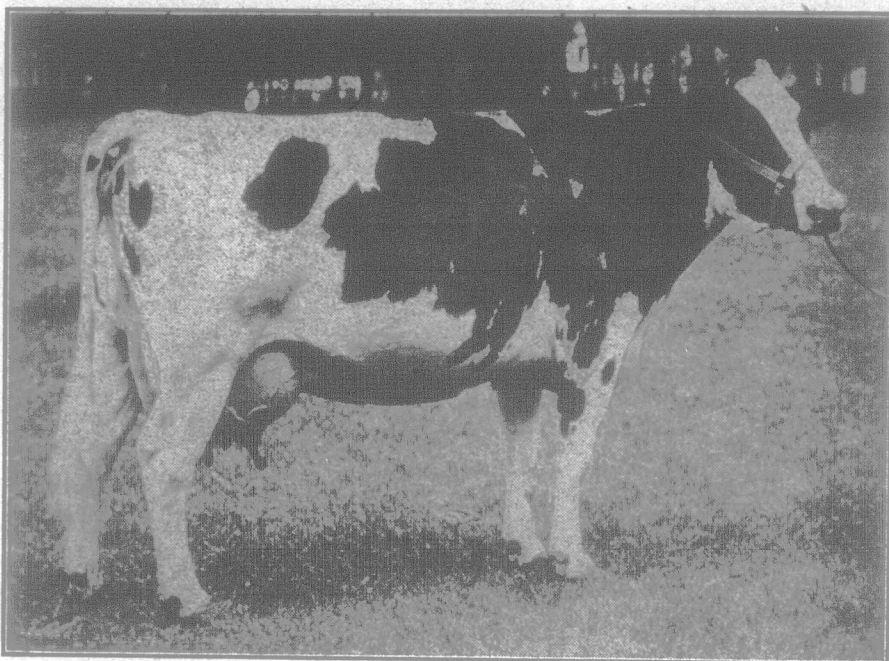
There are a few little things to remember in putting implements and machinery away for the season. In the first place, whether you have a special shed or not, put the implements under cover. The barn floor is just as good if not quite as handy as the implement shed. Clean all the implements well, take all the dirt off the disks, the cultivator teeth and the plow, and put a little oil or grease on; this will prevent rust, and make them work better in the spring. Arrange things so that all nuts may be gone over and loose ones tightened during the winter oil-season; prepare to wash up the wooden parts, if dirty, and during mild weather give them a coat of paint. Take the teeth from the harrows, and have them sharpened ready for the next year, and they may be brought home from the shop and put in place sometime during the winter. Take all the knives from mowers and binders; put them where they may be looked over, sections replaced and all sharpened ready for next year. A little oil on the knife after grinding will prevent rust. Tongues may be taken from many of the larger machines and implements, painted and hung from the rafters. This saves space, and, especially with heavy machines, saves springing them out of shape.

The farm wagons are very often not considered with the implements, or at least are not stored as they should be. The life of the average farm wagon could be prolonged at least fifty per cent. if it were given the same care that the young man on the place gives his buggy or automobile. There is no reason why the wagon should not be kept washed clean and painted once in a while in order to prolong its usefulness. A corner of the implement shed where one is being built, or is built, should be set apart for a little workshop in which a stove is kept, and this painting and repair work done in the winter. A forge and a few blacksmithing and carpenter tools will be a profitable investment on most farms.

THE DAIRY.

Relationship of Feed Consumed to Milk Production.

When some feeds are scarce and all are high in price the question which naturally arises in the minds of dairymen is, are all the cows paying market price for feed consumed and leaving a fair margin of profit? Evidently the herd as a whole is doing so, or the cows would not be kept, but to arrive at a definite answer by mere supposition may lead one far astray. Circumstantial evidence proves that some cows are much more profitable than others, but, according to statistics, the value of the product of the average cow in Canada is less than the cost of her feed. If this is the case, where does the cash come from to pay for labor, interest on investment, depreciation in value, etc.? No doubt but that the herd returns a profit or the dairyman could not stay in the business. The fact is that while some cows are boarders their stablemates are giving good returns for their feed and thus bringing the balance on the right side of the ledger. The profits would be larger, however, if the entire herd did as well as the best cow. The cows may all have the same breeding, weigh about the same, eat an equal amount of feed, require the same attention and apparently give about an equal quantity of milk, but unless the scales are used to weigh the milk during the year it is difficult to determine what the cow is really worth as a milk and butter-fat producer. Furthermore, it is necessary to use the scales in order to determine the proper relationship between feed consumed and the milk yield. There never was a time when it was so necessary to conserve our forces as at the present. Labor is scarce, feed and stock are high, and dairy products are commanding record prices. It must always be borne in mind that whether a cow be a poor or a heavy milker she requires a certain amount of feed to maintain life. Feed, over that required for a maintenance ration, largely goes into production of either



Duchess Skylark Ormsby 124514.

World's champion butter cow over all ages and all breeds. Year's record: Butter, 1,506.36 lbs.; milk, 27,761.07 lbs. Average per cent. fat, 4.34. Seven-day record: Butter, 34.36 lbs.; milk, 558.10 lbs.

milk or meat. As yet a very small percentage of dairymen are keeping records of their herds, but those who do find that it pays them. There is a vast difference in animals' ability to convert feed into milk. Some will give a considerably larger quantity on a certain kind and amount of feed than others. The scales aid in finding out if it pays to increase the ration. This information can never be gained by guess work. No person can estimate to within two or three pounds the amount of milk in a pail, and four pounds a day for two hundred days comes to eight hundred pounds, or at the present price of milk, to about fifteen dollars.

In order to show dairymen attending the National Dairy Show that it was impossible to estimate the yield of milk, the butter-fat production, from the appearance only, those in charge of the record work in the State had on exhibition nine cows taken from average herds of which records had been kept during the past year or two. In fact, the cows appeared a little above the average in condition but were only ordinary grades, judging from color. There was the grade Shorthorn, Jersey, Ayrshire and Holstein. The old brindle cow was also there. On the manger in front of each cow was a chart showing the number of pounds of milk and butter-fat produced during the last lactation period, the cost of feed, what it had cost to produce one hundred pounds of milk, and one pound of fat. The age of the cow was also given, together with the date when she last freshened and the value of milk for each dollar's worth of feed on each day of the show. The man in charge gave a lecture on results that have been obtained in this work in different parts of the country, and by use of the charts emphasized the importance of every dairyman keeping records, not only of the milk produced but also of the feed consumed.

The remark was frequently heard "They look exactly like the cows I have at home; I wonder if there is as much difference in the returns." Others sized up the cows and were surprised that some inferior looking animals surpassed the better looking ones in production. It was an object lesson which drew large crowds and no doubt many will profit by what they saw and heard. The cows were fed on rations similar to those ordinarily used in the New England States. Clover and alfalfa hay made up the bulk of the roughage, and the concentrates were composed of bran, brewer's grain, oilcake meal, some oats, and cornmeal. Corn stover and silage also entered into the ration of the herd.

The figures showing the difference in production and cost of feed, with this herd of nine cows, will give a fair idea of the variation of the milk yield and profits of the average herd. Cow No. 1 gave 8,646 pounds of milk and 362 pounds of butter-fat in one lactation period, at a cost for feed of \$64.66. This figures out, that for feed alone it cost 75 cents to produce 100 pounds of milk and 18 cents to produce one pound of fat. This cow is seven years old. She last freshened on September 16, and on October 15 was producing milk to the value of \$2.04 for each dollar expended on feed. The cow standing beside her was a bigger, stronger cow and from the appearance of her udder one would judge that she would be a heavier producer. However, her record gave the milk yield as 3,823 pounds and 160 pounds of butter-fat. This is considerably less than half what cow No. 1 produced, but it only cost \$35.07 to feed her, which is also much less than it cost to feed the cow previously mentioned. However, figuring it out on the 100-lb. basis it cost 91 cents to produce 100 pounds of milk and 22.15 cents to produce one pound of fat. On October 15 she was only returning \$1.33 for each dollar's worth of feed, or 71 cents less than No. 1 cow. Number 3 cow gave 6,323 pounds of milk and 308.4 pounds of fat, at a cost of \$38.62. Alongside of her stood a cow that only gave 300 pounds more milk and 30 pounds more fat, but it cost \$59.16 to feed her, or \$20.54 for the extra 300 pounds of milk. These figures show the necessity of keeping records

of the feed as well as of the milk in order to determine the real profit made from the cow. It does not always hold good that the more a cow eats, the more she will produce. The breeding must be taken into consideration. Although there was only 300 pounds difference in the milk yield of the two cows previously mentioned, the one produced milk at 61 cents per 100 pounds, while with the other it cost 90 cents. Cow No. 5 was the heaviest milker of the lot. In the one lactation period she gave 10,008 pounds of milk which yielded 460 pounds of fat. However, it cost \$93.79 to feed this cow. Consequently, each 100 pounds of milk cost 94 cents for feed alone, and each pound of butter-fat 20.5 cents. This also shows that it is not the heaviest producer that is the most profitable. The relationship between the feed consumed and the milk and butter-fat yield must be taken into account. Cow No. 6 was a little above the average in appearance and one would think that she would be a profitable cow to keep. She gave 7,557 pounds of milk and 232 pounds of fat in the year, which is a good deal above the average. However, she consumed \$82.95 worth of feed which brought the cost of 100 pounds of milk to \$1.09 and of one pound of fat to 36 cents. This shows that the butter-fat content of the milk is a factor to be taken into consideration. Cow No. 8 produced milk the cheapest of any. Her milk weighed 8,445 pounds, containing 346.5 pounds of fat. It cost \$56.92 to feed her, which was considerably less than it cost to feed the former cow which was not as heavy a milker. One hundred pounds of milk was produced at a feed cost of 67 cents and one pound of fat at 16.4 cents. The other two cows in the herd averaged up fairly well with the production mentioned. At the present price for dairy products all the cows gave a fair profit over the cost of feed consumed, but there was a difference of about \$52.00 in the profit made by the best cow and the poorest.

These figures were taken from the record sheets of cows that represent herds that are a little above the average. In fact, the cow that gave the least milk gave as much as the average cow of the Dominion, according to the latest statistics. We have reason to believe that there are scores of cows that do not begin to pay for the feed which they consume. If these were weeded out and the feed which they would consume given to the best cows in the herd, the average milk yield would be increased and the profits would be considerably higher. It has been proven time and again that the boarder cows cannot always be picked out with the eye. The use of the scales and tester are required. It only takes a few minutes each day to weigh the milk from each cow and record it on a sheet, but the figures will

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