

JOHN CUNNINGHAM, Greenock.—My crop of Golden Cross, although injured by spring rains, will yield well. It promises from twenty to twenty-five bushels per acre in this vicinity. Michigan Amber has done well; it will yield even better than Golden Cross, but is somewhat lighter per bushel. The old Clawson continues to give good yields in this locality.

Huron, W. R.

W. W. FISHER, Benmiller.—Early Red Clawson, Michigan Amber, Surprise and Scott are mostly grown in this section. Of these, Clawson is most popular, and Surprise the least. My Clawson averaged thirty-seven bushels per acre this year, being seven bushels more than last year's yield.

Brant, N. R.

R. S. STEPHENSON, Ancaster.—Fall wheat is turning out well with us. American Bronze seems to be the leading variety of the new red wheats. Red Clawson was largely sown here last fall and did well. Genesee Giant, a new sort, has been grown here one year and promises well.

Waterloo, S. R.

JOHN TAYLOR, Jr., Galt.—Dawson's Golden Chaff has about first place in the estimation of the farmers of this locality. Early Red Clawson, too, has many admirers. Velvet Chaff and Jones' Winter Fife have lost favor during the last two seasons.

York, E. R.

H. REEVE, Highland Creek.—Jones' Winter Fife and Early Red Clawson are largely grown in this section, both of which have many admirers and have given good returns. Surprise, Genesee Giant and Early White Leader have been grown by farmers in this section, and are all found to possess good qualities. Of these, Genesee Giant seems to be the favorite.

Brant.

JAS. MILLER, Paris.—I may safely put Golden Chaff at the head of the white wheats, turning out from 30 to 40 bushels per acre; good, strong grower; stiff straw and standing up well; not subject to rust; weight from 60 to 63 lbs. per bushel. Red Clawson leads the red wheats, but is not so stiff in the straw as Golden Chaff; Manchester is shorter in straw, and more inclined to go down. Millers do not like it.

#### Farm Water Supply.

In reply to the enquiry of Mr. Clark in your issue of July 16th, would say that the usual way for arranging water supply outfits for farmers and suburban residents is to place the wind-mill at the well or spring, or wherever the best supply of water is, and raise the water from the well and convey it by means of pipes to the tank, no matter how far the tank may be from the well. In some cases we have located tanks several thousand feet from the wind-mill and source of water supply. The distance the tank is from the wind-mill does not matter, as the wind-mill is sufficiently powerful to draw the water out of the well and force it into the tank. Of course, height of elevation and distance, also depth of well, must be taken into consideration when deciding size of wind-mill. We have pumps for this purpose which are so arranged that water can be drawn at the well the same as with ordinary pumps, or at the will of the operator can be forced to the tank a distance away.

There is not the slightest difficulty in arranging a satisfactory outfit for Mr. Clark, or anyone desiring to do such work. The probable cost, including tank, piping, etc., or a job such as Mr. Clark would require, would be about \$120. Of course this is a rough estimate, as we do not know exactly what he would require, but think it would be in that neighborhood. There is no doubt whatever but there are thousands of farmers in Mr. Clark's position, and if they knew they could have a plentiful supply of water at such a low cost, and no expense whatever after once erected, they would not be without it for a single day. Many do not realize the value of having plenty of water for use at any time. We believe farmers are wasting their strength and a large amount of money every year by not having some such system such as we have tried to explain.

GOULD, SHAPLEY & MUIR.

Brantford, Ont.

#### Gypsin—A New Insecticide.

A new and very effective insecticide has lately been discovered by F. C. Moulton, of Maldon, Mass. Arsenate of lead was the substance used, which was prepared by dissolving 10 oz. acetate of lead and 4 oz. arsenate of soda in 150 gallons of water. These substances quickly dissolve and form arsenate of lead, a fine white powder which is lighter than Paris green, and while being, it is said, as effective in its operation in destroying insect life, is far preferable for several reasons. One of these is that it can be used much stronger than Paris green, without injury to foliage, which is greatly in its favor. It is only fair to say that, properly used, Paris green will not destroy foliage, but the tendency is to use it too strong. Many have not at hand proper scales for weighing it, and in order to "fix the insects sure," they throw in a little extra. Some have paid very dearly for such carelessness or recklessness. "Enough is as good as a feast," in this case better. It is far more readily seen on the trees than Paris green, and being lighter, does not settle nearly so quickly in the water, and therefore can be distributed more evenly over the foliage. The addition of two quarts of glucose or molasses to 150 gallons of water causes the mixture to adhere to the leaves a much longer time.

#### Silage as a Food.

According to exhaustive experiments carried on for three years, at the Woburn Feeding Experiment Station, England, silage does better for older than for younger beasts. Silage made from good grass very nearly approached roots and hay, but never quite reached it. "Sweet" and "sour" ensilage seem to be of equal value. Grass from two and two-fifth acres, made into silage, equalled hay from two and four-fifth acres.

## DAIRY.

### Some Interesting Facts Regarding Practical Dairying in Ontario.

BY J. W. WHEATON, SECRETARY D. A. W. O.

A few weeks ago there were sent out from the office of the Western Ontario Dairymen's Association, circulars to factorymen, asking a number of questions concerning some leading features of dairying. Some of the answers have been returned, and show many interesting facts regarding the profits of the dairyman, the working of the Babcock test system of paying for milk, and other new features in dairying.

#### TWO KINDS OF DAIRYMEN.

One of the strong lessons learned from these returns is the very wide variations in the amounts of money, per cow, received from the factories by different patrons. The smallest amount so far is \$12 per cow for the season, while the largest amount is \$65 per cow. It may seem impossible that any patron of a cheese factory would keep such inferior cows, or would take the trouble to supply milk when the total returns for the season only averaged \$12 per cow. It is doubtless true, however, as there is the same amount mentioned in the returns from three or four factories. A number of others gave from \$14 to \$18 per cow as the smallest amounts received by the patrons. Even these amounts are very low, and are a long way below the line of profit. A dairyman whose cows return him no more than the amounts quoted above, during the cheese factory season, had better go out of the business unless he can give some reason that does not appear in these returns. His calling is evidently not that of the dairyman. Either the man or his condition may be better fitted for some other line of agriculture. True, there may be certain conditions which materially effect the returns, such as a very small factory, where it costs a large amount for hauling milk and manufacturing cheese, and where the season is much shorter than in the section where the \$65 per cow man lived. We find, however, that at the same factory with the \$12 per cow man, the largest amount of money received per cow by any patron was \$35. These figures are for the cheese season of 1893. If one man, under the same conditions, can realize a large profit out of his cows, there does not seem to be any valid reason why there should be a \$12 per cow man at all. What one can do, others can do under the same conditions.

Wherein lies the difference between the \$35 man and the \$12 man? We do not have to draw very much upon our imagination to find out a cause for this wide variation. We picture the \$12 man as a careless, shiftless farmer, without system or order in his work, who keeps cows because his neighbor does, or because his grandfather did, or, perhaps, because the cow was one of the animals Noah had in the Ark. He does not think cows pay, or that there is any money in dairying or in supplying milk to a cheese factory. He has a few dilapidated, ill-bred, ill-cared-for cows, and because the milk wagon passes his gate he sends his milk and gets back his share of the whey and the money, and feels that he is doing his duty, and, perhaps, fulfilling his destiny. He does not think it pays to keep cows well, or to care for them during the winter when they are not giving milk. Consequently, he is not very particular about providing warm, comfortable stables for his cows, and allows them to shiver and hump up their backs around the straw-stack during the greater part of the day and night, when the temperature is a long way below freezing. Being of this mind, he thinks that any kind of food will do for his cows during the winter. Therefore he neglects to lay in a supply of suitable, nourishing food. His cows have to whet up their appetites in order to be able to indulge in a bill of fare consisting of

#### WHEAT STRAW FOR BREAKFAST.

oat straw for supper, with a wisp of hay sandwiched in between. These cows always give their owner a great surprise in the spring. He is surprised because his neighbor's cows are thrifty, sleek and hearty, while his cows are weak, unthrifty, and frequently need aid in getting into a normal position for walking. This \$12 man never has a large amount of forethought, and never thinks of providing supplementary feed for his cows during the dry weather of July and August. Consequently, his cows, with no large supply of milk to boast of at any time, begin to shrink in their milk till it is difficult to get enough to make the can stay on the milk wagon during its journey to the factory. Then this \$12 man begins to consider, and he makes a vow that another year he will do better and make provision for his cows both winter and summer. But another season comes around and brings no change, just because he fails to take action and neglects to put skill, intelligence and good judgment into the business.

What about the \$35 man who is in the same factory with the \$12 man?

We picture him as a man who means business. He is not keeping cows for nothing, or because somebody else did. He is keeping cows because he thoroughly believes that there is money in it, and patronizes a cheese factory for the same reason. He does not believe in keeping poor cows, but puts his skill, his intelligence and his good judgment

into the selection and keeping of the best cows to be had for the production of milk. He believes in using a cow well during her holiday season. He aims to have her comfortably housed and fed when not milking. Consequently, you will always find near his stables a supply of chop, corn ensilage, corn fodder, roots, etc., to tempt his cows' palate during the cold winter months. Neither does he ask his cows to walk half a mile or more through snow banks to drink out of a "hole in the crick" all winter; nor does he compel them to quench their thirst at a slimy pond hole during the summer. He does not believe in neglecting his cows during the summer, and therefore always keep them supplied with good, nourishing, succulent food during the milking season. He never handles his cows roughly or ill-treats them. He always gives the best of care to the cows' product in preparing it for the cheese factory.

#### THAT \$65 DAIRYMAN.

It may seem very improbable to many that a patron of a cheese factory should receive \$65 per cow for one season. In fact, the \$65 man, in a way, creates a great deal more surprise than the \$12 man. The greatest surprise, I think, is that one man could make over five times as much per cow out of the factory than another man. The fact that there is a \$65 man is a convincing argument of the effect superior skill, superior intelligence and superior business ability have, when applied to the business of dairying. There are not many \$65 men supplying milk to the cheese factories of Ontario. But the existence of one shows us the great possibilities there are in intelligent, systematic dairying. No doubt the \$65 man had some advantages that the \$12 man has not had. He supplied milk to a large factory, where the cost of manufacturing cheese was less than one-half what it was where the \$12 man supplied milk. This large factory also ran for a longer season and secured the highest price for its cheese. In the same factory with the \$65 man, the smallest amount of money received by any patron is \$35 per cow, the same as the largest amount received at the factory with the \$12 man. Here, under similar and favorable conditions, we find one man getting nearly twice as much money per cow as another. These variations show that success in dairying depends more upon the individual dairyman than upon anything else. Unless a man is determined to keep only the very best cows, and to give them the best of care and the best of feed, he need not rely on making any extra profit out of his cows, or of securing the best results for the time and money he expends on the business.

#### THE COST OF MAKING.

In the cost of manufacturing cheese there is a wide variation shown, but this is not so surprising. It varies from 1½ cents to 2½ cents per lb. of cheese—these figures including drawing and total cost of making. At the large factories in the old dairy sections, where every farmer makes dairying more or less a specialty, the cost of drawing the milk is a comparatively small item, and the cheesemaker can afford to work at a much lower rate per 100 lbs. But in those sections where dairying is a side issue, and the milk has to be drawn eight or ten miles, with every other farmer sending milk, the cost of drawing comes very high; in fact, too high for profit. Besides, where only a small amount of milk is received at the factory, the cheesemaker must have a higher rate per 100 lbs. for his work, which will increase the total cost.

The returns for the cost of drawing show a very wide variation, ranging from 3 cents to 17 cents per 100 lbs. of milk. At the factory where the milk is drawn for 3 cents, the total charge for manufacturing and drawing is only 95 cents per 100 lbs. of cheese to stockholders, and \$1.35 per 100 lbs. to non-stockholders. It is difficult to see how a manufacturer can afford to make cheese for 2½ cents per lb. and furnish everything, and pay 17 cents per 100 lbs. for drawing milk. The manufacturer who only charges 1½ cents for making, and pays 3 cents per 100 for drawing will be in the better position.

Hauling the milk is one of the economic problems that is agitating many of the managers of our smaller factories. When the cost of drawing milk to any factory is more than 10 cents per 100 lbs., there is not much profit in carrying on the business, unless the patrons are willing to pay a very high rate for manufacturing. When such conditions exist, there must be something radically wrong with the business or with the dairymen in the locality. They are not making the best of their opportunities, and are only patronizing the factory because they have a little bit of milk which they do not know what to do with during the warm weather. In such sections, if every patron would make an effort to keep three or four more cows, and would commence sending at the beginning of the season, and continue till the close, they would get the milk drawn much cheaper, have a larger make at their factory and lessen the total cost of manufacturing. A lessening of the total cost of making means more money in the patron's pocket. In large factories the cheese usually sells for a higher figure. The buyer can afford to pay more, as there is not so much expense in shipping. All these things increase the profits of the man who supplies milk, and are some of the advantages to be gained by those who make a business of dairying.

From returns already received, the average cost of drawing milk for 1893 was 8½ cents per 100, and for 1894 about the same. Many of the factorymen in the outlying districts will consider this a comparatively low average. There are included in it