which, by the way, are almost as numerous as barns in many sections of Eastern Ontario and the Eastern Townships of Quebec. In Western Ontario, the stave wooden silo and the round cement-concrete are all in vogue. Eastward, they build hoop silos almost exclusively. Five thicknesses of elm stuff are molded in special forms and nailed together so as to answer the purpose of hoops. These are set up, and inch stuff of some durable material stood up inside, being nailed to the hoops, if we mistake not. Then, outside, another thickness of boards, say hemlock, is nailed on. Thus, instead of two-inch plank staves, held in place by iron hoops, they have two thicknesses of inch boards, with the elm hoops between. The cost is larger than for a stave silo, but those who have built them expect them to prove more durable. One reason advanced for their preference is that some stave silos have collapsed, though our informants conceded this was probably due to a lack of reasonable precautions in tightening the hoops when the silo was emptied. It is claimed, on behalf of the hoop silo, that no such attention is required.

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It would surprise some Western farmers to note the extent to which corn is grown from Kingston to Montreal, and down through the Eastern Townships. Dairying holds sway, and silage is by long odds the most economical roughage on which cattle can be fed. As above stated, silos are almost as frequent as barns, and many new ones have gone up this past summer. Of course, here and there a man is pointed out who built a silo, and, after using it awhile, let it go to pieces, but these are a most significant minority, and many of them are changing their minds and going back to the silo again. There are no two ways about it, the Canadian farmer must grow corn. He cannot afford to do without it. They raise great crops of it down this way. Leaming, Red Cob, Longfellow, and such varieties are planted, and mature well enough to make very good silage, though a considerable proportion of ears fail to reach the glazing stage. Yields of silage corn are rather hard to get at, but from figures of acreage and silo dimensions submitted, we should say fifteen to twenty tons per acre were not uncommon yields. Some claim to do much better.

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Another matter in which we were reminded of the force of local example was in the crop rotation practiced. In Chateauguay County, for instance, which, by the way, is a region mainly of French and Scotch inhabitants and Ayrshire cows, their rotation appears to be, hay two years, pasture two years, then corn, followed by mixed grain seeded down. At least this is the rotation of two leading stockmen visited. It is a good rotation, undoubtedly a better one than practiced by many in the West. The plan of planting corn after sod cannot be improved upon, but we could not help wondering why they don't plow the land oftener, instead of leaving it so long in sod. In manuring for corn, an approved practice is to top-dress the pasture land in winter and early spring one year before it is to be broken up for corn. The growing grass minimizes waste of nitrates, and they say that when the manure is applied early in spring the cattle do not object to grazing over it during the ensuing summer, while the subsequent yields of corn attest the wisdom of the practice as regards the conservation of soil fertility.

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Though not of any practical importance, it is interesting to note that the unit of land area in Quebec Province is the French arpent, which is about one-fifth less in area than the acre. The Quebec bushel is slightly larger than the standard bushel in other Provinces, so that, what with a small acre and a large bushel, the Quebec farmer's average yields are somewhat discounted by comparison with average crops in other Provinces, although, notwithstanding this handicap, some of the yields of grain and corn reported by Chateauguay farmers are very good indeed.

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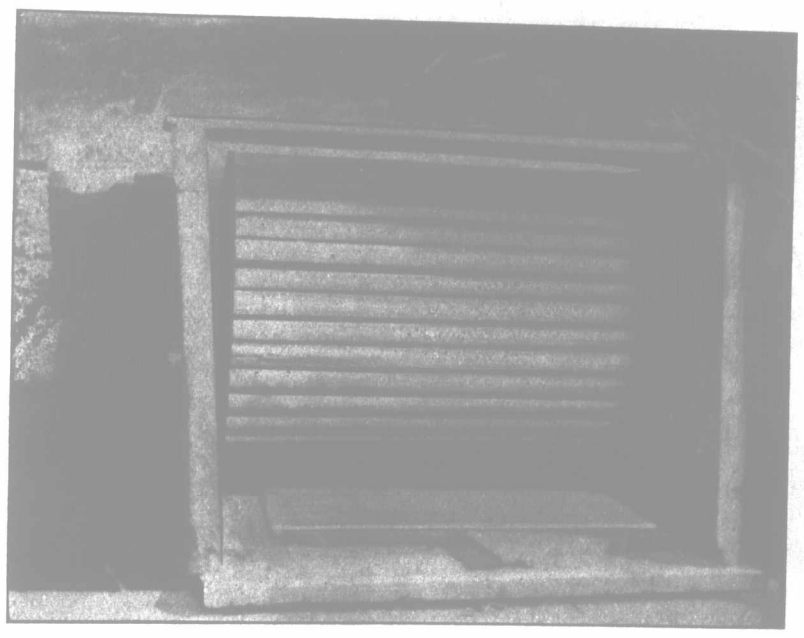
Milk for the Montreal trade absorbs a considerable percentage of Chateauguay's dairy output, although there are numerous cheese factories and creameries doing a thriving business as well. The winter wholesale price of milk for Montreal retailers is 20 to 22 cents per gallon, less an express charge of two cents a gallon or more, depending upon the distance of shipment. There is money in milk at this price, although feed values necessitate close figuring and skillful feeding. Advantageous use is made of oil meal, and some bran is used, even at present prices, while moullie (chop) is always a staple reliance. Straw is economized in some stables visited by the use of sawdust for bedding. The sawdust serves a good purpose in the manure, absorbing the liquid, and opening up the texture of a rather tenacious clay soil.

* * *

It is a pity the Ottawa Valley and Western Ontario are such strangers to each other. Southerners think of the Ottawa Valley as girt with the iron-clad rigors of the north. Yet here is a rich country that grows ensilage corn almost as well as any portion of Ontario, outside the few specially-favored counties in the south. We should have liked to loiter through this region, pausing to study agricultural conditions, but time forbade, and our impressions were mostly the flitting and superficial ones obtained through the car windows. There are some brisk towns up-river from the capital. Arnprior, Renfrew and Pembroke appear to be stirring centers of commercial and industrial activity, with extensive sawmill and grist-milling interests and miscellaneous enterprises of various kinds. Water-powers on adjacent streams have been harnessed, and their energy transmitted into electric current, which drives the wheels of factories, and even, in odd



Walnut Huller.

cases, the stationary machinery of farms. Let us hope it is but an earnest of the part that electricity may yet play in the advanced agriculture of the twentieth century.

And the Ottawa River, what of it? Little that can be written; much that should be seen. They say an Ottawa Valley man is always disappointed at Niagara; and, after seeing the Ottawa, one can understand it. Broad, glassy, lakelike expanse, flanked on the northern shore by rising, blue-wooded hills, suggest a volume which, confined at other points in narrow channels, fretted with irregular, rocky beds, and pitched and swirled by falls, cascades and cataracts, must rival Niagara's whirlpool rapids in her most tumultuous moods.

One cannot contemplate the length and breadth of the Ottawa without feeling that it was destined to fill an important function in Canadian commerce. For the hundred-million bushels crops of the Northwest, it is right in line to the world's markets, and when the immense waterpower that might be incidentally developed is taken into consideration, the wisdom of proceeding at once to build the Georgian Bay Canal and develop a direct commercial highway from Fort William to Montreal instead of frittering money away on a roundabout Detroit-River Welland-Canal system, presents itself with force.

"DON."

A WALNUT HUSKER.

Editor "The Farmer's Advocate":

In a previous issue a reader asked if there was a machine on the market for taking the husks off walnuts. I send you a photo of one my two younger brothers made. The cylinder is out of an old washing machine, but could be made by anyone handy with tools. The board on the bottom is just far enough from the cylinder to let the large nuts through after they are husked. The grate on the board is an iron one, out of an old stove oven, and is hung on nails so it can be let down closer to the cylinder for the smaller nuts. The cylinder is run by a rod passing through it and a pulley on the end. The pulley is cut out of a piece of board with a compass saw. The machine was run by a belt from a portable forge, the wheel of which was about three feet across. The nuts had to be picked out of the husks after they were put through the machine, but it husked them all right. The boys have free access to all tools on the farm.

Oxford Co., Ont. E. F. CHAMBERS.

The motorist has the same right to the reasonable use of the road as the man who owns a good pair of horses or the farmer whose team drags his harvest to market. But the motorist has no right to make himself and his juggernaut the terror of the public highway. He should be curbed by a severe law. If he must race, let him go to a race-track, where he need not risk injuring anyone but himself.

THE DAIRY.

ECONOMIC FEEDING OF DAIRY CATTLE.

In view of the short food supplies for dairy cows, and consequent high prices for all kinds of feed, the dairy farmers of our country are "up against" the feed problem as never before. Many are in a quandary as to what course to pursue for the next seven months. Carrying a full stock through a Canadian winter on a half or even a two-thirds crop is by no means an easy matter. Some have already settled the question, solving it in the easiest way, by calling an auction sale and disposing of both stock and what feed could be spared. Low prices for stock and high prices for feed prevailed, and we are not sure but what these farmers who were overstocked pursued the wisest course, for certainly, to purchase rough fodders and concentrated feeds at prevailing prices to carry dry and young stock through the winter, would be a losing game, as we have no cheap fodders this fall. We are all in about the same fix as the farmer who was noted for his "grumbling" propensities—this farmer made it a point to keep any hay spoilt by weatherig to winter his heifers. There came a season when the weather was most favorable for saving the hay; he, therefore, had no spoilt hay. When met by a fellow farmer with the remark that he had nothing to grumble about this season, he replied, in a very doleful voice, "Yes, I have no heifer hay this season." I fear very many have no heifer hay this season, and while many old cows will go to the market as canners at low prices—and we need not weep many tears as they take their departure, as many of them were only "boarders," anyway—it is a matter of regret that so many choice young heifers will also go to the block; 'tis best that, like the "canners," some should go, but not all, and we must confess to feelings of regret frequently when we saw a choice lot of dairy heifers going to the block, as has been the case this fall. But there is another side to this, too. The past four years have been "full" years; a large number of young cattle have been raised, some good, many only fair, and a host of them we have to class as bad dairy stock. It is largely this latter class that has been sent to the butcher this fall.

With hay soaring at $16 and $18 (and even $20 in some localities), and grain feeds equally high, the result will be that cows will be dried off earlier this winter, thereby cheapening the cost of feeding by taking off the drain of the milk flow, thus taking less feed. This applies not only to patrons of creameries and cheeseries, but producers for the city milk trade as well, but this latter class count on having a number of cows freshen during the fall and early winter months. These are the cows that will produce the milk for city supply for the coming winter, as there will