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in the plots of the first scheration of imported seed." To return to the original plots. The next three rows we looked at were all Grimm, but the seed had been obtained from different places. The best row was from seed obtained in Minesoia, grown in a field that had seen 40 years down.

"How about the Ontario Variegat-03 ?\* I asked.

"Ontario Variegated compares quite favorably with Grimm for hardiness," Mr Waitzinger assured me.

Mr. Walisinger assured me. There are several new varieties of allata being tested at Macdonald Col-lege, which may some day become common. One variety, the Don, brought foru: Russis by Prof. Hanson, of South Dakota, will grow where other varieties of alfalfa will not suc-cied. It will thrive on low ground the aid difficulty in propagating it, however, is that ip produces little seed. Prof. Ranson has used trans-planting machines for setting it out in me fields. The Ruthenica is a small plating machines hor secting it out in new fields. The Ruthenica is a small growing kind, and is supposed to be a pasture variety. Some of the newer varieties, such as the North Sweden, in the second selection, are proving hardler than the Grimm, and have the additional development that that the the additional advantage that they come faster in the spring.

This very brief sketch of the experi-mental work with alfalfa at Macdon-ald College, may give some idea of the service that experimental work the service that experimental work can do for agriculture. By following the results of this work, the farmer may susually world warieties witch are unsuitate to our climatic conditions, and he can also select the varieties that are suitable and with "which suc-cess is almost assured. It is through our colleges, too, that new varieties are introduced and experimented with, and once varieties are found superior, it is a matter of only a few years, until the seed is available in com-mercial quantities for the use of farmers generally.

## Prospects for Fall Wheat

TAT fall wheat in Ontario will be a failure is now almost an as-sured fact. In some of the more favored parts they report a 5 per cent. crop, and in many other parts the like-lihood is that it will be plowed up. This condition does not speak well for the greater production campaign. The reason for this failure is due in the first place to the short growth

which it had last fall before the winter season came on, and in the second place to the freezing and thawing which was experienced during the last few weeks.

It is an old saying that good sugar weather is bad fall wheat weather, and while we are not so suce about this having been an unusually good time for maple sugar, it certainly has not been favorable for fall wheat.

## Pasture for Hogs

R ECENT experience has shown that a good pasture is one of the cheapest sources of food for hogs, says Andrew Boss of the

<text>

# FARM AND DAIRY

## A Model Barn for the 100-Acre Dairy Farm (Continued from page 5.)

root cellar, so that all the feads ex-cep' the clover hay, go through this room

room. The silo is of stave construction, 14 x37 feet, of which six feet is below the ground. This basement in the silo, gives refrigerator conditions for the ensinge that may be used for summer feeding. This is the only part of the barn plan that might have been im-proved in again extant. It would have barn plan that might have been im-proved to some extent. It would have been a little handler in feeding the cows had the sllo and feed room been erected at the south end of the barn. erected at the south end of the barn. They would then open directly on the feed passage. It is, however, Mr. Newman's plan some day to increase the capacity of the dairy barn by moy-log the south wall out so he placed the slow here it would not have to be moved. As it is, however, there is not much distance here were the class. distance between the silo and the feed passage.

the feed passage. The Horse Barn. The Horse barn, in keeping with the rest of the bains of neat con-struction, and has pleaty of light. Little doors open from the mangers to the barn hoor, allowing the latter to be used as a feeding alley. The stalls and mangers are constructed of wood and the oats is fed in the bottom of the manger, instead of having separand the oats is fed in the bottom of the manger, instead of having separ-ate oat boxes which wear out halters. A good feature in the construction of the banger in both this barn and that of the late R B. Wither addiction of the late R. B. White, adjoining, is that the builder placed along the top of each manger a piece of bar iron. This prevents horses acquiring the habit of "cribbing." Another place habit of "cribbing." Another place where experience teaches came out in a discussion with Mr. Newman as to the merit of concrete floors. A Model Dairy.

One of the most attractive features of Mr. Newman's buildings is the com-bination dairy and ice house which is built to the east side of the barn. A glance at the plan will show that the adary is connected with the dairy barn dairy is connected with the dairy barn by a passage. This passage has a concrete floor and a roof like a ver-anda, but is open to the weather on the south side, so that the odors from the barn are never carried through to the dairy. The construction follow throughout in this building is per-

manent. Floors are of concrete and are well drained. The walls are kept are west drained. The wants are sopplicated a glossy white and the whole inside presents a very attractive appearance and is laid out in such a manner that the work is quickly done.

The dairy is equipped with table. sink, a stove, a cream separator and a pump ran by a gasoline engine and with cooling tanks for milk. The water which is pumped through the tank runs to a stock trough outside. The ice chamber is 10° 6" inside and between the ice chamber and the dairy is an ante room and refrigerator h has been found to have one hunwhite dred and one uses. In fact, so well was this dairy planned that it has been incorporated in bulletin No. 49 of the Dairy and Cold Storage series, Ottawa, as plan No. 4, "a farm dairy with insulated ice house and refrigera-

This dairy is probably more extor." tor." This dairy is propaging more ex-pensive than many farmers would care to install, Mr. Newman's costing in the neighborhood of \$650, including labor. The best of construction was employed throughout, the ice chamber walls and those of the refrigerator be-

#### ing made one foot thick The Cost of the Barn.

• The Cost of the Barn. The man who sarts out to build a good dairy barn will find that it runs away with an awful lot of money and if any size of a barn is credied, he will be surprised to find what a hole he has made in a \$5,000 bank account. In the fullying statement of the ext. In the following statement of the expense of his barn, it will be noted that Mr. Newman has charged everythat Mr. Newman has charged every-thing used in fits construction against his barn including all the labor. Also included in this statement is \$100 for material used from an old barn that was form down. This statement of cost includes the erection and equip-ment of the barn and silo and is as follows:

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## Excavating silo base (7'). 15.92 Digging drain from root cel-19.96% Not classified ..... 899.20

(9)

Total Cost of Labor...\$1,368.69%

Materiai:	
Cement	195.00
Lime	35.62
Sand and Grave!	60.00
Paint	71.56
Glass	30.92
Putty	3.25
Roofing (metal)	266.12
Lumber for ventilator shutes	20.73
Lumber for grain bins	
(26'x8'x8')	29.43
Lumber not classified1.	341.31
Nails	36.34
Silo clips, blocks, etc	42.06
Barn equipment, including	
stanchions for 26 head, litter	
carrier, etc	302.58
Lightning Rods	16.62
Rods, bolts, tar paper, latches.	24.43
Pump	35.55
h.p. gas engine, including	
56' 1 3-16" shafting, 7 pulleys,	
belting and pump jack	209.45
Total cost of Material \$2,7	20.97
Total Cost\$4,085	.6614

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