

Fall Wheat Pointers.

The following conclusions were arrived at by Mr. C. A. Zavitz, the Guelph "Farm" Experimentalist, at the end of a long series of experiments with the growing of fall wheats:—

1. The average results of winter wheat growing on the experimental plots for seven years in succession are as follows: Weight of grain per measured bushel, 60.5 pounds; yield of straw per acre, 2.5 tons; and yield of grain per acre, 38.7 bushels.

2. Dawson's Golden Chaff has given the largest average yield of grain per acre among fifty-three varieties of winter wheat grown at the Ontario Agricultural College for five years; also among eleven leading varieties tested over Ontario in 1893, nine varieties in 1894, and nine varieties in 1895.

3. The Early Genesee Giant has given the largest average yield of grain per acre among twenty-eight new varieties which were tested for the first time in 1894, and have now been tested for three years in succession. This variety also stood second in average yield per acre among nine leading varieties of winter wheat tested over Ontario in 1894, and nine leading varieties tested over Ontario in 1895.

4. The Early Genesee Giant, Giant Square Head, and Queen Meg varieties of winter wheat, which head the lists in average yield per acre among the varieties grown for three years, for two years, and for one year, respectively, are very similar in all characteristics.

5. Among eighty-one varieties of winter wheat tested in 1896, the Dawson's Golden Chaff, American Bronze, New Columbia, Early Genesee Giant, Giant Square Head, and Queen Meg produced the stiffest straw.

6. In the average of four years' experiments in seeding winter wheat on different dates, it is found that when the wheat was sown later than September 9th the crop was much poorer than when the seeding took place on or before that date.

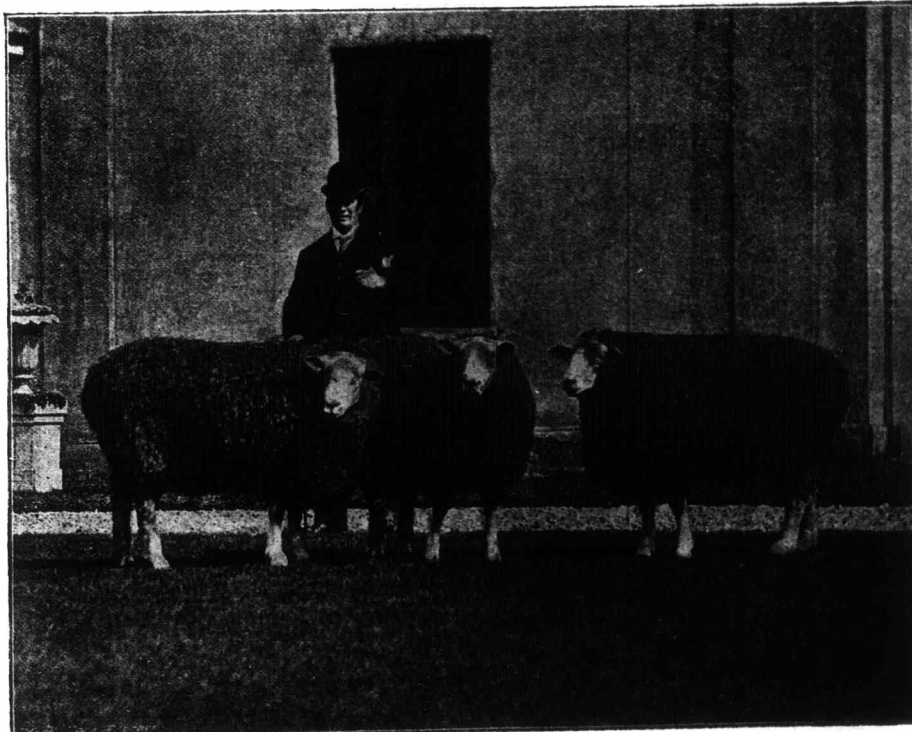
7. In the average results from growing winter wheat for seven years in succession, it is observed that the white grained varieties have given the largest yields per acre in those seasons when there was but little rust, and the red grained varieties in those seasons in which the rust was abundant.

8. The varieties which have given the best average results in the experiments at the College are the varieties which have also given the best satisfaction throughout Ontario.

[NOTE.—For article by Mr. Zavitz, treating this subject fully, we refer our readers to page 309, Aug. 1st issue.—ED.]

A Trio of Prizewinning Lincolns.

As one of our extra illustrations in this issue we portray three Lincoln shearing rams, winners at leading English shows this year, bred by Mr. H. J. Dudding, many of whose sheep have been imported to Canada. They well sustain the reputation of this heavy British breed of sheep.



[From the "Mark Lane Express."] TRIO OF LINCOLN SHEARLING RAMS, BRED BY DUDDING, OF ENGLAND.

Plowing Down Rye--Grass Catch--Vinegar-Flaking and Evaporating Apples.

To the Editor FARMER'S ADVOCATE:

SIR,—In issue of August 1st I notice query of F. S., Middlesex, Ont., in regard to seeding lawn. Perhaps a little experience I have had on a small scale might help him. About September 1st, 1895, I sowed one acre of quite poor land with rye, expecting to use it for a soiling crop in the spring, but grass made such a good growth last spring it was not needed, and manure being scarce, I decided to try plowing under, which I did towards the last of May, it being then about five feet high. I sowed with corn, which has made a grand growth—much better than some that was manured and twice as good as some that had no manure. I intend sowing this fall on a much larger scale. While I do not think it can nearly equal manure, it left the land in such fine tilth that the young plants got a fine start, and, I think, should ensure a good catch of grass seed.

Could any reader of the ADVOCATE give plan for making good, clear cider vinegar? As apples are very plentiful with us, we wish to make some use of them. Also something in the way of a cheap evaporator or handy way of drying at home.

Huron Co., Ont.

J. C.

Mr. Ellis F. Augustine, Lambton Co., an occasional contributor to our columns, sends the following: "To make good, clear cider vinegar, the cider should be made from well-ripened, slightly sour apples. After standing for a week the top should be skimmed off and the clear cider poured off into vinegar or whiskey barrels, being careful to get none of the settlings. About a quart of good vinegar-mother and two gallons of strong vinegar should then be added, and the bung-hole or top of the barrel securely covered with a thin cloth. The

barrel should be placed where it can be kept quite warm, when good vinegar will be formed in from five to six months."

[NOTE.—There is need of some improvements on the old plan of stringing apples or suspending them in an open rack over the kitchen stove as a roasting place for flies, where ashes, dust, and sundry flavors would all concentrate, making dried apples anything but an appetizing morsel. As an industry, evaporating fruit has attained large dimensions in some places. Whiteness is now one essential of dried apples. Elam Hatch, a U. S. farmer, is said to have discovered by accident that sliced apples could be made a clear, pure white by the use of brimstone fumes, since which it became a great business about Rochester, N. Y. In another column Mr. E. D. Smith suggests several farmers clubbing to secure an evaporator. Some reader can probably furnish the "homemade" plan "J. C." asks for. The G. H. Grimm Mfg. Co., of Montreal, advertise evaporators elsewhere in this issue.—EDITOR.]

Harvesting Corn for the Silo at Guelph.

To the Editor FARMER'S ADVOCATE:

SIR,—In my opinion, the coming implement for harvesting corn for ensilage will be a self-binder. It is a decided advantage in loading and unloading to have the corn tied in bundles. Several manufacturing firms in the United States are now making an implement specially for this purpose, but they are too expensive for the ordinary farmer. Several farmers might, with advantage, unite and get a complete outfit for cutting their corn and filling their silos.

I have been told that the low-down binder will cut and bind corn satisfactorily. It is my intention to try one when our corn will have attained its full

be green, but more tramping is required than with corn. Corn is cut with a binder, and allowed to lie on the ground in sheaves a couple of days. If touched by frost it may be put in the silo at once. Eighteen inches of cut straw or hay is put on top. Cutter is run with tread power; corn being cut into inch lengths. It falls in center of silo, where one man levels and tramps.

DAIRY.

Buttermaking Without the Churn.

Two members of the FARMER'S ADVOCATE staff recently witnessed at the Medway Creamery (Ont.) a demonstration of buttermaking in which the churn was discarded. It was given by Mr. Walter Cole, formerly of Australia, latterly of England. Instead of the churn was a round glass vessel about three feet high and a couple of feet in diameter. Lying flat on the bottom was a coil of small pipe, perforated at intervals with small holes. The pipe continued straight up the inside wall of the vessel to the top, extending a few feet across to a closed copper chamber containing water, under which were two oil lamps, by which the water was heated, say to 100 degrees. This chamber was in turn connected by a pipe with an air pump driven by the creamery engine. The glass vessel being about two-thirds filled with very sour cream (butter cannot be made from sweet cream by this process), the air pump was started and the air forced through, the hot water was raised to 80 or 90, and passing on down into the glass vessel, escaped through the holes, bubbling lively to the top of the cream. In about 40 or 50 minutes butter formed, and soon after cold water was added, the buttermilk drawn off, and the butter dipped out and removed to the refrigerator-room to be worked into prints.

The theory of this warm air process is that each butter globule is surrounded by an albuminous sack, and the hot air passing through the cream sets up a chemical action, dissolving the sack, freeing the globules, which coalesce. The day in question being excessively hot, with the warm air-currents rising through the cream, the butter did not present that attractive granular form which buttermakers desire to see. Still, butter it was, and in due course was made into prints.

As to advantages, it was claimed: (1st) That cream of any age or sourness could be used in making butter, so that it could be gathered from long distances; (2nd) that all objectionable flavors would be driven off, even to turnip; (3rd) that more butter—in fact, all—could be secured from the cream,

which churning did not do; and (4th) that the butter, being free from albuminous matter, would keep longer and more perfectly. The first point (cream gathering) conceded. That some odors might be driven off by the hot air rising would not seem unreasonable, but the claim is rather sweeping; there was no comparative test made on the day in question to demonstrate that a given quantity of cream would yield more butter than an equal quantity in the churn, nor was any test made of the buttermilk to show its freedom from fat, and, of course, we could say nothing as to its keeping qualities—claim No. 4. We suggested that the process be submitted to independent experts, such as the Professor of Dairying at the Ontario Agricultural College, or the Dominion Dairy Commissioner's staff, but understood from Mr. Cole that it was to be shown at the large fairs.

A Canadian Buttermaker in Pennsylvania.

Mr. Isaac Linton, a Canadian, now manager of the Silver Spring creamery, in Potter Co., Pa., writes us an interesting account of his present home and business, adding that he has read the FARMER'S ADVOCATE for the last 25 years and "it seems to get better the older it gets." He is in a beautiful section, fertile and well-watered. The pasturage is admirable. The army worm caused great havoc there this season; many fields of grain being cut green for fodder so that all would not be lost. The farm, of which, together with the creamery, Mr. F. L. Andrews is proprietor, consists of

Cutting Corn With a Hoe.

Mr. D. C. Black, of Ekfrid Township, Middlesex Co., Ont., expresses, in a letter to the ADVOCATE, his surprise at not seeing among the corn-harvesting articles in last issue the use of a hoe recommended for cutting the corn. He recommends, from experience, using a triangular hoe, with an 18-inch handle; the hoe made seven inches across the back, and 4½ inches from apex across to where the handle is attached. A blacksmith can make it from a portion of an old cross-cut saw blade. It should be kept very sharp.

Silo Filling in the N.-W. T.

In the event of a partial failure in corn, Supt. MacKay, of the Indian Head Experimental Farm, writes us that green oats, or a mixture of oats and barley, takes its place. In '94, oats well advanced toward maturity were used, but dried out, resulting in almost total loss. Not only must the grain