we adopt our old original law, which we had 40 years ago, with some amendments. I would like to know what "Fritz" thinks of it. He has shown rare ability in his criticisms of Mr. Way's suggestions, and some knowledge of drainage, so I expect to hear from him again.

Dundas Co., Ont. "SPITZ."

Dominion Experimental Farm Crop Yields.

The results of the trial plots of grain, fodder corn, field roots and potatoes, on the Dominion Experimental Farms, are given by the Cerealist, Dr. Chas. E. Saunders, in Bulletin No. 66. These experiments have been going on for 16 years, with seed supplied at the outset from a common stock. So far as possible, the varieties are reported according to their average yield for the last five years. In the notes on spring wheats, White Fife is ranked with Red Fife in hardness and flour strength, and is deservedly popular in the Eastern Provinces of Canada. White Russian is a somewhat soft wheat that could be advantageously replaced by better bread-making sorts. Preston and Huron (bearded) are commended where early frosts are feared, but, for bread-making, are not equal to the Fifes. Stanley (beardless) resembles Preston and Huron, but produces paler flour. Marquis (beardless) is reported the most important early-ripening sort yet introduced, much like Red Fife, yielding flour of the same excellent qualities, and worthy of a trial in most districts.

Of the winter wheats, Turkey Red is a strong bread-making flour, recommended for Southern Alberta, but does not yield well in Southern Ontario. Egyptian Amber, Imperial Amber and Tasmania Red (bearded) give good crop in Southern Ontario, and yield a strong flour desirable for bread-making; not enough attention is paid to them. Dawson's Golden Chaff holds place as an excellent field variety, good for pastry, but not desirable for bread-making. Below are given the five highest-yielding varieties, grown for five years on sixteenth-acre plots, with average yields in each case:

CENTRAL EXPERIMENTAL FARM RESULTS.

Spring Wheat.—Chelsea, 35 bush. 22 pounds; Preston, 32 bush. 46 pounds; Bishop, 32 bush. 14 pounds; Pringle's Champlain, 32 bush. 2 pounds; Huron Selected, 31 bush. 34 pounds. In 1910, Chelsea yielded 46 bush. 30 pounds.

Oats.—Thousand Dollar (white), 74 bush. 16 pounds; Gold Rain (yellow), 73 bush. 18 pounds; Improved American (w), 72 bush. 20 pounds; Danish Island (w), 72 bush. 18 pounds; Swedish Select (w), 72 bush. Daubeney Selected ranks seventh, with 70 bush. 28 pounds; Siberian, eleventh, 69 bush. 2 pounds; Garton's Abundance, twelfth, 68 bush. 32 pounds; Banner, thirteenth, 68 bush. 18 pounds. The 1910 average of 24 varieties of oats tested for five years was 68 bush. 8 pounds per acre.

Barley (six-row).—Manchurian, 59 bush. 8 pounds; Odessa, 58 bush. 46 pounds; Mandscheuri, 58 bush. 36 pounds; Albert, 56 bush. 26 pounds; Nugent, 54 bush. 42 pounds. Mensury yielded 53 bush. 32 pounds.

Barley (two-row).—Hannchen, 54 bush. 6 pounds; Canadian Thorpe, 46 bush. 30 pounds; Swan's Neck, 45 bush. 10 pounds; Clifford, 45 bush. 8 pounds; Standwell, 45 bush. 4 pounds.

The average crop of 1910 for 14 kinds of two-row barley, tested for five years, was 41 bush. 18 pounds per acre; and of six-row, 68 bush. 21 pounds. The former suffered most from the dry June and July weather.

Peas.—Prussian Blue, 40 bush.; Prince, 36 bush. 46 pounds; English Grey, 36 bush. 34 pounds; Wisconsin Blue, 36 bush. 20 pounds; White Marrowfat, 36 bush. 14 pounds.

Indian Corn.—Sown in rows 3 feet apart, and plants thinned out to six or eight inches in the rows; sown May 17th; cut green for ensilage Sept. 17th: Eureka, 21 tons 1,868 pounds; Superior Fodder, 20 tons 1,536 pounds; Wood's Northern Dent, 20 tons 190 pounds; Selected Leaming, 18 tons 1,862 pounds; Early Mastodon, 18 tons 1,356 pounds. Compton's Early gave 17 tons 870 pounds, and Longfellow, 15 tons 1,680 pounds. Five varieties gave an average yield in 1910 of 29 tons 288 pounds.

Turnips (Swedes).—Good Luck, 31 tons 1,770 pounds; Hall's Westbury, 28 tons 1,850 pounds; Magnum Bonum, 28 tons 1,170 pounds; Hartley's Bronze, 28 tons 80 pounds; Jumbo, 27 tons 1,310 pounds. Drills were two feet apart, and plants thinned to 7 inches in the rows. Average yield of ten varieties in 1910, 31 tons 565 pounds, sowed May 12th, pulled October 25th.

Mangels.—Selected Yellow Globe, 36 tons, 1,720 pounds; Giant Yellow Intermediate, 35 tons 570 pounds; Yellow Intermediate, 33 tons 1,470 pounds; Half Sugar White, 32 tons 1,840 pounds; Prize Mammoth Long Red, 32 tons 660 pounds. In drills 2 feet apart, thinned to 7 inches in rows; sowed May 12th, pulled October 26th. The average yield of seven varieties in 1910 was 56 tons 57 pounds, the Selected Yellow Globe yielding 70 tons 200 pounds.

Carrots.—Sowed in drills 2 feet apart, and thinned to five inches. Best yielding varieties: Improved Short White, Ontario Champion, Mammoth White Intermediate, Half-long Chantenay, and White Belgian, ranging from 26 tons 1,520 pounds, to 19 tons 1,560 pounds.

Sugar Beets.—French Very Rich, 22 tons 400 pounds; Vilmorin's Improved, 21 tons 1,500 pounds; Klein Wanzleben, 20 tons 640 pounds.

Potatoes (reported by W. T. Macoun, Horticulturist).—Dalmeny Beauty, 276 bush 19 pounds; Hard to Beat, 196 bush. 41 pounds; Carman No. 1, 228 bush. 22 pounds; Gold Coin, 178 bush. 38 pounds; Late Puritan, 178 bush. 12 pounds. Some sorts yielded over 400 bushels per acre in 1910, and the 12 sorts highest in the five-year period averaged 309 bush. 50 pounds in 1910. For planting, the potatoes were cut into pieces having at least three eyes in each, and planted in rows 2½ ft. apart, and 1 ft. apart in the rows. One row 66 ft. long was planted of each variety. They were planted May 17th, and dug October 13th and 14th.

At the Nappan, Nova Scotia, Farm, White Fife headed the list of spring wheats, 36 bush. 12 pounds, on one-fortieth-acre plots.

The best-yielding oats were Golden Beauty, Banner, Siberian, White Giant, and Danish Island. Yields, 65 bush. 26 pounds, to 63 bush. 2 pounds. In 1910, sixteen varieties averaged 82 bushels per acre.

In six-row barleys, Stella, 46 bush. 28 pounds, topped the list, with Mensury, Odessa, Oderbruch and Nugent following. Two-row—French, Danish and Swedish Chevaliers were first in order, Beaver and Clifford following; yields, from 51 bush. 19 pounds to 43 bush. 24 pounds.

Peas.—Pictou, White Marrowfat, Daniel O'Rourke, Paragon and Mackay were the toppers, yields ranging from 27 bush. 56 pounds, to 22 bush. 12 pounds.

Ensilage Corn.—Angel of Midnight, 19 tons 280 pounds; Eureka, 18 tons 1,552 pounds; Early Mastodon, 18 tons 960 pounds; Selected Leaming, 17 tons 1,794 pounds; Longfellow, 17 tons 980 pounds.

Hall's Westbury, 30 tons 254 pounds, was the top Swede turnip; Yellow Intermediate Mangel, 29 tons 1,268 pounds. Ontario Champion was the highest-yielding carrot; Vilmorin's Improved the top sugar beet.

The five highest-yielding sorts of potatoes at Nappan were: Vic's Extra Early, Gold Coin, Rochester Rose, Everett, and Ashleaf Kidney, varying from 454 bush. 58 pounds, to 421 bush. 57 pounds.

At the Prince Edward Island Experimental Farm, in spring wheat, Chelsea headed the list, with a yield of 48 bush. 49 pounds.

The five highest oats were: Abundance, Irish Victor, Garton's Regenerated Abundance, Thousand Dollar, and Wide Awake, with an average yield of 121 bushels 29 pounds per acre, but the test plots were one-hundredth of an acre each.

Six-rowed Barley.—Albert, Claude, Mensury, Nugent and Mansfield were at the top, and Invincible headed the list of two-rowed sorts.

The Arthur was the highest-yielding pea.

Corn.—Compton's Early, Wood's Northern Dent, Longfellow, Eureka and Early Mastodon, with fodder yields of from 30 tons 60 pounds to 24 tons 1,940 pounds.

Hartley's Bronze was the top Swede turnip; Yellow Intermediate the top mangel; Mammoth White Intermediate the top carrot; French Very Rich, the top sugar beet.

The five highest-yielding potatoes were: Burbank's Seedling, American Wonder, Everett, Empire State, and McIntyre; yields from 328 bush. 54 pounds, to 302 bush. 30 pounds.

At the British Columbia Farm, Agassiz, the highest-yielding sorts in the different grains, etc., were as follows: Spring wheat—Stanley, 26 bush. 32 pounds. Oats—Improved American, 76 bush. 31 pounds; Abundance, 76 bush. 28 pounds; White Giant, 75 bush. 28 pounds; Lincoln, 72 bush. 30 pounds; Irish Victor 71 bush. 33 pounds. The old Banner holds 6th place, with 71 bush. 26 pounds. Barley (six-row), Mensury; (two-row) Danish Chevalier. Peas—Golden Vine, 44 bush 10 pounds. Corn—Superior Fodder, Compton's Early, Wood's Northern Dent, Longfellow, and Angel of Midnight; from 18 tons 102 pounds, to 15 tons 1,594 pounds. Turnips—Jumbo, 28 tons 1,701 pounds. Mangels—Yellow Intermediate 23 tons 927 pounds. Carrots—Improved Short White, 32 tons 139 pounds. Sugar Beets—Vilmorin's Improved, 14 tons 589 pounds. The five highest-yielding potatoes were: Late Puritan, American Wonder, Gold Coin, Dreer's Standard, and Morgan's Seedling, the yields being 402 bush. 42 pounds, to 388 bush. 7 pounds. The 1910 average of 14 varieties was 295 bush. 53 pounds.

Chimney Queries.

1. Would the draft of a stove be affected by attaching another stove to same pipe by a T elbow, say one or two pipe lengths from chimney?

2. Would it be as good as having two pipe-holes in chimney, one on each side?

3. In making two holes in chimney, would it be better to have one higher than the other; or would two chimneys be better.

4. How would glazed sewer pipe do for chimney, and what size for an ordinary-sized stove-pipe?

5. Is it better for a chimney to be larger than the pipe leading from the stove?

6. What depth would a cistern 4 feet square need to be to hold as much as a round cistern 6 feet in diameter and 6 feet deep?

7. Would it be all right to let the earth form the outside mold in building a cistern of cement? What thickness and strength should walls be for one the size asked in question 6? W. T.

Ans.—1. Yes. The draft would be as good in the stove after an extra one had been attached to the same pipe by a T. The proportion of the stovepipe above the T will carry a certain amount of air, and with two stoves to draw from, part would come from each stove. With this, neither one would have as good draft as if there was just one stove on the line.

2. If the chimney is larger than the pipe, it would be better to make two holes in the chimney.

3. It is better to make the two holes in the chimney side by side. If they are one above the other, then the stove attached to the upper one has a better draft than the other. This could be somewhat counterbalanced by attaching the shorter pipe to the lower hole. Two chimneys will give better results than two holes in the one chimney, even though they are side by side.

4 and 5. Glazed sewer tile would be all right, but glazed chimney pipe is better, as it has no flange like sewer tile, and, consequently, does not require so much brickwork. The chimney tile for an ordinary stove should be 9 inches in diameter. An 8-inch one will do in a pinch, but it does not give as good results.

6. 10.6 feet.

7. Yes, the earth would form the outside of the mould. This is often done. The wall should be from 4 to 6 inches thick. Five or six to one would do for the body of the wall, with a stronger coating on the outside, so as to make it as near watertight as possible. WM. H. DAY.

THE DAIRY.

Watering Milk Through Cow.

During the past year, reports appeared in the newspapers that dairymen had been convicted in French courts for selling adulterated milk, on the assumption that it is possible to water milk either by feeding watery food or causing them to drink large quantities of water before being milked. Accordingly, the British Board of Agriculture conducted an experiment with seven cows to test these points, causing them to drink by excessive salting. The result of the experiment appeared to show that periodical doses of common salt, administered to cows, even to the extent of purging them, do not necessarily cause them to consume excessive quantities of water, and that the amount of water consumed by cows has no direct bearing on the composition of their milk yield.

Prepare for Summer Feeding.

At the Central Experimental Farm, the milking herd last year consisted of 65 cows, with only a fourteen-acre field available for the pasturage of 50 head. The field was seeded the previous year with the following mixture: Red clover, 5 pounds; alfalfa, 7 pounds; timothy, 10 pounds. The seeding made such strong growth that half of it was fenced off for soiling. The chief dependence was not pasture, but soiling and silage, which latter was the chief feed in August. Soiling crops are reckoned the cheapest feeds for July and August. J. H. Grisdale, the agriculturist, and Dr. Wm. Saunders, the Director, join in again recommending to dairymen to prepare and feed somewhat as follows for each ten cows of their herds:

1. Clover, 1 acre—To have been sown with the mixture of peas and oats the previous year, as described below.

Feed off June 20th to July 15th.

2. Peas and oats, ½ acre—Sow 1 bushel peas, 1½ bushels oats, and 5 pounds red clover seed, on one-half acre of land about the first week in May, or earlier, if possible.

Feed off July 15th to 31st.

3. Peas and oats, ½ acre—Sow same mixture on another half acre about third week in May.

Feed off August 1st to 15th.

4. Corn, ½ acre—Sow 10 pounds Longfellow corn (or other small variety) in hills 3 feet apart each way. Sow third week in May, or as early