THE BINDER-TWINE TARIFF.

Editor "The Farmer's Advocate":

I write these few facts concerning the binder-twine industry, as present conditions affect both the manufacturer and the consumer or farmer. It is well understood by the manufacturer, and I presume by the farmer and consumers generally, that binder twine, as well as anything that pertains to its manufacture, is by the present arrangement of the Canadian tariff admitted free or without duty into Canada from the United States or any other part of the world; whilst, on the other hand, binder twine exported from Canada to the United States, which is made wholly or in part of manila fiber, is subject to a duty of 45 per cent., which is manifestly a discrimination against the Canadian manufacturer, and in favor of the American manufacturer. It would appear only reasonable that the Canadian Government should place the Canadian manufacturer on the same basis as the American manufacturer, by imposing the same duty and restrictions as our neighbors do. It may be said by the consumer that binder twine is a staple article, and every farmer uses more or less of the article; consequently, we want it on the free list, so that we may buy where our interests are served the best, and thus prevent combinations and graft by the Canadian manufacturer. Are the conditions that now prevail likely to bring about such a result? I think it may be safely asserted they are not. It may not be generally known, but it is a fact all the same, that at present—and has been for some time—there are more than enough spindles in the Canadian factories to make all the binder twine that is used in Canada each year, and more. At least in two cities in the Dominion, binder twine is made extensively by convict labor. It is reasonable to suppose, with such conditions prevailing, that the Canadian manufacturer would be unable to force fictitious prices for twine; or, in other words, charge any more for their twine than the actual cost, with a fair margin of profit.

It might now be enquired, with the existing tariff regulations, what are being the results, so far as the Canadian manufacturer and the consumer are concerned? In answer: first, according to a writer in Hardware and Metal, seventy-five per cent. of the twine used in Canada is imported, mainly from the United States; secondly, that of the binder-twine factories that have been in business, seven have been compelled to shut their doors by insolvency, or failure of making the business a paying investment, and the twelve that are operating are in a languishing condition—truly, not a very encouraging condition, in so far as the manufacturers are concerned. We sometimes hear it said, "Canada for the Canadians"; I think it has been shown that this does not apply so far as binder twine is concerned.

A short time ago a Globe editorial, in referring to the article of binder twine, said that the Government had conferred a great boon on the Canadian farmer, by wisely continuing binder twine on the free list, and that the dumping clause was nugatory, because binder twine was duty free to enter the United States. I suppose the idea of the Globe writer was, in the first assertion, see what a good thing has been done for the farmer, and the second assertion was a sop for the manufacturer. I have stated, which cannot be contradicted, that there is a duty of 45 per cent. on twine made wholly or in part from manila fiber entering the United States; and, further, I know that American manufactured twine has been sold for a less price in Ontario than the same grades were being sold in some of the northern States.

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Corn Improvement in the Corn States.

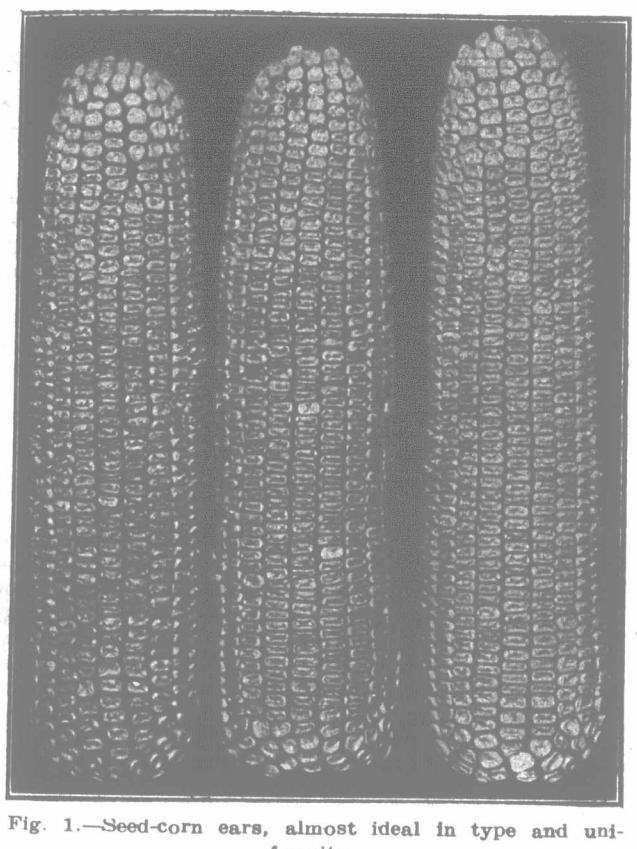


Fig. 1.—Seed-corn ears, almost ideal in type and uniformity.

Editor "The Farmer's Advocate":

In the 7 States—Ohio, Indiana, Illinois, Iowa, Missouri, Kansas and Nebraska—classed as "The Corn Belt" of the United States, more than 46,000,000 acres of land are planted to corn each year. The average yield of corn over this area for a period of ten years is about 32.6 bushels per acre. The yield has been affected by the soil and soil management, but experiments have also shown that this low yield is due in a large measure to the use of: First, low-yielding varieties; second, seed of low vitality; and third, seed improperly graded for the planter.

VARIETIES.

The varieties of corn usually grown are of the dent type. Some very small amount of flint corn is grown in the northern sections of the States mentioned. The number of varieties or strains of varieties of dent corn are almost innumerable, but the most prominent and those most generally used are Reid's Yellow Dent, Leaming, Gold Mine, Riley's Favorite, Boone County White, Iowa Silver Mine, and Johnson County White. These have furnished the basis for the many local-named varieties which are found throughout the country.

IMPORTING SEED CORN.

Owing to the fact that corn is readily affected by the soil and climatic conditions, it is impractical to import seed corn from a distance. The most satisfactory results are being obtained where home-grown seed or seed from the immediate community is used for the major portion of the crop. Corn for seed may be moved greater distances east and west than north and south.

When a new variety or strain of corn is brought from a distance, it should be planted over a limited area, and on soil of medium fertility. In the early fall, before the time of frosts, the corn should be inspected, and those ears which show signs of maturity by the brown husks should be picked and hung up in a dry place where each ear will be exposed to a free circulation of pure air, and where they can be kept dry during the winter. If this method of selecting the seed is followed up for two or three years, the date of maturity for the variety will be hastened ten days to two weeks; the corn will become acclimated, and little difficulty will be experienced in securing a satisfactory crop.

SELECTION OF SEED.

Recent experiments have shown the individuality of an ear of corn to be of much importance. Individual ears of corn were planted in individual rows in several plots in different parts of Indiana, and the following figures show some of the results:

YIELDS OF INDIVIDUAL EARS.

Plot No. 11.		Plot No. 12.		Plot No. 21.	
Ear No.	Bush. per acre.	Ear No.	Bush. per acre.	Ear. No.	Bush. per acre.
22	127	15	102	8	100
17	65	17	62	6	65.8

The above data show the variations in yielding power of individual ears, and indicate the possibilities for corn-improvement by selecting seed from the better ears. The productive power of an ear of corn cannot be told by the eye, but much can be done to discard the weak, undesirable ears when selecting the seed. A good plan is to lay fifty or one hundred ears in a row on a table, or on planks supported by barrels, and, with an ear that most nearly represents the type desired in the left hand, pass down this row and discard all those ears that do not measure up in size, shape and type of ear, color, shape and size of grain. In this way a uniformity of type, shape and size is secured. After this work has been done, the vitality of the individual ear should be determined.

TESTING OF CORN.

The germination test of seed corn is an important and necessary operation. When we remember that only fourteen ears of corn are required to plant an acre, and that with a yield of seventy bushels, each ear planted means five bushels at harvest time, we cannot afford to plant one bad ear. With the following method a man can place to test six to eight bushels of corn in one day, and, under average conditions, he does no work on the farm that returns him more dollars for his labor.

The tester shown in cut can be made from ordinary inch lumber, and of any convenient size, say about two by three feet, and three inches deep.

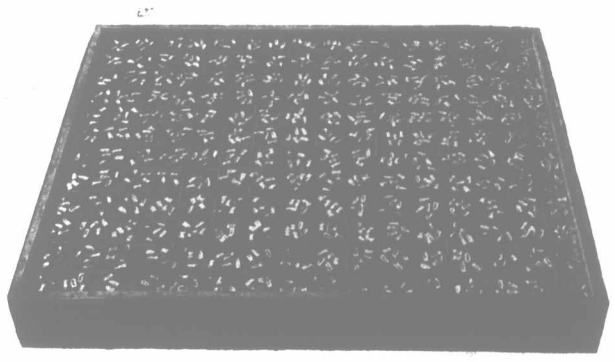
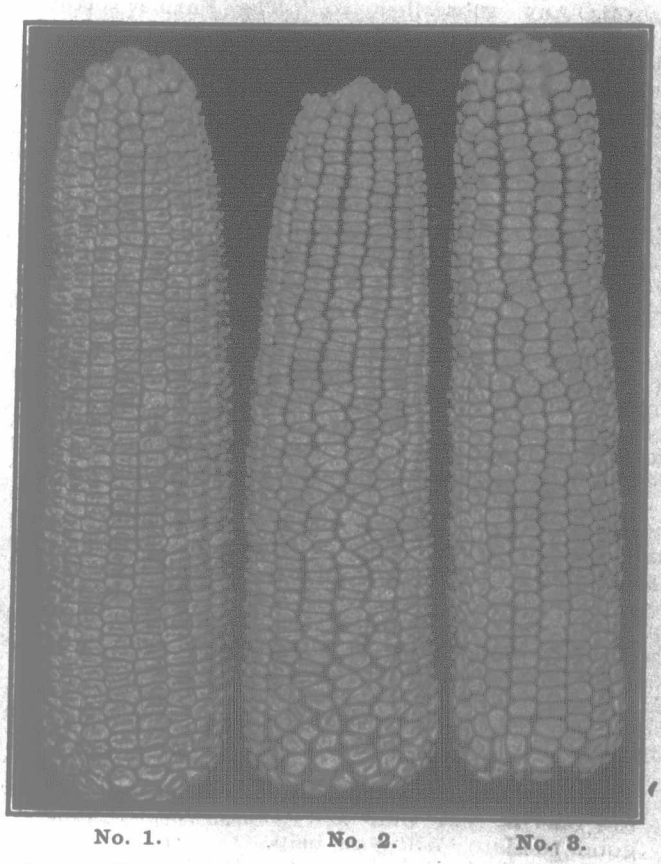


Fig. 3.—Seed-corn Tester.

Through the sides and ends holes are bored about two inches apart, and one-half inch from the top. Through these holes light galvanized or copper wire is strung from side to side and end to end, dividing the box into squares. The tray is then filled up to the wires with sand, garden soil or sawdust, and moistened thoroughly.

The ears to be tested should be arranged in rows on the floor, or in racks, where they will be undisturbed until tested. Remove five kernels from the different parts of ear No. 1 and place them in the first square in the upper left-hand corner, designating this as square No. 1. Do the same with ear 2, etc., placing the kernels in a respective square in the box. After the kernels have been placed, the tester should be covered with glass or a piece of carpet so as to prevent evaporation of the moisture, and placed in a room kept at a temperature of 65 to 70 degrees F. After five days the tester should be examined, and any ear that does not show vigorous root and stem sprouts from the five kernels should be discarded.



No. 1. No. 2. No. 3.

Fig. 2.—Ear No. 1 is not a good seed ear. The rows are too close together, and the kernels vary much in thickness. The kernels of ear No. 2 are much too irregular in shape. Ear No. 3 has several broken rows, and lacks constitution and strength.

A study of the vitality of corn has shown that no one can pick out all the ears of imperfect vitality by a mechanical examination. Every weak germ means a weak plant and a small yield, and when these can be easily detected by the tester, there is no reason why they should be planted.

GRADING.

After the desirable ears of corn have been selected, the tip and butt grains should be removed and discarded. Tests have shown that it is impossible to secure a high per cent. of stand when the irregular tip and butt grains are planted along with the uniform middle grains.

The following table shows the results of a planter test, in which the whole ear and the uniform middle grains were compared. In each case it was desired to drop three kernels per hill. Records made in 100 drops:

No. of kernels dropped.	Whole ear.	Middle kernels only.
1	1 time.	
2	6 times.	8 times.
3	66 times.	92 times.
4	25 times.	
5	1 time.	
6	1 time.	

After this has been done, one other step in the grading should be taken. Make a lap-board, about two feet square, with raised edges,