SELECTING SEED CORN.

There Is Only One Proper Way to Do It and That Is to Select It In the Field.

"I presume, says a writer in the Breeder's Gazette, that no class of farmers are better prepared to appreciate the importance of seed-breeding than are stock-breeders. From seeds spring all important organic life on the farm. They, therefore, in their development become the measure of the cost of animal growth and in a large degree of its character. However successfully a farmer may breed his steers, he is doomed to failure if his crops are of low capacity. The pounds of beef per acre is measured not mainly by his skill as a stock-breeder, but more by his skill as a plant-grower. It follows that our genius o f farmers should expend its first or chief force upon the plant rather than upon the animal. Few men possessed of one absorbing purpose but what fail to give proper attention to other important factors in life. This general truth is not without its illustration in the ranks of stock-breeders, although no class should appreciate potent seed more. Very nearly the round of the laws of heredity in animal life are found with analogous relations in plant life. I need not review them to the readers of the Gazette nor marshal supporting evidence, for assertion of these laws is the equivalent of evidence to a breeder who has familiarized himself with the laws that govern succession of organic life.

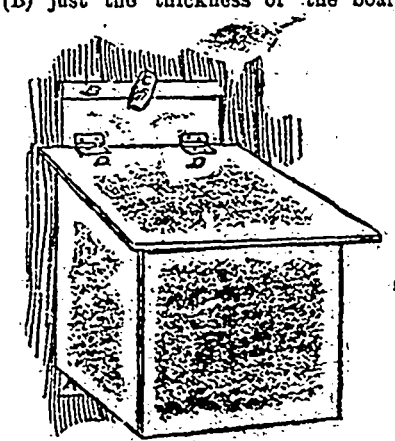
Hereditary qualities may be fixed in corn by selection, or may be produced by crossing and fixed by selection. I shall confine my statements to selection as a means of improvement, and mainly to those phases of the question that will be suggestive and of value at the coming harvest.

One right way exists for corn selection, and only one right way; and that way is to select the corn in the field and from the plant at a date early enough to determine the character of the whole plant. The Western practice, though wrong, measures the value of the corn crop almost wholly by the ears produced. This demands a plant that gives the maximum amount of ear and the minimum amount of stalk. By selecting the ear from the stalk, and by no other method, can this result be secured. The ratio of seed to stem is as variable for corn as it is for other plants. The seed is but a fraction—a part of the whole life—and the ratio of the parts vary in the plant as in the animal, and are as susceptible of being fixed as are the parts of an animal. I have carried out trials in selection of seed corn for several years. I will not in all these cases prolong articles with tables of results, and in accordance with this design state that by weight I find that the ratio of ear to stalk is very variable; that the largest ear is not necessarily found on the largest stalk, and is not usually so found (I am considering plants within a given variety); that an ear from a tall stalk reproduces a tall stalk and from a short stalk is reproduced a short stalk, and that ears selected from short stalks produce more corn per acre than do ears selected from tall stalks. The yield of stalks is on the reverse order. The total crop is quite as large from the seed of the tall stalks as it is from the seed of the short stalks—really larger. When corn is grown for ensilage a different policy in seed selection should be pursued from that advisable when selection is made for corn grown for its ear alone.

IMPROVED NEST-BOX.

This Is Certainly a Good Device and Worth Trying.

Mr. James E. Riddle, Greersville, O., sends to Farm and Fireside a plan of a nest-box, which is easily constructed and very convenient for cleaning out and collecting the eggs. In describing it he says: "There is no patent on this nest-box, so I will give it to your readers. It can be attached to any poultry-house by sawing a hole in the side of the building large enough to let the hens go through. The bottom of the nest-box is one foot square. Nail two pieces of lath to the side of your building, one at the bottom to support the nest, marked (A) in the illustration, and one at the top (B) just the thickness of the board



NEST-BOX.

that the nest-box is made of, to attach a button (C) for holding the box in position. Nail a board extending upward from the bottom, five inches wide, next to the building. The board at the top where the hinges (DD) are attached, is 6 inches wide, and extends 3 inches down each side of the box. The lid is 18 inches square, and the box is 12 inches high in front and 16 inches next to building. Having finished the box, all that is necessary is to turn the button at the top, and the box can be lifted from its support and cleaned, fresh nest material put in, and you can walk along the side of your building and gather the eggs from the outside, as those boxes are attached to the building from the outside."

STERILITY IN MARES.

Conditions That Tend to Produce It—Treatment For.

One of the very hard questions that are often asked us is what causes and what will cure sterility in mares. We can not answer such questions except in a general way. A writer has recently gone into the subject very fully, and we compile the chief points that he makes for the benefit of our readers. All practical horse-breeders are impressed with the fact that a proper management of brood mares undoubtedly influences their regularity of breeding. High feeding and the use of stimulating food will quickly induce sterility. Fat and plethora of system lead to fatty deposits about the ovaries, degenerative processes or clogging up the fallopian tubes with fatty particles. Likewise the opposite condition of reduced vitality from old age, poverty, over-work or bad feeding is equally as conducive to sterility.

The lesson to be drawn from these facts is to avoid both the obese and the impoverished state; keep your brood mares thin in flesh yet in good heart and spirits to ensure regular pregnancy and the production of healthy progeny. Many animals, from peculiar idiosyncracy of constitution, will accumulate fat under a system of starvation; such require to be carefully watched. Debilitated mares require good feeding and careful treatment to regain tonicity of the generative apparatus. Exercise is an absolute necessity to procreation. The idle mare, with no range of pasture, or one that is housed, is apt soon to become sterile. Many animals will only breed when regularly worked or placed under such condition as ensures strong exercise. Inferior foods are apt to arrest the breeding function; if not actually preventing conception, by their influence on the generative organs, they intend to abortion at an early period of gestation. Moldy hay, smutty corn fodder, musty grain or corn, or ergotized grasses, must be carefully avoided. Making brood mares in winter the scavengers of all the rough food of the farm, considered unsuitable for other stock, is a system that can not be too highly depreciated.

If you have any old sheep—scrub hogs or unprofitable cows—get them ready for the butcher as soon as possible.

As soon as an animal is matured it ceases to be profitable to keep, unless it is a work animal and possibly sheep.