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The Field.

Wanted—A New Late Potato.

The Peachblow has long maintained its place at the head of the list as a potato for eating in winter, spring and early summer. At its best, it possesses in an eminent degree two valuable characteristics—solidity and meanness. Other potatoes of equal solidity, generally are sooty when cooked, and are consequently unacceptable. But a well-cooked Peachblow will have a very substantial taste, and resembling a cereal, and at the same time appear nearly as light and dry as flour.

These two meritorious qualities in the Peachblow have covered a multitude of faults, or demerits, and been the cause of its covering a greater breadth than any other potato, and leading in price in our principal potato marts. We will now briefly sketch its principal demerits:

1. It has too much top. The tops of potatoes probably exhaust the soil of its organic matter quite as much as the tubers. Of two varieties of potatoes equally valuable in other respects, we should give decided preference to the one that had the least tops in proportion to tubers.

2. It scatters too much in the hill, thereby increasing the labor of digging. The greatest portion of the labor involved in raising potatoes is expended in digging them. Every farmer knows the difference in digging between the Old Mercer, or the Early Rose, and the Peachblow.

3. The greatest demerit, however, is its lateness, or the long season required to complete its growth and maturity. In our climate it is very desirable that a potato shall be fully matured by the first of October. A variety not matured at that time will be quite likely to have its growth arrested by frosts before it is ripe, or if not, to continue to grow so late as to be in danger of freezing before it is dug.

There are other minor objections to the Peachblow, its form is not favorable to baking, it is decreasing in productiveness; it is specially liable to a peculiar form of leaf-blight, and from its long season we think it will be exceptionally exposed to the ravages of the potato beetle. The third and last generation of the beetle, is by far the most numerous one, and they find the haulm of the Peachblow in full vigor, and concentrate upon it.

But what shall we substitute for it? This is a question which we are not as yet prepared to answer. We are not aware that the potato has yet been introduced that has the peculiar merits of the Peachblow without its faults. But we know no reason why the sense and perseverance in crossing that has produced many valuable summer varieties, may not yet be rewarded by producing a winter variety, nearer perfection in all respects than any we now have.—*American Rural Home.*

SOW ONLY PLUMP SEED.—It does not pay to buy shrunken wheat or seed grain of any kind to sow. If you buy seed wheat, insist upon perfect kernels—the larger and plumper the better, since this is essential to the health of the plant. Shrunken or shrivelled seed may germinate, but the absence of a sufficient quantity of starch to supply nutrition for its early development may cause it to perish before it takes root in the soil.

The Drill System of Grain-Sowing.

A correspondent wishes to know what are the advantages of drilling in grain, as compared with the common method of broadcast hand sowing. The question has been answered in these columns time and again, but it is always a good thing when interest and curiosity are awakened respecting agricultural practice, even if it occasions repetition of statements already put in print. We have pleasure therefore in summarizing briefly once more the chief points of superiority in drill over broadcast grain-sowing. They may be classed under three heads:

1. Better Work.

The seed is evenly distributed, buried at a uniform depth, put into the most favorable condition for quick and simultaneous germination, and the field left in a neat workmanlike state.

2. Economy of Seed.

By drilling in the seed, a bushel per acre may be saved. This may seem at first incredible, but careful experiments have proved it, and a little reflection will show that it is not after all so improbable as it may seem. In the first place, there is no waste when the drill is used. All the seed is deposited in the soil, and none left on the surface as a lure to birds or a prey to the elements. Again, the seed being evenly scattered, there is no loss by overcrowding in some spots, and scarcity in others, as must be the case, more or less, with broadcast hand-sowing. Especially does this condition of things occur if there is high wind when the sowing is done. The drill can be used no matter how stiff a breeze may be blowing. But even on the calmest day there will be irregularities in hand-sowing which are totally avoided by means of the drill. Further, a comparatively thin seeding, such as may be secured by the drill, gives room for each plant to spread itself to the utmost. On this point, the braird, though looking thin at first, will "taller out," as the saying is, and the stools of wheat will obtain a strong growth, covering the ground evenly and occupying it thoroughly.

3. Quantity and Quality of Product

Of course a bushel of seed saved is no gain if it is done at the expense of the crop. But this is not the case. The increased "tillering," already referred to, implies a multiplication of stalks, and consequently of ears. A needless profusion of seed causes feebler stalks through overcrowding, and the yield of grain is less than if there had been fewer stalks better developed and more fit to sustain and nourish well filled ears. We have no definite statistics at hand, but suffice it to say, facts have proved beyond question that the advantage is all on the side of the drill, so far as quantity of product goes. The same is true as to quality. A plumper, more uniform berry, and better straw even are thus obtained.

In view of these considerations, it will be seen that the first outlay involved in the purchase of a drill is a mere trifle compared with the profit resulting from its use.

Raising Wheat.

At the recent New York State Fair, held in Rochester, a well-sustained discussion took place on the above subject. According to the report given by the *Country Gentleman*, two things were considered specially important,—drainage, and keeping the manure that is applied at the surface. Science teaches this, and practice confirms it. Under-drained land, if clay, is often more or less wet. Wherever this is the case, the frost in the spring, and also during the winter, if open, will lift it, throwing out thus yearly a large amount of the grain, in some years seriously affecting the crop. This we have reported of some sections every year. It is on clay soil principally that this takes place, and *always* where undrained or poorly drained. A thoroughly porous (drained) soil will *never* have wheat lifted out, because there is not water enough for the frost to act upon.

To bury the manure (by ploughing under) and put the wheat on the top, on the raw or unmanured soil, is in effect not to manure at all, so far as the start of the crop is concerned; and the start has much to do with success. Then the manure buried will lose some of its substance, and the best part—the nitric acid—for which the soil has no attraction. Each rain takes some of this from the soil, and the more readily, as it is already well on its way, being put down by the plough. The point is to have it at the surface, where the grain can at once feed upon it, and as the roots extend downward in their growth, they keep pace with the sinking material. Thus, if not too much is applied, most if not all of this will be saved. Hence frequent and somewhat light manuring is most profitable. There are other elements besides the nitrates—lime, for instance—that are fugitive in their character. To harrow in manure with the grain, or to apply it afterwards, finely and evenly distributed, is the true doctrine. In this way, and with drainage, you are pretty sure of a good crop, providing always you have your land in a mellow condition, a point insisted upon, and justly, in the discussion, for the plant receives its nourishment, not alone from the water holding it in solution, but takes it also directly from the soil, the roots having that power. Thus they cannot do successfully if the contact is slight, as in the case of coarse, lumpy soils. Fine, compact soil (not hard), hugging the roots closely throughout, is what is wanted, especially for wheat, and no soil does this so well as a pulverized, drained clay soil. Such a soil is also lasting, and holds manure well. And here let me make a point: It is well to use mechanical means to fine the soil, in order to reduce the clods. It however helps the growth of the crop but little, as it only reduces the large lumps to small ones, all alike—of little, though some use to the plant. What is held by these lumps is generally locked away from the plant. You want a fine, disintegrated condition of the soil. You have to rely upon the elements mainly to give you this; the frosts of winter, it is well known, are an advantage, as they reach the minute particles, separating and comminuting them. So the sun, in connection with moisture, produces much the same results. Hence the mellowing effect of a fallow. The two together—ploughing in the fall and working the soil the following summer—will reclaim almost any soil. The clod-crusher and harrow will never do it.