

spring. As a hard, impenetrable pan is just as bad as the other, causing the plant to get yellow, even in times of partial drought for want of sustenance, it must be filled deeply, the roller, and that a heavy one, must be called into requisition throughout the process, so as to produce artificially that consistency and consolidation which nature has performed during the winter when the land had been deeply ploughed.

When the surface has been brought to that state of pulverization required for the equal braiding of the seed, it should be evenly sown by a very careful, experienced flax-seed sower, so that it may not be too thick or too thin in patches; otherwise it will not be fit to pull evenly, nor will it scutch well, or with profit. The thin parts will branch, produce more seed capsules, and be of less height than the thick parts; while the latter will have more slender stems, be drawn up longer, and be weaker in the fibre than the thin portions of the crop. It, therefore, requires a very careful and experienced hand to sow flaxseed. When sown it should be harrowed with a short-tined harrow, first one way, then across, and a third stroke of the harrow diagonally, which three strokes will suffice to both cover and distribute the seed evenly, if by chance some spots may be sown thicker than another. To effect these operations in the best manner, the land should be in a dry, free working state—not too dry; and if so damp as to clod with the harrow, which would gather the seed in the clods, the sowing is better postponed for a few days, till the land is in proper working order, then proceed with it.

Early sowing is to be preferred to late sowing, for many important considerations—early sowings are fit to pull early, and the weather and water are in a better state of temperature for steeping than at later periods: the flax is, therefore, earlier fit for the scutching mill, and sooner marketable. The time for sowing must be regulated by the state of the weather. If sown too early, and that it braids, and is caught by frost, it will be highly injurious to the crop, and is best put off for a few days till there is a favourable change in the weather. The period for sowing ranges between the 8th of April to 25th May; but invariably the early sowing produces the best crop, and it is worth making a push to secure all its advantages.

There has been much disputation about the quantity of seed to be sown; some advocating as much as 4 bushels per Irish acre, some 3½ bushels, and some have come down much lower. The soil, the climate, and the aspect have much to do in this matter, and must be taken into account by the flax cultivator. As a general rule, we find that 9 pecks or 2½ bushels to the statute acre, or a little over 3½ bushels to the Irish acre, is about the proper quantity. It is better to sow a little too thick than too thin; in poor and exposed soils and aspects a little more seed will be required, and in rich, sheltered situations and aspects it will be prudent to sow a little less, which must be left to the practical judgment and experience of the farmer himself.—*Irish Farmer's Gazette*.

## The Cabbage as a Field Crop.

Among the profitable crops to be grown on the farm, cabbages hold an important place.

They are not so extensively cultivated as they deserve to be. We have reference now to their cultivation beyond a place in the vegetable garden where, of course, they are esteemed as indispensable for family use. About 10,000 plants can be grown on an acre. Throwing out the 900 plants as producing imperfect heads, we have 10,000 heads, which, at the low estimate of three cents per head, amount to \$300. But if taken from the field, and sold at that price there still remains the loose leaves and stalks, which afford a considerable quantity of nutritious food to milk cows, at a time when grass begins to fail, promoting and keeping up a flow of milk in the fall which is not easily obtained from any other food.

Last season we commenced feeding the loose heads and leaves left from a patch of cabbages, and found the increase of milk nearly, if not quite, paid for the cost of cultivation.

A part was fed from the field and the balance was stored in the barn so as not to be affected by frost. We believe the crop can be grown profitably for stock feeding. Where the soiling system has been adopted, they are one of the crops to be used in the succession.

The elder Mr. Quincy, of Massachusetts, in a letter written to us several years ago, places cabbages as among the most important plants for soiling purposes. They come in play at a time when the nutritive value of grasses has been injured by frosts, and when the food of stock is being changed from succulent grasses to dry fodder, and hence they are of important ser-

vico for the dairy. Some regard cabbages as a profitable crop to raise for feeding stock in spring, or during the latter part of winter. Properly stored, the heads may be kept without loss or decay. As a market crop cabbages have long been regarded as among the most profitable vegetables that can be grown. Sales are readily made in the fall throughout all our cities and villages, and at remunerative rates. In the spring, perfect heads of good sorts command very high prices, and, in view of this fact, it is rather singular that so few, beside market gardeners, go into their cultivation for supplying the spring markets. They can be grown on almost any soil that is adapted to corn, if an abundance of well rotted manure is applied to the land. That from the hog-pens produces the best results. Cabbages are not likely to do so well on ground that has been successively cropped by them for three or four years, but succeed best on fresh lands. For a very early crop the plants will be well on their way at this time in hot beds, but for a general crop, the seed can be sown now. And we have introduced the subject with the hope of inducing a more general cultivation of cabbage as a field crop.

There are a great number of varieties of cabbages many of which are inferior. The Winstedt we place among the first for excellence. It is a choice variety for the table, and taking all its good qualities into account, is scarcely excelled. The Wakefield, the Ox-heart, the Drumheads, the Red-Dutch, and the Sugar-loaf are popular varieties, all of which make good returns.

Some of the varieties of the Savoy are very desirable for cooking. The leaves are very much wrinkled and the variety is very much esteemed for its flavour and richness. Mr. Gregory of Marblehead, advertises a new early variety called the Cannon Ball. We have never seen the variety grown, and therefore cannot speak as to quality or as to its reliability in heading. It is said to be very hard-headed and heavy for its size, being round like a cannon-ball, and excelling in hardness every known variety.

In sowing seed for plants it is always well to sow plentifully in order to secure enough plants to meet every emergency. The seed costs but little, and surplus plants can usually be disposed of, or at least will often accommodate neighbours or friends, who have been unfortunate with their plants, or who have neglected to arrange for a supply.

We have known, some seasons, a great call for plants and great difficulty in obtaining them. Sometimes insects prove destructive to the plants while in the beds, before they are ready to transplant. An occasional application of ashes or soot sifted over the beds will serve as a protection.

The cabbage is a very nutritious vegetable. According to Johnston, the dried leaf contains from thirty to thirty-five per cent, of gluten, and is in this respect, therefore, more nutritious than any other vegetable food which is consumed to a large extent by man and animals. We do not know what amount of green food could be grown from an acre of cabbage by selecting the larger varieties; but it is larger than one, at first thought, would imagine. Supposing however, that an average of five pounds per head be obtained, the 10,000 heads would turn off 50,000 pounds or twenty-five tons, an amount which it would seem might induce their more extended cultivation as a field crop.—*Utica Herald*.

A farmer named Wells, living in Wethersfield, Mass., who owns a large tract of land, raised last year \$17,000 worth of onion seed, the profit from which was \$14,000! He produced, besides, a large quantity of potatoes and other vegetables. Such farming is not only worth money, but is worth mentioning.

AN IMMENSE CROP OF TURNIPS.—“We are indebted,” says the *Utica Herald*, “to Willard Hodges, Esq., of Rochester, N. Y., for a statement recently furnished him by John T. Andrew, of Cornwall, Ct., in reference to a large yield of turnips. The crop was raised by Mr. Andrew a few years since and is one of the largest that has been reported, viz., 2,102 bushels per acre. It shows what can be done by thorough cultivation, and forcibly presents the question whether the turnip crop cannot be made a source of profit. In England turnips are extensively grown, and the crop has added greatly to the wealth of the country, and it would seem they could be profitably raised on any farm where stock is kept. Mr. Andrew estimates the cost of raising at between two and three cents per bushel. At this rate calling a bushel sixty pounds, a ton of food could be produced, at most, for one dollar. His turnips stood ten inches apart in the rows, and the distance between the rows was eighteen inches. The largest weighed fifteen pounds each, but had the average been ten pounds each, it will be seen what an immense crop is capable of being produced to the acre.”

## The Breeder and Grazier.

### Breeding and Management of Pigs.

We quote part of an article on this subject from the *Scottish Farmer* :—

“The farmers of Scotland, as a rule have no great affection for the porcine race. Not that they have any Judaistic repugnance to the animal, on the ground that “though he divide the hoof and be cloven footed, yet he cheweth not the cud.” All of them, so far as we have had any experience, can enjoy a slice of ham with their fowl, or a rasher of bacon with their eggs. But they object to pigs about their steadings, because in their opinion, they do not pay, generally speaking. Scottish agriculturists regard Paddy’s “rint payer” as a beast to be avoided except in a cooked state; and in their hearts, we are afraid, many of them believe that the costs attendant upon breeding and feeding, more than counterbalance all the premiums obtained at agricultural shows, and the high prices often realized for the prize-takers and their progeny.

This is no doubt an erroneous notion, arising from the fact that those sceptical about the profitability of pigs have never bestowed upon them the same amount of care and consideration which they devote to cattle and sheep. They have regarded pigs as an inferior sort of quadruped—a low, grovelling, dirty, besotted race—as far beneath the other occupants of the farm-yard as some Americans consider the woolly-haired negro below the lanky-haired white man. In fact, we have known some farmers, who have been induced to purchase pigs, in a moment of excitement declare their wish that the gospel miracle should be repeated—viz., that the whole herd should be suddenly possessed with Satanic agency and run violently down a steep place into the sea, or into any other place where fatality would ensue to them. But in such cases we are inclined to think the owners were themselves more to blame than the poor swine. They never attended to their comfort or their food, allowing them to wallow in dirt and mire, and to scramble for food in the cattle courts. And for such treatment, what other reward than loss could be expected?

They manage these things better in England. English farmers, or at least a considerable number of them, know well that the pig is an animal with no natural predilections dirtwards more than other four-footed beasts—that, in fact, it thrives and grows fat best when it is kept most cleanly. Thanks to a few humane individuals, there is now a prospect of better days being in store for the hard-wrought, much-abused, and long-enduring ass; we trust also that a brighter future is dawning for the despised and often ill-treated pig.

Mr. Stearn, of Brandeston, one of the most successful breeders of pigs in England, recently gave some very good advice to his brother farmers of the London Central Farmers’ Club on the subject. The first consideration, as Mr. Stearn pointed out, is to secure a pig of a good breed. Unless this is done, the chances are that the balance will be on the wrong side of the ledger. “I am often disgusted,” says Mr. Stearn—and his observations apply to Scotland more pointedly than to England—“as well as surprised, to see what a disgraceful lot of pigs are kept by many of our large agriculturists as well as by the small ones, such as I am sure, if kept to any great extent, will ruin any one, for they eat an enormous quantity of food, and will neither grow nor fatten upon it; but if farmers generally would pay proper attention to breeding, rearing, and feeding, I believe there could be double the meat raised at little more than the present cost.”

After having secured a well-bred pig, the next most important duty is to see it properly housed. The piggery ought to be roomy, dry, and well ventilated, and it ought to be cleaned out frequently. Dirt and bad smells are as productive of illness and disease to the swine as they are to human beings. Mr. Stearn, after thirty years’ experience, prefers an asphalted floor to any other, but over this in cold weather he places a false lattice floor for the young pigs. This is lifted weekly, everything swept from underneath, and the floor washed. “Every morning,” adds Mr. Stearn, “I have the beds attended to and fresh littered, for I find the cleaner a place is kept the better the pigs thrive.” Mr. Stearn, who deserves great praise for the frankness with which he makes public the whole system of his management, goes into considerable detail as to breeding; but the gist of it is, that the sow should be larger than the boar, and that the former should not be bred from before she is ten or twelve months old, or the latter before he is eight, and that the young pigs should receive