Garden, Orchai

nently hazardous, inasmuch as many of the MANGOLD WURZEL. By the Northern Farmer in the Mark Land Express.—It is absolutely impossible to ever-rate the value and importance of this plant as a source of cattle-food for the spring and summer months, or to substitute any other article, either home-grown or purchased, which will tide over with the same amount of plenty, economy, or satisfaction what is un versally admitted to be the scarcest period of the whole year. The farmer who has had the industry and foresight to provide and hold over a large supply for early sum-mer, need care but little how the season turns out with regard to growth of grass, whether dry or moist, early or late, as he holds in his yards the material of superabundance, a comparatively small breath of surface, if the land has been liberally treated, supplying an immense bulk of food, suitable alike for horses, cattle, sheep and pigs, and of which all seem to be alike fond. Coming into season at the very period when the Swede, however carefully kept, begins naturally to decay, lose its sap, and become worthless as food, it forms a connecting link between the old season and the new, which, combined with its extraordinary abundance, renders it one of the most useful and valuable plants known to modern husbandry. In situations where climate and soil are suited to its growth and successful culture it actually supersedes the Swede, and is yearly increasing in favor with large stock-owners. It contrasts favorably with the latter in first of all, having fewer enemies in the earlier stages of its existence, therefore, if once fairly started, it is almost certain to progress uninterruptedly to successful maturity. Again, it is a plant that delights in a ity. Again, it is a plant that delights in a rich and highly-manured soil, and will stand any amount of forcing, giving an immense return for liberal treatment, the expense of return to comparison to the value of which bears no comparison to the value of the crop in cash, or the advantages it confers on the owner of a heavy stock during the spring and summer months. Moderately good land, deeply stirred by grubber or plough, or with both—which makes the best work of all when performed in the autumnthe eradication of weeds being attended to at the same time, may fairly be expected to give a return of not less than forty tons of roots to the imperial acre, an amount in itself surely amply sufficient to encourage the farmer not only to lay out a considerable sum in applying dung and auxiliary manures, but in rigidly attending to carrying out in perfection the whole of the cultural details, from the preparation of the land for the seed the storing of the roots in the end of October. Given, that all the preliminary operations of working and manuring have been done in the best possible manner, it is nevertheless truly astonishing how greatly the subsequent processes of cultivation affect the ultimate success of the crop, and increase or depreciate the weight per acre in an exact ratio to the way they are attended to, whether attentively and carefully or the reverse. A ley field broken up in autumn, or at latest early winter, suits admirably for a crop of mangolds; and this more particularly if the preparatory season happens to be dry and scorching, as the fresh mould retains the winter moisture longer and resists evaporation much more effectually than land which had been previously cropped. earth in this instance may be compared to very fine meal in its appearance and nature, the finely comminuted particles attracting moisture from the air during the night, and its close consistence enabling it in a great measure to retain it during the day, however dry may be the weather. It is difficult, and often altogether impracticable to render land which has been frequently cropped so extremely fine, especially if ploughed out of the stubble in unfavorable weather; as however great the care which may be taken with it in spring, or however weighty the implements which are employed in its reduction, it bears more resemblance to crushed cinders than to the floury compound so ardently desired by the cultivator, and so absolutely necessary for an equal and vigorous start of the young plants. Although the preparation of land during showery weather is tedious and difficult, and, even in this case, dangerous to the work in hand, in so far as when it occurs at the period of sowing, which is very limited, the acreage under a very valuable crop may have to be considerably circumscribed and the general plan of the year's proceedings altered. On the other hand, a lengthened drought about the time of sowing, and ex-tending to a couple of weeks after it. is emi-

seeds will fail to vegetate in the dry soil, much of the land remaining blank, and rendering it necessary to fill up such spaces, either by transplanting, or sowing turnip seed, both processes being disagreeable and unsatisfactory, and at best compensating in very inferior degree for the first loss When the weather chances to be very dry it is excellent policy to concentrate the whole available force of the farm in men and horses, on such a portion of land, as can, by a smart push, be plowed, grubbed, harrowed again and again, chain-harrowed, weeds picked off if necessary, drilled, manured and seeded all in one day. The various opera-tions succeeding each other so rapidly gives spirit and animation to the workers, and a and field. big day's work is done in the best manner, with a good prospect of a quick and equal start of the seed which has been deposited. The dung quickly spread, and covered at once with finely prepared earth; retains its moisture, communicating it gradually to the over-lying soil, thus materially assisting vegetation, and helping on the embryo plant in its first struggle for existence. the drills with a heavy Cambridge roller immediately after sowing is extremely useful in very dry weather, as it presses the seed down on the dung, and enables the earth to preserve its moist condition under the influence of a powerful sun, and possible drying wind; moreover its mechanical effect on the drill is to press it quite flat, exposing a large surface to the action of the air, from which it is thus enabled to absorb an appreciable amount of moisture during the night. Care and attention in this way will go far to obtain an even and healthy plant in almost the driest seasons. This secured, there is scarcely ever any further difficulty as, if the manurial conditions are favorable success is almost certain, the plants having no insect enemies grow vigorously, speedily covering the ground, and seldom experiencing a check until they reach maturity. Ir the cultivation of mangold wurzel manure is all important, and no other consideration should be permitted to interfere with or prevent its being liberally used. Fifty cartloads of dung made in the best manure under cake-fed beasts, is about a fair dressing for an imperial acre, supplemented by 70s. worth of Peruvian guano, kainit, and dissolved bones. As an economical source of ammonia, farmers are now in a measure forced to turn their attention to nitrate of soda, and as it is now vastly cheaper by the ton than it was a few years ago, a portion of it may be substituted for an equal money value of guano. But for its evanescent nature nitrate of soda would be invaluable to the farmer; its effect, however, is not lasting, as may be easily proved by the after crops, therefore it must be used with caution, merely taking advantage of its stimulative powers on crops that will stand forcing. Deep stirring between the drills, both with plough and grubber, during the period of growth prove of immense advantage to this crop, and the time and trouble expended on these operations will be amply repaid by the luxuriant foliage and rapidly swelling bulbs, unfailing indications of a magnificent crop. Where the breadth grown is considerable, it is safe management to begin lifting the crops by the middle of October, sharp frosts almost invariably occurring about the first week of November, which are the cause of great anxiety when such a valuable crop is in danger, and when such a valuable crop is in danger, and although it may not appear to have inflicted much injury at the time, yet in the months of April and May a rather heavy per centage of retten bulbs will too truly show the effect of a few pights' sharp frost and also effect of a few nights' sharp frost, and absolute necessity of getting them early placed in a safe position. In storing never place against a wall; it is the cause of much loss. Pits of seven feet in width, tapering to a sharp point at about the same height, being nearly as quickly built up, and when properly thatched and secured, keeping the roots over without perceptible loss from rotting, quite through the summer.

Note.—In November, if not done earlier, we can break up the field we intend for this crop, one certainly of the most valuable on the farm. We always prized it very highly, and fed it to all farm stock, but more especially to Milch cows.

EDUCATION OF SUCCESSFUL FARMERS.

The English Agricultural Gazette has, for a number of weeks, been publishing the early education and training of successful farmers, in different parts of the kingdom. It is almost discouraging, in view of what is

so generally hoped as the outcome of our agricultural college system, to see how very few of these men had anything approaching a liberal education, and how often the three R's alone appear as the representatives of the schooling received. Those of our people who are longing to get out of their occupations, and to become farmers, would probably also be somewhat discouraged to see in how very few instances among those cited the successful farmers have adopted the business late in life. Farmer's sons and farm-laborers have furnished the stock from which nearly the whole list has been drawn, and especial importance is attached in nearly every case to very early training to hard work, and to the manifold cares of the stable

All this does not by any means indicate that success can not be attained by men who have not sprung from the families of farmers and farm laborers, nor by well educated sons of farmers, but it does suggest the importance of sound rudimentary training, and a strong inclination toward the farm rather than away from it. It makes it clear, too, that farming is a business which requires no small share of energy, attention, and acquired skill; that it can not be gone into hap-hazard, with only the knowledge that comes from schooling and one or two years of experience with a good farmer. quires thorough ingrained training in every detail of farm work, a real love for it, and a determination to succeed in it. Any young man starting life with these qualifications, may be considered safe to stay on the farm; not because of a sentimental liking for it, but for the much better reason that he knows that there he can make more money and earn more substantial success in life than in any other occupation that is open to him. Ogden Farm Papers in Am. Agriculturist.

THE HARVEST OF EUROPE. Translated from the Journal des Debats, for the Mark Lane Express.

The Havas agency has published the de tails of the harvests in different parts of Europe according to the information collected at the International Corn Market at Vienna, the results of which are as follows:-

In Austro-Hungary the surplus of wheat derived from the harvesting, relatively to the average produce (12,300,000 hectolitres in Austria, and 29,520,000 hectolitres in Hungary), is 3,075,000 hectolitres, 2,152, 500 hectolitres being for Hungary and 622, The 500 for the other parts of the empire. exports of flour in consequence can be 600,-000 metrical quintals. The yield of rye does not show any increase in comparison with the average, which is about forty million quintals. The exports can therefore be 1,500,000 quintals. The yield in barley has been an average one; the exports may therefore be 1,500,000 quintals. The deficiency in oats in Austria is about 1,230,000 but it is covered by the excess m Hungary. The results of the hectolitres, derived from Hungary. maize harvest vary from one place to another. It is thought that the total produce will exceed the average (25,830,000 hectolitres, of which 22,140,000 are from Hungary.)

In Prussia the yield of rye surpasses by 12 per cent. that of last year—about four million and a half tons; wheat, about 2,450,000 tons; barley, about 2,070,000 tons, but this is not sufficient for the breweries of the country; oats, 2,200,000 tons, being one-third below the average.

Upon the banks of the Rhine the yield has not been abundant, but the quality is excellent; rye, 80 to 85 per cent. colza, 60 to 65 per cent. In Southern Bavaria the yield has been

good, and 3,936,000 quintals of flour will be disposable for export. The surplus of the cereals for breadstuffs will be 705,000 quintals. The result of the yield of barley has been good likewise. In Upper Bavaria there has been an average harvest. In

Upper, Lower Bavaria, and Franconia the quantity of wheat is upon an average, and the quality good. The quantity of barley is satisfactory, but the quality varies. The yield of oats presents in general an average. There is hope, however, that some exports may be made. The stocks of Russian rye are considerable.

In Hanover the yield of wheat promises to be very good—10 per cent. above the average; rye, 15 per cent. below the aver-The oats are excellent, but short in the straw. Potatoes promise well.
In the Grand Duchy of Baden the yield of

rye will be small; the oats and barley give also unsatisfactory results.

In Wurtemburg the yield of wheat is 20 per cent. above the average; the produce of rve is 617,500 quintals. The quantity of of rye is 617,500 quintals. barley harvested has been 812,500 quintals. There will be 562,000 quintals of bread-stuffs disposable. The total produce of The total produce of cereals fit for milling purposes is about five million quintals (that is, 10 per cent. above the average), of which about 4,500,000 quintals will be disposable for consumption.

Nov., 1874

In Mecklenburg the yield of wheat has been abundant, and considerable quantities will be available for export. The quality of the rye is good, but the quantity might be greater. The barleys are very fine. The oats are magnificent in the good soils, but below the average in the poor soils. are fears of a bad potato crop.

In Schleswig-Holstein the wheats and the

ryes are in great quantity and excellent quality. The barleys and the oats promise especially well. The oleaginous grains have

produced largely.

In Russia the quality and quantity are both generally good. The yield of rye has been good in the centre and south of the empire. The samples which have been tested show a weight of 77 to 81 per metzen. There is a surplus of wheat upon the banks of the Don and the Sea of Azof. The result is less satisfactory in Bessarabia. is good in Poland. At Odessa and at Nicolaieff there are still considerable stocks of last year's in hand. The barleys and the oats are short.

In Switzerland there has been a good average harvest, both as to quality and quantity; the quantity is, nevertheless, insufficient, as usual, and it will be necessary to purchase two to three millions and a half quintals. In general the produce of Austro-Hungary, preferred, but of late years recourse has been had to different markets.

In Holland the wheats are of good quality, but they only suffice for one-half the consumption. It will be necessary to import about 3,600,000 hectolitres. The ryes and the barleys have suffered. The yield of oats is good, and the colzas satisfactory. Hemp is deficient.

LETTER FROM KANSAS.

It has been my custom to write up Kansas or "the Garden of the World," to few hopeful correspondents of the Ploughman, that it is now with extreme reluctance that I must, as is my duty, show the other side of the picture. Had a stranger visited our State during the months of April and May, he would have gone into extacies about the green and loveliness of the land; all nature then, were its shadiest green, every little plant and timiest weed seemed ambitious to become a tree, the hopes of the farmer went up to 100 degrees in the shade.

Wheat, corn and everything vegetable was green and in the most promising condition. Anon the chintz bugs begin to thin out the spring wheat, then the rain ceased and the scorching rays of "Old Sol" began to wither up the green things of earth. The farmer watched the fleecy clouds, but all in vain.

Now for eight or nine weeks no rain to amount to much has fallen; the millions of acres of corn, which had stalked up to seven and eight feet, wilted and was fairly cooked by the overheated wind. came the grasshoppers in countless billions. Nothing now remains of the corn but the naked ground and wilted stalks. The discouraged farmer, who had a right to expect to harvest four hundred bushels, will not have a peck. The swine must be killed or they will starve. We cannot afford to feed on wheat; no fruit, no potatoes, nothing to on wheat; no halt, no posteres, starting or sell to buy clothing or pay our taxes, and with thousands who had only corn to depend on, must starve or receive aid. Dejection is written on the faces where last week was hope and happiness. Many will emigrate out to other places, and many are too poor to go or stay. The old farm hog and hominy will not be had. The hog crop will fall off one hundred per cent. for want of the means to keep and fatten their hogs. Indivise all to keep and fatten their hogs. I advise all who have sufficient means to go while they have the means. Trade will be extremely dull. The shopkeepers cannot buy what is not to be had. Depression in all kinds of business will be great, for the corn and hog erop is or should be the great export of the State. It will require all the wheat to keep the people from starving, until another crop is grown. We have certainly a hard time before us, and what will support the thousand honest settlers through the coming fall and winter, God only knows.—Plowman.

This disgusting inse

merous in some local mer, and has in some siderable damage to tare first noticed after ral days, and the tre rusty appearance. This slug is of a gloss quarter of an inch in mistaken by a carele mon fly. They come ter quarters in May eggs and disappear weeks. We quote these slugs: "At first the slugs

matter soon oozes covers their backs sticky coat. They l legs, or a pair unde body except the fou largest slugs are about inch in length when of a dark chestnut c tirely concealed une behind, and in for minute tadpoles. T swelling out the for generally rest with up. These disgus the upper side of the cherry trees, and thereof, leaving on beneath untouched thirty of them may and in the year 179 in some parts of M trees were covered liage entirely destr passing through t with a very disagregiven out by thes trees attacked by out new leaves, du mer, at the ends o that still remain able foliage, which till the next spri the trees, and cut

The slug-worm twenty-six days, cast their skins fi soon as the skin 1 ing upon it; but coat, which rema leaf. After this is ca their slimy apper have a clean yell

viscidity. They become proport heads and the m plainly to be see change they le crept or fallen to the depth of fro inches, accordin By moving the them becomes pand an oblong and is afterwa glossy substanc closely adheres cells or cocoon takes place; an descent of tha transformation crawl to the they appear in come forth bet the first of Au second brood come to their in September till the follow changed to flie

It seems th finish their some are four ground until all the slugs year should l from a form the earth to Whale oil den syringe

other insect

orchard, but

of fine dry freely, will touched.