working mechanic can compete with the perfected mechanical aids, driven by steam-power, which these makers bring to bear upon their manufactures. Take our farmer of ten or twenty acres—he may be, and is, an industrious, careful man, and does "all within himself," that is, himself and his family manage the farm without external aid; consequently, nothing is paid for labour, nor can be afford to purchase or use the more effective implements, or rear, or purchase, or feed the better kinds of stock. "All is done within himself," and after the most economical and frugal manner: nothing is expended that can be done without. If he keeps a horse he is at all times at liberty to work for hire if required; his pigs and his pound to expensive, "takes too much keeping;" her calf is sold young, her milk to the town, or her butter to the shop, piggy getting the buttermilk. The common practice is to hire horse labour. In such case the work is seldom well done, the vendor not liking to discress his horses "by ploughing too deep," and the seed is often got in very indifferently—"horse hire costs so much; we must do a good deal in a day." There are no artificial manures used, nor artificial foods; but all is done upon the most "saving" principles and practice. Woe, woo to our implement makers and merchanitsts, our cake and manure dealers, if such are to be their customers. Take our farmer of 300 or 500 acres: his home and farm premises are all arranged after the best modern designs for effecting the most at the least cost consistent with the best practice; the horses have healthy and roomy stabling, the cattle have warm and comfortable yards and sheds, the young calves their warm houses, the pigs their airy, cl-anly sties—all these arranged for convenient management. The barn has its thrashing machine, the chaff-buse its chaff-cutter both driven by steam power; the granaries and store houses for corn, for cake, for roots, for manures, are amply sufficient and convenient; the implements and machinery are selected with judicious c

DISEASE IN TURNIPS.

DISEASE IN TURNIPS.

Our attention has been directed to a great failure in turnip crops throughout many of the midland counties, caused, as it is believed, by a small green aphis closely resembling that of the rose, and illustrative specimens have been submitted to our examination. Those, however, before us show no indication of any attack from insects, but, on the contrary, they are covered with a white mould, which is very common on turnips in autumns like the present, and is often extremely destructive, though not to so great a degree this year as in some former seasons. The affection is, however, entirely independent of insects, which have doubtless accomplished their own end of destruction on myriads of plants, and occurs on individuals which have never been attacked by a single aphis. It is by no means confined to turnips, but occurs on other culinary plants of the same group, and especially on the asparague kale, which resembles the Swedish turnip to closely in foliage. The greater part of the mould consists of an oldium, which is undoubtedly a peculiar form of some erysiphe, capable of propagating the species on ye extent, though it may never assume its most perfect form, exactly as is the case with the oldium of the vine, the perfect condition of which has not yet been gathered. The white mould is accompanied by the common macrosporium, which is quite colour-less when young, but acquires as it grows old a brownish int, giving a gray shade to the white patches. The macrosporium, however, is a mere consequence of incipient decay, while the ofdium is the true cause of evil, and is capable, where virulent, of destroying the most healthy plants. If, however, those roots are examined whose leaves are only slightly affected, the flesh will be found perfectly free from taint, while in exact proportion to the virulence of the disease the vessels will be found clogged up with dark matter, and in those cases where all the leaves here falled a sacrifice, the whole root will exhibit more or less strongly decided sy

if the atmospheric conditions are favoural ever they find a resting place suited to their

ever they find a resting place suited to their development.

Besides these affections, produced by aphides and moulds, there is another far more insidious disease, as there are at first scarcely any outward indications of its presence, and no outward parasite to whose influence it can be ascribed. The leaves exhibit, perhaps, a very slight tinge of yellow, yet scarcely such as to make one suspicious of evil, and even when the root is drawn the skin appears quite perfect, and yet when it is cut asunder every vessel seems gorged with black matter, while one or more cavities exist in the surrounding cellular tissue, the walls of which are discoloured and rough with shreds of diseased vessels. The disease, however, does not complete its progress with these indications, but presently the cellular tissue itself is mottled with brown appea, and after a time the whole passes into a loathsome putrescent mass proceeding from the crown of the root downwards. This is one of those mysterious affections whose cause is entirely unknown; for it may occur in land, whether in the garden or field, which has never known the presence of a particle of guano, and where manure has been very scantily supplied.

While on the subject of decay, it may be well to

affections whose cause is entirely unknown; for it may occur in land, whether in the garden or field, which has never known the presence of a particle of guano, and where manure has been very scannily supplied.

While on the subject of decay, it may be well to call attention to another crop which has been affected most seriously by a parasitic mould during the early part of the season, while the weather was wet, the turnip mould being rather a fungus of a dry than a moist atmosphere. Every one was complaining in early summer that the onion crop was going off, and it was scarcely possible to pass through the parts of Bedfordshire where onions are grown so largely in the fields, both for bulbs and seed, without noticing large gaps, or where the crop had not entirely vanished a most unhealthy condition of the foliage and stems. As the onions themselves began to swell, the leaves gave still more unequivocal marks of disease, and at last the stem became pulpy, and the bulbs either partially or entirely decayed. The affection, moreover, was not confined to onions, but garlie, shalots, and other species of the same genus were indiscriminately attacked. Where onions were grown for seed, sometimes one side only of the stem was affected, becoming ultimately of a decided yellow, while the rest remained green, so that it was enabled to perfect a small proportion of its capsules. In every case alike the evil was distinctly traceable to a little pinkish, gray mould, Peronespora destructor, very closely alied to that which produces one form of the potato murrain. The spawn of the fungus run deeply smongst the cellular tissue, and effects its destruction with greater or less speed according to the condition of the weather. As it is one of those moulds which live at the expense of the fungus run deeply smongst the healthy of the fungus run deeply amongst the weather. As it is one of those moulds which live at the expense of the internal tissues, unlike the turrip mould mentioned above, which a federal the content of turnips, th

"PETTING" AGRICULTURE.

Str.—I read with much interest in your number of September 15th, three articles; and if the public would carefully attend to the facts therein stated, agricultural interest would never want support or "petting" from "high places." Your editorial and excellent criticism on the absurdity advanced by other editors—"Protection of Property," by Patrick Matthew; and "Fat versus Lean, or the Obese System of Feeding Cattle"—are all worthy of reperued.

other editors—" rrotection or property," by Patrick Matthew; and "Fat versus Lean, or the Obese System of Feeding Cattle"—are all worthy of reperusal.

Now, Mr. Editor, let me ask you when the aristocracy of England have done a good thing for agriculture or tenant farmers in either house, or out of them. If petting game, to rot beit tenants of their industrious earnings, and petting and puffing-up short-horns, to destroy public confidence, is "agriculture petted," then I admit they have done much; and I should suppose these were the evils from which you that the press (your own paper being an exception) has done much injury to agriculture by publishing articles from their pet correspondents. "If Mr. Alderman Mechi, or any such an authority, wishes to have a rap at, or cast a slur upon, the agriculturist, the clearest of type and the best of places are sure to welcome his effusions; whereas the ready answer and straightforward contradiction go but too commonly from the editor's box to the waste-paper basket. Is this petting, and spoiling, and patting on the back? If so, the farmer has had enough of it." No, Mr. Editor, such editors have been a curse to agriculture both in England and the United States; and in this time of war, sorrow, and depression, the latter will certainly be found out. If a nobleman, lady, or any other person of money, wishing for short-horn fame, has a pet beast, un matter how coarse, how flabby, or uneven in points, the med-lubs resorred to, to force it into blabbe and cover its faults—the more it is "patted," the more blibber is manufactured; and by it, they beast is brought into notoriety to deceive judges, whare always led astray by it, coupled with the infenence of those whose hobby it is to produce it. Judges tremble at their own shadow when a bettu unstaffed, uspuffed animal, with good proportions of fat and lean meas, comes before them. They must consumer; but conscience gives way, to please the oppular and influential breeders of this kind of stok. This, Mr. Editor, is a very serio

I still contend that the quality of meat is bred in the animal, and if naturally fed to ripeese is the one most profitable to breeder, feder, and consumer. It is the tenant farmers who produce this kind; while the aristoreary and men of money feed for show, display, and notoriety, regardless of consequences; and ill content of the con

the field, or barrowed on planks. This has been obviated by means of a railway in portable sections of 18 feet long, which is laid across the field and moved as required. Roads have, of course, been formed at certain points, and, as may be conceived, their construction is peculiar. Stones would at once disappear; hurdles or fascines composed of branches serve as the foundation, and it is remarkable how heavy a weight they will bear when well covered with moss. Hedge cuttings form the best material, and we were amused by a remark by Mr. Maxwell's overseer that he hald left hedges uncut for a couple of years in order to grow how been American earlies and regents; they are in demand for seed, and are readily sold in Edinburgh; they are invariably free from disease, and though the tubers of the first year's crop are generally under sized, the return is good. The early practice was to take repeated crops of potatoes from the same piece of ground—four or five in succession. In one point of view this was found profitable, the potatoes improved in yield and were remunerative; but experience has proved it to be detrimental to the final results of the improvement, the moss, becoming too much disintegrated, loses its consistence, and is also overrum with chickweed. Mr. Maxwell, therefore, followed by oats sown down with grass. The oats are not frequently very strong, but the grass—the ultimate and real object in view—is generally splendid; it is not cut, but at once eaten by sheep. Before sowing the oats, clay mised with lime is applied at the rate of about 100 to 120 carris per sore, by means of the portable railway; Mr. Maxwell considers such a top-dressing essential to secure a good crop of oats and grass.

The whole extent reclaimed is about 80 acres. We had the advantage of judging of the improvement by seeing it in every stage—before and after drainage, lying dug, broken by the boes, under potatoes, oats, and in grass from one to eight years old. The potatoes were altogether one of the bast crops we have seen this y

FUTURE SUPPLIES OF WHEAT FROM AMERICA.

Some weeks since an opinion was bazarded in this journal that the war in America, it continued for any length of time, would materially interfere with the cultivation of the soil, by abstracting a large number of hands from agriculture; and that in another season is would greatly reduce the exporting power of the country. This opinion is likely to be more than confirmed, according to a letter that has been put into our hands by an American wheat and flour merchant in Mark-lane, who received it from one of the first houses in thrade in New York. The following is an abstract: "The effect the war will have upon the corn trade will depend much upon the action of England and France. If they unite in openly favouring the enemy, the export trade of the country will be interrupted. If not, and we are left to deal with Southern Slaveocracy, the contest will not last beyond the winter; but the next year will give us no surplus for export. The labour necessary to plant has gone to the army; and possibly more mean may still be needed. Whatever interest suffers, the military power will not be allowed to fall. Such is their cultivation of wheat according to the expected requirements of the next season.

The shipments of four from the United States have been upon a large scale since the harvest was secured in that country; and, according to a leist from the same house, written on Oct. 8, there would still be a considerable quantity of wheat forwarded the following four weeks from that date, but not beyond, as the Eric canal and the lakes would be closed by the ice. According, however, to the account of the receipts of wheat at a Chicago, the crop in the Western States the last season has been far from abundant. The following are the quantities of bundels of wheat received at that city in the month of Sept. in the years 1860, 1861, and 1862:—

1860 ... 3,417,400 bushels.

1861 ... 3,987,412 ... less by 487,988 bush. 1862 ... 1,735,586 ... less by 1,251,876 ... Upon this statement the Chicago Tribene makes the following remark: