

MR. F. F. HALLET, of England, the originator of the famous pedigree wheat, in describing his process of selection, says: "During these investigations no single circumstance has struck me as more forcibly illustrating the necessity of repeated selection than the fact that, of the grains in the same ear, one is proved greatly to excel all the others in vital power. Thus the original two ears contained together 87 grains, which were all planted singly. One of them produced ten ears containing 688 grains, and not only could the produce of no other single grain compare with them, but the finest ten ears which could be collected from the produce of the other 86 grains contained 598 grains." That this process of selection need not deter any one from using it, from the slowness of the result, it is stated that Mr. Hallett had one field of seven acres sown with the produce of a single grain of wheat planted two years before; but Mr. Hallett, in his seed growing, plants thin, in one case planting at the rate of but 10½ pints per acre.

Who will give the American farmer a pedigree wheat which can be depended upon to double the crop? The thought is a reasonable one, and the man who first succeeds will reap success for himself and others.—*Colonial Farmer*.

TROPEOLUM SPECIOSUM IN WARWICKSHIRE.—Having made several attempts to grow this plant without success, it may interest your readers to know that I have succeeded, this season, in obtaining a very fine show of bloom. In the first week in April (the best time for planting) I had given me two small tubers, which I broke into bits, about ½ in. long, and laid them on silver sand, in a stove for a few days. When I could see them forming eyes I had a border prepared for them in the following manner:—It was dug out one foot deep and one foot wide, two inches of crocks were placed in the bottom for drainage, and then I filled up with a mixture of peat, sand, and charcoal, making all solid by treading. I then planted each bit of tuber about two inches deep and surrounded them with a little silver sand; they soon began to grow, and, after that, they were never allowed to get thoroughly dry, and the result has been a beautiful display of this *Tropæolum* all the autumn. —**FREDERICK PERKINS**, Leamington, in *The Garden*.

THE largest root shown at any of the English Root Shows this season, was a Carter's Long Red Mangold, weighing 33½ pounds. This is not half of the weight of specimens exhibited at Mr. Ronnie's show in Toronto, while the English roots had a season of growth at least six weeks longer than the Canadian. So says the *Toronto Globe*.

THE PIG AS A MANUFACTURER.

IN the decline of the manufacturing interests, and the want of employment in the older States, let us not overlook the humble operative who always makes staple goods and sends them to a hungry market. He works upon coarse raw material, and manufactures pork, lard, and fertilizers, articles for which there is always a good demand on every farm, and a ready sale in the village markets. One effect of the large increase in the circulation of our agricultural journals has been to raise the price of fertilizers. The profits of cultivation are sure to keep pace with the use of fertilizers. The demand is especially lively in our large towns and their suburbs, where market gardening is followed, and more money is made from ten acres well tilled, than from many large farms. Six to eight dollars a cord is a common price for stable manure in these localities, but it is often much higher, and sometimes not to be had at all. In the flush times through which we have passed, many villagers ceased to make their own pork, and, even upon the farm, near good markets, it has been a question whether there was any profit in keeping pigs. In the olden time it was a main resource, and the corn-crib and the pig-sty were as indispensable as the barn and cow-yard. The best manure made upon the farm was the contents of the sty. It made its mark upon the corn field, and the effects were seen for years after in the oats and grass. After many years of experience with home-made manures and the manufactured article, we have come to the conclusion that no cultivator can afford to dispense with the labors of the pig as a manufacturer of fertilizers. It is the most satisfactory way of filling the pork barrel and the lard keg, even if there be little economy in it. Swine pay largely in mixing and composting the contents of the barn cellar that receives the manure of cattle kept in the stables above. We have noticed this feature in the management of the most thrifty farmers recently visited. Pigs are kept at work from their birth to their slaughter. All refuse from the farm and garden goes to the barn cellar. Absorbents, in the shape of weathered peat and muck, head lands, swamp hay, salt marsh grass, sea weed, saw dust, leaves from the woods, were frequently added to keep the swine busy and to prevent all bad odors. The sty, which is often a nuisance, by the use of absorbents may be kept entirely inoffensive. The pigs not only thoroughly compost all this material thrown into the cellar, but by the trampling of their feet prevent excessive fermentation after it is mixed. The pig is especially valuable to the villager who is occupied as a laborer or mechanic dur-

ing the day. He has his acre or two of land, his vines and fruit trees, which can be made to supply his table with luxuries and comforts the year round. The profit of his garden and fruit yard will depend almost entirely upon the free use of fertilizers. It is practicable to keep his soil in a high state of productiveness with fertilizers made upon the premises. If we make the most of our home resources to fill the larder, and store the fruit room, the times would not be so incurably bad. *American Agriculturist*.

THE BEAUTY OF NATURE.

I AM never more convinced of the progress of mankind than when I think of the sentiment developed in us by our intercourse with nature, and mark how it augments and refines with our moral culture, and also (although this is not so generally admitted) with our scientific knowledge. We learn from age to age to see the beauty of the world; or, what comes to the same thing, this beautiful creation of the sentiment of beauty is developing itself in us. Only reflect what regions lovely as paradise there are over all Asia and Europe, and in every quarter of the globe, waiting to receive their counterparts in the conscious creature. The men who are now living there do not see the Eden that surrounds them. They lack the moral and intellectual vision. It is not too bold a thing to say that, the mind of man once cultivated, he will see around him the Paradise he laments that he has lost. For one "Paradise Lost," he will sing of a thousand he has gained. How every tender as well as every grand sentiment comes reflected back to us from the beautiful objects of nature! Therein lies their very power to enchant us. Nature is full of our own human heart. That rose—has not gentle woman leant over it, and left the reflection of her own blush upon the leaves of the flower? To the old man there is childhood in every bud. No hand so rude but that it gathers with the flower more and other beauty than what the dews of Heaven have nourished in it.—*William Smith*.

THE great Paris Exhibition is the topic of interest to the Parisians, and, as the time approaches, Nova Scotians, like other Canadians, will be vending their way Paris-ward. The following item is of scientific interest:—

Preparations are being made at the Champ de Mars, Paris, for executing Foucault's pendulum experiment on an enlarged scale. This apparatus was suspended in 1851 under the dome of the Pantheon. It was in operation for a long while, and removed only when the building was transformed into a church after the *coup d'etat* in 1852. The