

Every sentiment expressed in the following, from the *American Agriculturist*, is entirely in accordance with the views we have been advocating in this JOURNAL for several years:—

We have frequently referred to the advantages promised by the culture of the sugar-beet for the manufacture of sugar. But the great industry does not grow, blossom, and become fruitful in a year, or in a few years. Yet its final success is hastened by the ease with which the raw material can be procured. If sugar-beets were now grown as plentifully as potatoes, sugar factories would be as numerous as starch factories. It is the abundant supply of potatoes that tempted the starch manufacturers to build their factories, and offer a steady market for the farmers' produce. Let sugar-beets once become a staple product of our farms, and the only obstacle to the establishment of a vast business in sugar-making would be removed. Sugar-beets can be made profitable for feeding, but the effect of the culture upon our system of agriculture cannot fail to be so advantageous as to invite farmers to adopt it, if but for its own value alone. Root culture implies good farming; with poor farming one cannot grow roots. Roots may be grown upon poor land, by using the proper fertilizers and methods of culture, and there is no better method than this working up of the soil to a good condition. For if one grows a quantity of roots, these must be fed, and they cannot be fed without making a large quantity of manure; further, they cannot be fed with the greatest profit without the addition of some concentrated food, and that involves rich as well as abundant manure. Besides, in using roots and meal as a daily ration for cattle or sheep, it is found that the straw will be consumed with avidity; in fact, it makes an excellent substitute for hay, and uses up profitably a waste product that is generally used only for litter. An idea is prevalent that root culture is costly. It may be at first under certain circumstances; as upon a poor soil, and one foul with weeds, and especially under careless management. It may be made costly when, by neglect at a critical time, the whole crop is lost by being buried in weeds. But that is not the fault of the crop, but of the management. The seed of an acre of ground costs \$6, that is for sugar-beets, which may be grown closer than mangels, 12 lbs. of seed being needed for an acre; the cost of cultivation need be no more than for a crop of potatoes. The yield will be of considerably greater value than that of potatoes, reaching, under favourable circumstances, 800 bushels per acre, or 25 tons. For feeding, the sugar-beet is worth more than double the quantity of mangels, as it contains more than twice as much

solid matter, so that 25 tons per acre is equivalent to as large a crop of the grosser mangels as can be expected under the most favorable conditions. The direct profit is then attractive enough to induce farmers to raise sugar-beets merely for feeding purposes, while the indirect profit arising from the improved condition of the soil, gives a respectable return in addition. When the culture of sugar-beets then becomes general, there will doubtless be no lack of capital to work them into sugar, any more than there would be to operate a silver or gold mine that might be discovered on a man's farm. It is the want of material that has kept back enterprise in this line; the men and the money are always ready to develop any staple and profitable raw material.

The pretty little Golden Fern of California, the lower surface of whose fronds is covered with yellow, waxy powder, which poetical description might designate as gold dust, has been brought several times of late years from the Pacific coast of our Dominion, although Mr. Eaton, in his new work on American Ferns, seems unwilling to extend its range further north than Oregon. There are living plants of this species from British Columbia in Mr. Harris's nursery. It is the *Gymnogramme triangularis* of Kaulfuss. Eaton's American Ferns, plate 43, figs. 1 to 5. It is a small rock fern, a cluster of wiry ebony stalks rising from a compact rootstock, the frond three or four inches long and wide, in shape not unlike that of our common *Polypodium Dryopteris*, but the lower surface is coated with a powder varying in tint from white to a rich golden yellow.

We read in the *Agricultural Gazette* that about an acre of Lord Dufferin's plantation, a short distance from his mansion at Clondeboye, County Down, has been almost completely destroyed by fire. This is the third time within these last two years that this portion of Lord Dufferin's wooded lands has been so injured by some malicious person or persons unknown.

The use of "annatto" for colouring cheese is being discouraged in England, chiefly on account of the preparations sold as annatto not being the pure preparation of *Bixa Orellana*, but a "vile compound" of brick-dust, soft-soap and even vermilion.

In Covent Garden potatoes are selling at from \$20 to \$35 per ton, that is at the rate of from sixty cents to a dollar per bushel; those from Germany sell at \$1 to \$1.50 per bag. American apples per barrel from \$5 to \$7.50. Oranges \$1.25 to \$2.50 per hundred.

In Mr. Redfield's account of a Botanical Excursion among the mountains of NORTH CAROLINA, (partly reprinted in the *Gardeners' Chronicle*) it is stated that the *Rhododendron maximum* (our Nova Scotia species) withheld its wonted display of blossoms, the buds having been blasted by the severe cold winds at the end of the previous winter. This proved to be the case in all the region visited. *R. Catawbiense* was growing with it, at Blue Ridge, and equally tall, 12 to 15 feet, and already dropping its corollas, before the middle of June. In Nova Scotia it is in full flower at that time. Roan Mountain, on the boundary between North Carolina and Tennessee, (which rises to 6306 feet) had grassy parks studded with copses of *Catawbiense*, just opening its crimson and rosy flowers. On the cliffs grew *Sedum Rhodiola*, a rare plant recently found on Cape Split by Messrs. Jack, Thomson and Payzant. *Abies Fraseri* and *A. nigra* compose most of the forest above 5500 feet. *A. alba* grows nowhere on the Alleghanics, being a more northern tree.

THE total value of foreign GREEN FRUITS imported at New York in 1878 was nearly four millions of dollars; duty, \$666,016. The trade has more than doubled in ten years.

PROFESSOR PFITZER, of Heidelberg, says there were only 134 ORCHIDS known in 1823; that Lindley estimated the number at about 6,000 in 1852, and Dr. Krauzlin, of Berlin, calculates there are at least 10,000 species. These figures are all wrong. The *Gardeners' Chronicle* points out that Lindley estimated 3,000 in 1853. We may add that any one can see by referring to Loudon's *Hortus Britannicus*, that there were upwards of 270 species in cultivation in England in 1823.

AT the ROYAL MIDLAND ROOT SHOW in England, some roots were shown of the Improved Green Barrel Turnip, each of which measured more than a yard in circumference; also Normanton Globe Mangels, 40 inches in circumference. At the Dumfries Root Show a head of Green Kale measured 11 feet in circumference.

R. MULLER, of Danzig, specially recommends the following VARIETIES OF PEARS as suitable for a severe northern climate. He says that the number of varieties which bear the Danzig climate without injury is small. His list should be instructive to would-be pear growers along our rocky coasts:—Tepherine, Gregoire, Nouveau Poiteau, Lauro de Glymes, Beurre Payen.