

ought to cost. Mind this is calculated to produce a full crop of mangels or turnips without any farm yard dung :

Ashes 250 lbs. at 50c. per 100 lbs.	= \$1.25
Plaster 200 lbs. at 37½ per 100 lbs.	= .75
Sulph. ammonia 100 lbs. at \$3 00	
per 100 lbs.	= 3 00
Spent char 200 lbs. at 75 cents	
per 100 lbs.....	= 1.50
	\$6.50

Spent char, as we saw last month, contains 74 0/10 of phosphate of lime ; whereas, bones only contain about 50 0/10 : in this case we neglect the ammonia in the bones which is supplied by sulphate.

You can dissolve the spent char in acid, if you like, but it is not necessary, as has been proved by hundreds of experiments. Mr. Skaife tells me that " frequently, a very large quantity of spent char is turned out all at once, but, anyhow, I should think that forty or fifty tons could be had at any time somewhere in Montreal. Some time ago, we shipped over one thousand tons to New-York." Mr. Skaife, I hope, will let me hear from him again before the season for sowing roots is come. He recommends dissolving apatite in sulphuric acid, and therein he is quite right, for a crystalline form of phosphate like that is absolutely insoluble in the ground, unless so treated ; whereas spent char, Carolina-rock phosphate, coprolites, &c., like bones, will yield up their phosphoric acid by degrees under the influence of the water charged with carbonic acid they will meet with in the land

Sulphate of ammonia is now reduced to 3 cents a pound at the Montreal gas-works. It ought not to be more than 2½ cents, but we may use it at the former price. In England, where most of it goes, it is only worth about 2 cents a pound. —£10 per gross ton.

Sussex Cattle.—These were always useful beasts, even in my younger days. Great favourites with the butchers, on account of the quantity of inside fat they carried. Nobody, however, would have expected that they would have beaten all England in early maturity, as was the case at the last meeting of the Smithfield Club, where a Sussex yearling proved to have increased at the rate of but a very small fraction less than *three pounds a day* from the date of his birth !

Our Engravings.—A magnificent " Gobbler," designed, after life, by the well known artist, Harrison Weir. How well I remember the herd of Cambridgeshire turkeys at Duxford, from seven hundred to eight hundred in number ! Every year one or more of the eighteen months old cocks (" roundabouts ") used to weigh upwards of forty pounds without its feathers ! I heard, by the bye, that a cock killed at Quebec for Xmas tipped the scale at 28 pounds.

Yorkshire Shorthorns—People have been asking me lately about the Yorkshires. They are a refined stamp of the old Teeswater cattle ; hardy, prolific, immense milkers, and easily fattened when their time comes. Mr. Thomas Booth obtained his rudimentary stock from some of the best specimens of the breed ; a dairy farmer, Mr. Broader, under my great grandfather, at Fairholme, appears to have possessed a herd of unusually fine cattle for that period. They were good dairy cattle, and great grazers when dry ; somewhat loose in form, and steerish to look at, but of very robust constitution ; qualities which their descendants still retain. Previously to the year 1790. Booth had bought some calves from these cows, and they had the honour of being the ancestresses of several illustrious families of shorthorns under his wonder-

fully skilful management. These Yorkshire cows, though greatly improved in form, are not at all to be confounded with the " improved Shorthorn " as bred by Messrs. Cochrane & Co. They supply two-thirds of the milk sold in London, and if the London dairyman does not know what sort of cattle it pays him to keep, no one does. They would do well on the better qualities of soil in the Eastern Townships. An average cow of this breed should dress about 1200 pounds the four quarters.

Cultivation vs. manure.—So cultivation will take the place of manure, will it ? I rather think not ! The old theory of Jethro Tull, of Smith of Lois-Weedon, and others, I thought was quite exploded, until I saw an attempt to revive it in one of last year's U. S. agricultural papers. To convince my neighbours of its absurdity, I, in the summer of 1884, sowed two rows of white turnips without any manure. The two rows were sown, one between a piece of carrots and a piece of swedes, the other between a piece of mangels and a piece of cabbages. Treatment received, the same as the other root crops, except that no manure was given : four horse-hoings and two hand hoings. The seed was good, the plant was perfect, the land was utterly worn out, and the largest turnip did not exceed an ounce in weight ; while the carrots, swedes, mangels, and cabbages that had cultivation and dung, were about as good as they grow them.

Dairymen's meeting.—The Convention of Dairymen of the Province of Quebec took place on January 13th, and as a friend writes me word, " was a very great success. The feature for which the convention was particularly interesting was the remarkable interest shown by at least two hundred French-Canadian farmers and dairymen during two days to agricultural matters. This is a *revival* indeed. At the next meeting, which will be held at Quebec in the week following the opening of the session several important subjects will be brought up. I sincerely hope you may be there and share our enthusiasm. I expect a still better meeting than the last, and I hope to have at least one session in English, and a two days meeting. This, however, remains for decision."

Huntingdon Dairymen.—A convention of those interested in the dairy will be held at Huntingdon shortly. All are invited to attend. The date of this meeting will be given in the Journal when it is settled, as well as in the daily and weekly press

Canadian Cattle.—At the St. Hyacinth dairymen's convention, was read a report, by Dr. Couture, on the Canadian cows which competed for the prizes offered for the best Canadian milch cows." M. Couture was followed by M. Lesage, the deputy commissioner of agriculture, who read the list of the fortunate competitors :

M. l'abbé Gérin, curé de St. Justin, \$100 for " La Major," 12½ lbs. of butter in seven days.

M. Damase Paradis, St. Sébastien d'Aylmer, \$50 for " La Rougette," 10½ lbs. of butter in seven days.

M. Massé, St. Grégoire d'Iberville, \$25 for " La Noire," 9½ lbs. in seven days.

Two other prizes were awarded to two good milch-cows, though they were not pure-bred Canadians. M. Lesage then congratulated the association on their successful meeting, mentioned the great interest the Commissioner of Agriculture took in the convention, and having alluded to the establishment of a veterinary school at Quebec, concluded by strongly recommending the members of the society to turn their attention in a special manner to the manufacture of butter.

M. Couture gave some details on the characteristics of the