

CENTRAL HORTICULTURAL AND AGRICULTURAL CLUB

TURNIP AND OTHER ROOT CULTURE.

At a meeting of the Club, on Thursday last, Captain Beresford, of Newmarket, read the following paper on the Cultivation of Roots:—

The uses of roots were as well known to the ancient Romans as to any British farmer; and the winter-feeding of cattle with roots was practised even among the ancient Gauls. Pliny remarks that "some Roman authors have treated of rapa in only a cursory way. The Greeks more particularly, but if a just order were observed, it should be mentioned immediately after wheat, or at least after the bean; for no other plant is so well adapted for food to all sorts of animals." But though the cultivation of the turnip was known to the ancients it has been left to the British husbandmen to make manifest its importance and in the words of an English writer, "Turnip husbandry greatly aided the transition from the barbarous agricultural usages of the middle ages to the enlightened ones of the present day; and is now well known to every good farmer to be the sheet anchor, or *ancora qua non* of the modern alternate and convertible husbandry." At what time the field cultivation of Turnips was begun in Britain, is not, I believe, exactly known. They were employed for domestic purposes at an early date. The field cultivation seems to have been introduced from Flanders, and to have taken special root in Norfolk. Wortidge, in his "Mysteries of Husbandry," printed in 1669, says:—"In Holland they slice their turnips with their tops, and rape-seed cakes and grains, and therewith make mashies for the cows, and give it them warm, which the cows eat like hogs." And he complains of the great neglect of all similar uses of turnips in the farm economy of England. The usual mode of sowing turnips both in Flanders and in Norfolk was broad-cast, and continued so for many years, until the introduction of the drill system; and the benefit which that system confers in respect to quantity of produce and economy of labour, together with the facility it affords to hand hoeing and horse hoeing, and the land thereby being cleansed and fertilised by this important crop, cannot be too fully appreciated. Under due management it may be considered that almost all kinds of soils which are capable of thorough tillage may be cropped of some kind of root, either turnip, parsnip, carrot, or mangel-wurzel. In Britain the practice is to fall-plough the land intended for roots, in this country the earlier in the fall this operation is performed the better, to allow time for the grass and seeds to decompose, and as early in the spring as the season will permit, the land should be ploughed again and well worked with the harrow and the cultivator. With regard to the question of the most efficient system of manuring land for a root crop, an enquiry into it is so vast, and contains within it such abundant matter for discussion, that I shall not enter into it, as we should have to take into account that which is best adapted to promote rapid and early growth, to assist the plant to escape destruction from insect depredation, the effect upon the development of the root, the influence over the chemical constitution of the root, both with regard to the general feeding and fattening powers on the live stock, and lastly to its adaptation to the uses of the succeeding crops in the rotation—in it is contained almost the entire science of agricultural chemistry; still without entering upon it, this much I believe, is recognized, that well rotted dung is essentially necessary to the culture of the turnip, where it is used at all. The turnip is the most important root cultivated; and whatever relates to it may be applied to the culture of mangel-wurzel, carrots, etc., and as barn-yard manure is generally employed in this country, I shall direct my remarks to the mode of cultivation under which I have seen raised large crops of these roots. Where farm yard manure is used the raised drill or ridge method is probably the best, the ridges are made either with a single cast of the double mould board plough or a double one of the common plough, a cart with manure follows, the dung is deposited in the seams made by the plough, the plough again follows, closes the ridges, covering the manure, and the drill succeeds. A light roller goes over the sown ridges to cover the seeds. The distance between the drills should not be less than 27 inches, Tull appears to have used intervals of three feet. Mr. Dawson, of Goodan, Roxburghshire, after some residence in the county of Norfolk, adopted the drill system in preference to the mode which he had seen practised in that county. Mr. Dawson began