

which apparently had never before been brought to the surface: at the same time loosening two inches more that were left at the bottom. Thus the roots had four inches more pasture than was commonly supposed could be advantageously stirred, two of which were brought to the surface. Care being taken to effect the complete pulverization of the soil in the Spring, to the depth of seven or eight inches, it was afterwards cropped with carrots and cabbage, which fully repaid the expenditure. The plants flourished with equal luxuriance with those on land dug to the usual depth (8 inches) until the month of July, when the want of moisture gave a severe check to those on the latter, whilst the former gave a satisfactory proof of the efficacy of deep cultivation.

The crops on both soils were not weighed, but the deep dug portion was computed to contain a greater weight, in proportion to the additional depth of the soil. I am not sanguine enough to expect a double return by doubling the extent of active soil, but that the increase of produce will more than repay the outlay I fear not to assert.

By deep cultivation we expose a greater extent of surface to the destructive agencies of the atmosphere, and, consequently, the liberation of the food of the plants is accelerated; and, by a sufficient and equal supply of moisture, and by the aid of additional fibres, the nourishment that was before irregularly conveyed to the plant, in a fit state for its reception, is transmitted regularly and in sufficient quantity to support its constant growth. This, with the prolonged growth in the autumn, will easily account for the superior crops attained by deep cultivation.—*George Summers, Stoke Walke, Dorset.*

P. S.—I suppose it unnecessary here to remind my readers of the incapacity of a soil to absorb moisture in any weather when not permeable to the atmosphere, or to remind them of the injurious influence of certain subsoils on vegetation.—*G. S.*

*The varieties of soil suitable for compost need not be particularized. All soils are benefited by the mixtures, if they are properly adjusted to the circumstances under which it is applied: the application of an earth to form the basis of a compost being regulated chiefly by the mechanical character of the soil. But the special fertilizing properties of an earth for compost, may with advantage, be considered, at the same time that we have in regard due attention to its mechanical effect upon the soil.*

It is usually considered, that to attain the full mechanical as well as chemical influence of a compost, we must apply a large quantity of it. But by a judicious mode of applying an earthy compost, this end, so far as the growing crop is concerned, may very frequently be secured with little trouble. The best method is

to apply the fine fertile compost soil by *drill* along with the seed; so that the young plant shall, in some degree, exist in the artificial soil. In Yorkshire, the drill machines, which are capable of distributing bulky composts, are much in favour on strong soils; and unquestionably, enable many farmers to secure a plant, and to attain a luxuriant crop, in soil that is of a very unfavourable texture. Mr. R. S. Grabb of Glastonbury, Somerset, very properly directs attention to this feature in the application of composts, by which mechanical advantages are attained with little cost of application. "The admixture," says he, "of soils by the aid of the improved drills, has not sufficiently engaged attention. The cultivator of clay soils is enabled to grow Swede turnips, by depositing with the seed a *seed bed* of light earth, in which the young plants will flourish, until able to derive support from an imperfectly pulverized soil. The occupier of soils too light for the growth of heavy samples of wheat, is enabled, by the deposition of a strong earth, rich in the elements favourable to the support of wheat, to produce the grain of good quality; and the occupier of peat soils, abounding in vegetable matter, but deficient in earthy substances is enabled, in the absence of clay, by frequent application of small quantities of earth, sand, or gravel, to convert a merely vegetable and root-producing soil into a highly valuable soil, fitted for the growth of grain of excellent quality."

Lastly, earthy composts are well adapted for mixing with artificial manures. Substances which are small in bulk, or which are apt to injure the seed by too immediate contact, may, when thus added to the compost heap, be evenly and safely distributed.

TREATMENT OF THE MODERN WINDOW.—The office of function of the window is not a more important one in the pointed style than it is in the classic: it has as strong a claim to consideration and character in the one as in the other, and therefore no good and sufficient reason can be assigned why, while the jambs of the Gothic window enshrine a labyrinth of beauty and intricacy of decoration, the filling up of the classic window should be entirely neglected in the way of design. I say neglected, but it seems worse than neglected: not only have imagination, taste, artistic feeling, had no part in the design, but it is positively marred by the sash in common use. The straight sash-bars, dividing it into a series of equal squares, do not improve the appearance of the humblest cottage, but in an architectural composition they are an injury. In most instances a spectator, ignorant of the custom, would be led to conclude that the architect had abandoned this portion of the façade to the joiner, who had filled it up in the cheapest manner he could.—*The Builder.*