

sugar beets should never follow oats. The following is a suitable rotation:

1. Hay.
2. Winter wheat, potatoes, or fodder corn.
3. Sugar beets.
4. Spring wheat, barley, or oats, seeded.

FALL CULTIVATION.

Fig 1, showing the proper position of the beet at maturity in the soil, indicates the great depth to which the taproot penetrates. This penetration of the soil is of the greatest importance in securing a steady growth of plant and a high percentage of sugar. Meeting impervious subsoil deflects the taproot, develops lateral roots, and lifts the beet more or less out of the ground, all of which tend to lessen the percentage of sugar.

If the beets follow fall wheat, the land may be plowed shallow, just covering the stubbles, as early after the wheat is harvested as possible and harrowed, causing the vegetable matter to decay and seeds to germinate. Late in autumn,

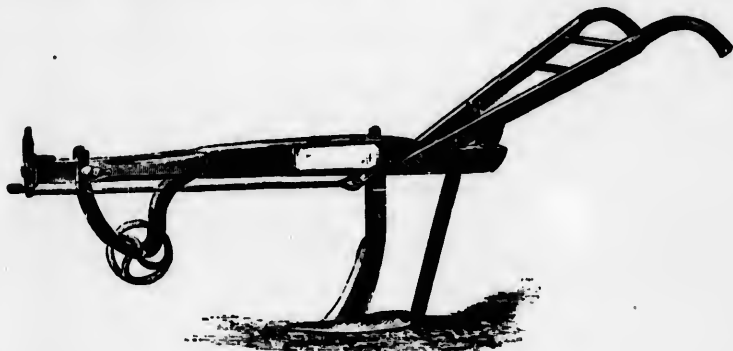


FIG. 2.—Subsoil plow.

cross-plow to a depth of nine inches, following in each furrow with a subsoil plow (Fig. 2), loosening (not turning up) the soil several inches deeper. Leave the land, thus plowed and loosened, to the winter frost, which through alternate expansion and contraction, becomes disintegrated and mellowed. But in case potatoes or fodder corn precede the beets, early autumn cultivation of the potato ground should not be necessary, while that of the corn land may be modified for the purpose of disposing of the corn roots. Late deep plowing is an essential part, however, of fall cultivation for sugar beets on any soil; but subsoiling, as above described, may be omitted in exceptional instances where the subsoil is naturally free and open.

In case it has not been practicable to apply farm-yard manure to the crop preceding sugar beets, then the manure should be drawn out upon the stubble