what expensive and laborious matter in some cases. And other things being equal, certain fruits will undoubtedly thrive better on special kinds of soils, and even different varieties of the same species of fruit have their soil predilections. So that it is better to ascertain the nature of the varieties to be planted, if possible, before giving them an uncongenial home. The kinds of soil best adapted for the cherry, the pear and so on will be touched on in the chapters devoted to those fruits. Any man who has decided to plant fruit trees of any kind should at once make up his mind that no matter how good the site, or how valuable the variety, his time and money will inevitably be wasted if his land is not properly drained. Some trees may exist under adverse conditions of this sort, may even partially succeed for a time, but "failure" must be the final word. A porous soil, soils of a sufficient elevation to provide good natural drainage, these with care may give excellent results, but broadly speaking underdraining will always abundantly repay its expense in the case of practically all fruits. Amongst the many benefits derived from the proper system of underdraining are the following: The raising of the soil's temperature; the freeing of all surplus water from the subsoil; the liberation of much plant food, which though in the soil otherwise remains inaccessible to the feeding roots; the making of the soil both moister in a time of drouth and drier in time of excessive moisture. On land well drained the root system of the tree is not only vastly more healthy, but the feeding rootlets commence work earlier; the tree makes a more rapid and vigorous growth, and is in a far better position to develop plump sound fruit buds and to ripen its wood for the winter. These are great gains, and under ordinary conditions the orchardist who has once experienced them will not be likely to neglect the underdraining of other lands he intends to plant.

M. BURRELL,

St. Catharines.

(To be Continued.)

NUMBER OF TREES ON AN ACRE.

30 feet apart each way	50	10 feet apart each way	435
25 feet apart each way	70	8 feet apart each way	680
20 feet apart each way	110	6 feet apart each way	1210
18 feet apart each way	135	5 feet apart each way	1746
15 feet apart each way	195	4 feet apart each way	2725
12 feet apart each way	300	3 feet apart each way	4840

RULE.—Multiply the distance in feet between the rows by the distance the plants are apart in rows and the product will be the number of square feet for each plant or hill: which, divided into the number of feet in an acre (43,560), will give the number of plants or trees to an acre.