for pumping water into strawberries, and so securing the greatest size and yield. It contains 12 plants each of all leading varieties. Each plant is allowed 2¼ square feet of land. Six of the largest and most productive varieties yielded an average of a little more than one quart to the plant, 18,360 quarts per acre. The average for the whole bed, including many shy fruiting varieties, was ⅝ of a quart per plant, or 13,115 quarts per acre, 400 per cent. increase over 3,200 quarts, the average yield in the State. These berries were so puffed up in size and beauty by extra conditions that their selling price was 50 per cent. about average market prices.

If with water you can float 400 per cent. increased yield into market and soak the price up 50 per cent. more, does that not show profit enough to keep all soil pumps well oiled and leave a good margin for outside fun? Three hundred and forty of my big Japan plums, 82 per cent. water and 18 parts solid, made a bushel that sold at $4.80, while 720 of same varieties 26 parts solid and only 74 of water. made a bushel that sold the same day in the same market at $2.56, or over $1.00 per barrel for the extra percentage of water in the larger plums. Open up the watercourses of the soil, and be ready for the flood tide of prosperity; it is of no use to dam it with "I can't!"

My big peaches—100 to the bushel—92 parts water to 8 parts solid, solid at $5; the same variety, 400 to the bushel, were 84 parts water, 16 of solids, and sold at 70 cents per bushel—$4.60 for the water and 40 cents for the solids in the large fruit, and 58.7 cents for the water and 11.3 cents for the solids in the small ones, or $5.64 per gallon for *extra* water.

UNDERDRAINING THE ORCHARD.

LOCATE drains midway between the rows of trees. The depth of the drains should be from four to five feet, not less than four and as much deeper as the outlet and convenience will allow. The tile should be two or three sizes larger than would be necessary to use in ordinary land draining, to give aeration to the soil, and not be liable to obstructions from small roots. If the drains midway between the rows and as much as four feet and laid with five or six-inch tile, the roots of the trees will not likely reach the drains in sufficient numbers to seriously affect the drainage. The deeper the drains the deeper the roots will penetrate the subsoil. If the drains were eight feet deep the earth midway between the drains and directly under the rows of trees would be affected as deep as seven feet in a few years' time, and the roots of the trees will penetrate as deep as the subsoil is drained within a reasonable limit, say ten feet, possibly more. Trees so deeply rooted are the better secured against injury from the extremes of the weather. With the sufficient under drainage of a fertile, retentive clay soil, the intelligent orchardist with persistent energy is master of the business.—Orange Judd Farmer.