the directions. On opening a can of peas the other day, for the first time, there were something in both smell and taste so odious, that we cast them far from us very speedily. The beans and corn proved less offensive, but neither was a dish that any who surrounded our table would choose to eat. The whole, in our experience, was a decided failure, and others may have the pleasure of this admonition at our expense. Fruits preserved in the old fashioned way, in sealed glass bottles come out much better. Our black raspberries, particularly, are a great acquisition to our winter table.—*Rural Intelligencer.*

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Transplanting Fruit Trees.

Seeing an article in the "Country Gentleman" of the 27 March, upon the subject of the "Transplantation of Trees," it occurred to me that a few suggestions upon the subject of transplanting fruit trees might not be out of place at this time of the year.

I have had some experience in transplanting trees, and latterly with good success. I set an orchard of 165 trees in 1851, and every one lived. I set three small orchards in the spring of 1854, and notwithstanding the almost unprecedented drouth of that year, I lost but one tree. Two of the orchards were upon very dry gravel soil. There I lost none. I dug a pit for each tree about 16 or 18 inches deep, in basin form, about three feet in diameter, and put in a large wheelbarrow load of good loam soil. Upon this I set the tree, holding it in my hand while my man with a shovel sprinkled the soil which came from the top of the pit on to the roots, having first been made fine. The tree is moved up and down so that the fine soil is worked under the roots until they are fully covered, and should the roots be so shaped and so clustered as to form a roof to prevent the soil getting fully up under the centre, the hand is used to accomplish it. When the roots are covered, a quart or two of water is turned upon the centre of the roots, which form a mud directly under the body of the tree. Then dry soil is again thrown on, upon which the person holding the tree steps, planting his feet 4 or 5 inches from the tree upon each side, and so passes thereon round it. The water or mud will by this pressure be forced up to the top of the ground, which gives evidence that all the space under the roots is filled.

The soil is then thrown around the tree to about the height it was in the nursery, but raising a circle around it high enough to hold a pailful of water. If the season is one with ordinary rains, they will leave out and grow. If they should not, and the season is dry, place around them some broken straw and long manure, giving each one a pailful or a half a pailful of water. Should any fail to leave out with this treatment, tie around the trunk quite up to the limbs or further, a thin layer of straw, putting on the upper layer first, and then with a ladle turn water upon the upper end of the straw until the tree is thoroughly wet, and repeat it daily. This will seldom fail to bring out the leaf; and save the tree.

Should any of the trees falter through the summer, as they may, if a dry one, give them a pail of water in the basin prepared for it, and they will go through. This is some trouble, but if a tree is worth buying and setting, it is worth saving.

I have saved trees which had been very much dried before they had reached me, by digging a trench in a wet place, and heading them down so that the body will be at an angle of, say, 30 degrees with the ground. If water shows itself in the trench it is no objection. When the roots are so covered, the buds will open if there is any vegetable life in the tree. They should then be set.

I very much prefer the spring to the fall for setting trees; but as the early part of the fall is the best time for getting a chance of trees in the nursery, it is well to take them out at that time, and heel them down in dry ground, in a protected spot, until spring, and then set them. I treated pears and plums in that way the last year taken from Thorburn & Co.'s Nursery, Albany, and every one lived, and more than half of them ripened fruit the first year.

S. CHEEVER.

Waterford, March 27th, 1856.

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Draining--Results of Experience.

A meeting of the principal English agriculturists, who have distinguished themselves in improved farming, was held in London during the past winter, which was confined in its discussions wholly to the subject of underdraining, and, as might have been expected, a great deal of valuable information was elicited. The experience of British farmers with draining has been great; and the conclusions they have arrived at on some disputed points cannot fail to prove interesting. But we find the same defect in their statements, that characterizes nearly all the details of experiments made in this country; namely, a want of accurate estimates or measured results. Their conclusions are given generally, without any data by which we know the amount or degree of benefit or injury occasioned. "*I think so*," or "*I know so*," is not a very scientific rationale, nor very clear mathematical calculation.

Depth of Draining.

An important point, on which nearly every one present agreed, was that deep drainage, —not less than four feet,—was invariably the best. Among other statements on this part of the subject, we observe that of T. Scott, who had had for fifteen years constant connexion with extensive works for drainage. In 1838, he superintended 140 miles, which were dug 27 to 30 inches deep. The bottom was laid with sole tile, or with 12 inches of stone broken so as to pass through a 2½ inch ring. "The effect of the drainage was wonderful, and repaying at the time;" but, as proved to be the case with many other shallow drains, these seemed to lose in part their efficiency after several years; but having learned the superior advantages of deep drainage, measures were taken ten years afterwards to take these all up and replace them with four feet drains. The objection that surface water would not find its way down to such a deep channel, had not been found to exist in practice, which indeed appears very obvious when it is remembered that water will descend through soil four feet much easier than horizontally 12 or 15 feet, which it must do to effect thorough drainage of the land.

Deep drains were found to commence running sooner than shallow ones, and to continue running longer—showing their greater efficiency; doubtless owing to the fact that the subsoil must be first filled by the falling rain, up to the bottom of the shallow ditto, before the flow of water can begin; and it must again cease when the surplus water in the subsoil is reduced down to this level.

Only one member of the meeting advocated as shallow a drainage as three feet—which he did on the ground of saving expense, the last foot of a four-feet ditch often costing as much to excavate as the three previous feet.

It was claimed by some members, that soluble manure would be carried down and flow off in shallow drains, while the water will run clear from those of greater depth. This reasoning does not appear to possess much weight, for if the channels are two rods apart, all the surplus water of the soil would be only *one sixteenth* nearer to the three-feet drain than to the four feet—a difference of small amount, and affecting very little the results in practice.

It would have greatly assisted our enterprising farmers in America in determining the proper depth, if we had been furnished in this report with precise statements of the actual difference in results,—given in figures from careful measurements,—showing the increased cost per acre of the various increased depths, together with the greater amount of growth in crops. As the statements now stand, there is nothing more than a mere expression of *opinion*, founded on extensive observation. A five-feet ditch may be best; but what we want to know is whether its increased cost will *pay*.

Importance of Levelling-Instruments.

Where there is a steep descent, little difficulty is commonly felt; yet a *uniform* descent would admit of smaller tile, and prevent those lodging places for sediment, which has been sometimes found to cause the entire obstruction of the channel. When the land is nearly level, an instrument for determining the descent, in the first place; and for its uniform slope in the second, is absolutely indispensible. Col. Challoner mentions instances where, without this careful attention to the fall, three-fourths of its entire amount had been taken up before the drain had been cut half its length, thus leaving the remainder almost a dead level and nearly useless. He recommended an accurately-made common bricklayer's level, whose length divided into the entire length of the drain, would give the descent for each length, and perfect uniformity be thus maintained in every part.

Cost of Draining.

It appears from the various remarks made by the speakers, that *brush-draining* had been regularly and efficiently performed for 30 to 40 shillings per acre, or eight or ten dollars of our money. These continued to answer the purpose for twelve or fourteen years. The drains appear to have been made much shallower than the four or five feet tile drains, which have cost about five to seven pounds or twenty-five to thirty-five dollars per acre, and which is about the same as the cost of draining in this country only two and a half or three feet deeper. The difference in cost, in the two countries, is attributable to the difference in the price of labor and cost of tile. We entertain hopes, however, that by the use of Pratt's ditching machine, we may be able to drain land three feet deep, and lay it with tile, for $20 per acre, of which the tile will be one-half. The price of tile now, is much higher than in England, but it will unquestionably become cheaper when there are greater facilities for its manufacture, but more especially a larger market for it than at present.