

first into sugar, and fill the others with fresh sap. The one with the syrup is kept well off the fire; the others are made to boil as fast as they can, so that they do not boil over."

"How do you prevent the sap from burning and browning in the kettles?"

"We take care to keep them pretty full, and then the fire does not make the sides of the kettles too hot; it does not burn or brown easily."

"Does it not boil over when it gets thick?"

"Oh, yes, it would; but we take care of that. Some hang up a bunch of twigs or brush over the kettle, with the points of the brush cut off square, and which go just inside the kettle. As soon as the sap boils up the twigs break the bubbles, and it stops the boil."

"Is there any other way?"

"Yes; some take a piece of pork, and hang it by a string just so that when the bubbles rise they shall touch the pork; and as soon as they do this they break and go down, owing to the fat. Others put a little bit of butter in the kettles, and that keeps down the bubbles; but both these plans make the sugar taste a little, and for that reason the twigs are best."

"Do you ever use white of eggs, or anything else, to clear the sap?"

"Some do; but if the sap is kept clean and free from dust and other things, there is no need of anything of the kind. Nothing makes the sugar so good as the pure, clean sap."

"How do you know when it is done?"

"We judge it by taking a little between the finger and thumb. When it is fit, you can feel it, and it sticks in a particular manner. It may then be poured out into moulds and it will become solid, and can be stirred into loose sugar."

"What is the best part of the season, and in which you make the best sugar?"

"The beginning and middle of the season are best. Towards the end we make the sap mostly into molasses, as it does not 'sugar' so well."

"What kind of 'sugar work' do you like best?"

"I like the kettles set in an arch best, the sap kettle being the one over the fire, and the sugaring-off kettle farthest off. I always used my potash kettle arch for this purpose, and make excellent sugar in that way."

"How many kettles make a complete work?"

"I like four kettles, and we can then boil down about fifty bushels of sap a day."

The idea of "a bushel of sap" was new to me, so I asked for explanation as to how the bushel measure came to be applied to liquids. "You see" (the answer was) "we make our pails to hold half a bushel each, and so we keep count."

"But your pails," I replied, "only hold two gallons each." (I had the common patent pail in mind, but that did not suit Lower Canadian ideas.)

"No," he said, "we make our pails to hold four gallons each, that is half a bushel."

"How do you collect the sap?"

"We use a sleigh with a barrel, and the horses."

"Don't you use cattle?"

"No; not much. It is dangerous for the cattle to get at the sap, which they will do if they can, and drink till they burst themselves. They will also get at the molasses, too, if they can, and a very little molasses will kill an ox."

"Well, but won't the horses drink the sap?"

"Yes, and they are very fond of it, but won't take enough to hurt them. They will always take a little drink every time they come to a trough, if they can; it does them good, and makes the winter coat all come off at once, and leaves them very sleek, with beautiful coats."

"How much sugar could you make in a season?"

"The last season I worked at it I made a thousand pounds weight; but it was very hard on the horses, as the trees were so wide apart, and I had so far to go, and I will never try them so hard again. They were overdone, and were injured for their spring work."

"Is your sugar always alike?"

"Yes, I always make it good."

The fact is that our Canadian farmers, with their usual improvidence, have so cut down our beautiful groves of maple that a good sugar bush is now a rarity. Maple always grows on the best land, and makes the best firewood; so that what would be both a valuable source of income, and also of domestic economy, is sacrificed for the present need. Maples carefully tapped and properly taken care of will last for generations, and yield sugar richer every year; but they have been ruthlessly slaughtered in every direction, and the consequence is that a good sugar bush is a great rarity. Maples are now being planted in many places, and, as they grow tolerably fast, and afford a beautiful shade, while they neither throw up suckers, nor are in any other way a nuisance, we may yet hope to see these trees regularly planted round our fields and homesteads, and by the roadside. In soil that suits them the result would be shelter for the fields in winter, and the snow kept on the wheat, and thus winter-killing avoided, and in the summer good shade for our cattle, and for ourselves a picturesque beauty added to the landscape, which none begin to appreciate until after they have denuded the land of all trees, and have felt the inevitable effect of exposure in winter, want of shade in summer, and the drought which always attends the removal of forest trees from the soil. Many places in Spain are now uninhabitable

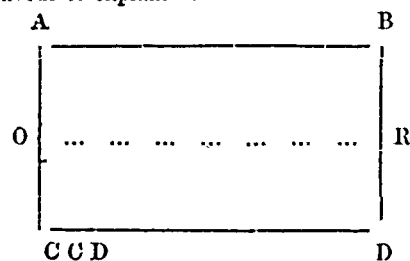
by drought for want of timber, which formerly were well watered tracts.

VECTIS.

Drilling for Turnips.

The other day we were drilling up land for turnips, and our neighbour was doing likewise in an adjoining field. Now, we drilled twice as much as he in the same time, and made as good work, both using a single mould board plough. Our plan (and although it applies peculiarly to sandy lands, we have used it with success upon well prepared clay lands,) is to make one drill with every passage of the plough. Our neighbour, who is somewhat like the "Deacon" in those excellent papers "Walks and Talks," that appear in the *American Agriculturist*, and who takes a very great deal of persuasion before he will leave the old groove, was drilling in the old fashioned way, throwing to, or taking a double stroke of the plough to make every drill.

Now, perhaps some of our readers would like to try the one stroke plan; we will endeavour to explain it.



A. B. C. D. is a piece taken from one side of the ground, two sides being parallel.

Mark out very carefully the line O. R. with marking stakes exactly equi-distant at all points from C. D., the side of the field. Commencing at O., strike out a furrow to R., and then hawing round, come back in the same furrow. These should be a good depth, in fact to the bottom of the mellowed seed bed. Now haw again, keeping the near side horse in the furrow, and cut your next furrow at just the edge of the first half ridge. Continue to haw round each time, cutting a new ridge from close to the former one. By cutting close to the old ridge, we undermine it as it were, and the loose earth falling over, gives us a nicely shaped drill.

The advantages of this plan are that each stroke of the plough makes a drill; that one horse never leaves the furrow, (except coming back in the first furrow, when it is better for the team to straddle); that if we have no better plough, good drills may be set up in this way, even with a short mould board; that the ordinary double tree is used, and that neither the clevis or the plough bridle need be shifted from the time the first furrow of the field is struck.

BET ROOT FACTORY.—W. W. P.—The only large Beet Sugar Factory in England is at Lavenham, Suffolk, James Duncan proprietor. The great beet root distillery owned by Robert Campbell is at Buscot Park in Berkshire.