

Horticulture

as the condition of the mixture. I have condensed this as much as possible. If any point is not clear I will answer questions to make everything plain.

DRINKING WATER IN DRY COUNTRIES.

Frequently I am asked by mail and by personal calls what we do for drinking water in an irrigated country. That was a matter of much concern to us for a number of years

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We have just had a small circular printed which contains valuable information on when to spray, what to use, what to spray for, etc., as recommended by the Washington Experiment Station, at Pullman, Wash. If you grow nothing more than a few berries in the back yard, you need this bulletin. Just drop us a card and a copy will be mailed you free.

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but that is all past now. At first we filled our cisterns from the irrigation ditch early in the spring and then again late in the fall. The water in the spring is from melted snow in the mountains and ought to be pure and must be when it starts on its downward course. But there are towns and cities on the river and at least some filth must get into the river. It is true that an effort has been made to have septic tanks into which the sewers of the cities must flow and be purified. But all this was not satisfactory to the people generally. Now we have wells bored down about 150 feet and cased up with iron pipes and no surface water is allowed to go to the bottom of these pipes. The water will rise in these pipes so it can be pumped out. This water coming from 150 feet below the surface is absolutely pure. On our ranch we have two of these piped wells. One has a windmill with which to pump up the water and the other a small gasoline engine. Each of these wells cost about \$250 and windmill and engine cost extra. Very many of our neighbors have similar piped wells and windmills and engines in most cases. This water is unlimited as to supply both in summer and winter and constitutes one of the best assets we have.

Newcomers can boil their drinking water till they can get these deep wells. In many cities it is not considered safe to drink any water that has not been boiled. Prof. Piper, who now lives in Washington, D. C., told me once when on a visit on my ranch in the Yakima valley, that in Washington he and his family never drank of the water there till after it had been boiled. We had to boil our drinking water here in Seattle this winter for a period of three weeks after the breaking of one of the large pipes. It was not a very troublesome thing to boil some water once a day. Pure drinking water is one of the greatest blessings of life.

ABOUT DWARF TREES.

Some few months since I answered some questions about dwarfs. It may be remembered that I expressed doubt about dwarfs being the best form of trees to use in our commercial orchards. Where we want ornamental trees or are very much cramped for space on city lots, I would recommend the use of dwarf trees but in all other cases I would use the standard trees. I am much pleased to find H. E. VanDeman, in many respects the leading horticulturist of the United States, takes the same view of dwarfs that I do. He was recently asked through the Rural New-Yorker how far apart dwarf apple trees should be planted. Here is his answer:

"If I should answer this question from a practical standpoint, I would say that dwarf apple trees of any kind

should be planted five miles apart. They are really worthless as a matter of profit. For the fancy grower who wants to play with dwarf apple trees in the back yard of a town lot, those on Paradise stock should be set 10 feet apart and those on Doucin stock 15 feet apart. The Experiment Station at Geneva, N. Y., has made extensive trials with dwarf apple trees and come to the conclusion that they are not practical and that almost every claim that has been made for them is not borne out by facts as developed by the experiments on three large plots."

That is good advice. This department in The Ranch does not confine its utterances on horticultural matters to what its editor has to say on such matters but gives the view of our leading horticulturists. In this way we have give in recent issues the views of our leading specialists on dwarfs, the use of fillers, on winter and summer pruning and many kindred topics.

FRUIT GROWING IN THE PACIFIC NORTHWEST.

Fruit growing in Washington and Oregon has grown to be one of the leading industries in these two states. An interesting question is, how did fruit growing begin in these two states? An account of the first apples ever grown in Oregon territory, which at that time included what is now the states of Oregon, Washington and Idaho, is to be found in the "History of the Pacific States of North America" by Hubert Howe Bancroft, volume 23, page 441 and reads as follows:

"The first fruit tree grown on the Columbia, sprang from the seed of an apple eaten at a dinner party in London. The dinner had been given to Captain Simpson of the Company's coast service. One of the ladies present, more in jest than in earnest, took from the apples brought in with the dessert, the seeds; and dropping them into Simpson's pocket, told him to plant them when he should reach his Northwest wilderness. The captain had forgotten the circumstance until reminded of it while dining at Fort Vancouver in 1827, by finding in the pocket of his waistcoat which he had worn last in London, the seeds playfully put there by his lady friend. Taking them out he gave them to Bruce, the gardener, who carefully planted them; and thence, within the territory of Oregon began the growth of apple trees."

Thus began the growing of apples in the Pacific Northwest. On pages 442-443 of the same history we are informed that in 1829, the brig Owyhee, Captain Dominis, entered the Columbia, and opened trade with the natives. This ship came around cape Horn and the history add: "On his voyage out Captain Dominis touched at the island of Jaun Fernandes and brought thence peach trees which were planted in Oregon. Likewise his vessel was the first that took a salmon from the Columbia River to Boston."

This Captain Dominis was a faithful old tar and did much in opening up this new country. He knew how to sail a vessel over new and untried seas but he did not know much about things on land. Bancroft illustrates this by telling a funny story about this valiant old captain. I quote from this history, page 443 as follows:

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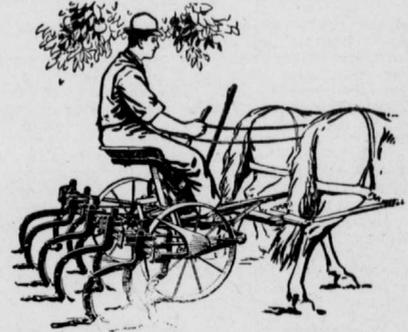
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their increase might overspread the rich pastures which lay illimitable on every side; for a beginning Captain Dominis was requested to bring some sheep from California. The captain was a better sailor than stock raiser. True, he brought the sheep according to orders; a fine large lot of them and in good condition, but when they

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