

# HORTICULTURE

F. WALDEN

It was my privilege to attend the Kittitas County Farmers' Institute recently. I delivered two lectures on fruit growing. Dr. S. B. Nelson, of Pullman College, delivered some very instructive lectures on diseases of fowls, calves and cows and one valuable lecture on the benefits we derive from scientific investigations. Dr. Nelson is so well informed that his lectures are always of the greatest benefit to farmers. We shall never know how much we are indebted to him for warding off diseases that would cause the loss of many thousands of dollars to the stock men of this state. An expert, such as Dr. Nelson is, can always give valuable information and what he says should be heeded by all who raise farm animals from a hen up to a fine horse.

The people of Kittitas County are deeply interested in fruit growing. This in part is no doubt owing to the fact that the Capital, published in Ellensburg, has a wide-awake editor who has been calling the attention of its readers to the subject of raising winter apples in that valley. This matter was brought to the attention of the readers of The Ranch in its last issue. The Ranch has many readers in that county and I have reasons to believe will soon have an increased list. Some fine fruit was shown at the Institute. There are some decided advantages in growing apples in that valley. The codling moth does not bother the orchards but little. This is owing to the higher altitude there and the cool nights. This moth flies at night and will not fly at all when the temperature is below 60. Prof. Woodworth, the noted entomologist of California, has shown that some sections of that state are practically free from the codling moth by reason of cool nights. These sections must become exceedingly valuable in raising apples unless there are other difficulties encountered which offset this advantage. Another advantage that comes to the orchardists of the Kittitas Valley is the fact that their winter apples will keep better than those raised further down the valley where the summers are longer and hotter. This is owing to the fact that their apples do not mature so early as the same kinds do further down. I found the Northern Spy in its prime there just before Christmas. The same is true of the Rome Beauty. I saw a Rambo there at that time that was in fine condition and it bid fair to keep all winter. It would be difficult to find any of these apples now in good condition as far down the valley as where my orchards are.

There are some disadvantages that the Kittitas County orchardists will have to contend with. The green aphid will always be worse there than in hotter sections. This aphid loves cool weather and especially if it is cloudy. The Kittitas Valley has as much sunshine as the lower Yakima Valley but it is decidedly cooler there. The green aphid does not do much harm anywhere to old trees, so if the orchardists will successfully combat this insect on their young trees but little trouble will be encountered. I tried to tell them how to do this.

Another difficulty they will labor under is that some kinds of apples will not color sufficiently. Avoid planting such apples as need hot weather to bring them up to the right color. Such apples as the Winesap, Arkansas Black, Canada Red, the Lawver, Gano, and Black Ben Davis will color anywhere. The Yellow Newton does not need coloring—it sells well in some markets for other reasons, notably in the English markets. The Spitzenberg colors well any-

where and if it will bear well in that part of the Yakima Valley, it will pay well. Some fruit growers claim that it does bear well there.

I noticed that the apples raised about Ellensburg look smaller than the same apples grown in my orchards. Whether this difference in size is caused by climate or culture I do not know; possibly to some extent by both. My advice to the fruit growers of the Kittitas Valley would be: Thin out the tops of your trees so as to let in the sunlight; thin your apples well on the trees, especially if they are inclined to be small; give good cultivation to your apple orchards, not allowing grass or weeds to use up the fertility of the soil and, above all, don't water your orchards too much—don't try to substitute water for cultivation; keep your best apples for the spring market and you will make money and you may wear diamonds if you haven't any more sense.

I wish to call attention to an old apple that is but little raised in the Pacific Northwest, so far as I know. It is Smith's Cider. I set two trees in my experimental orchard; one died and the other got burned back to the ground but fortunately a sprout grew above the intersection of the graft with the root. The past summer this sprout bore about three boxes of apples and to say that I am delighted with this old apple is drawing the matter mildly. It is a red apple, which just now is a strong point in its favor. With moderate attention and thinning they will pack fours. The quality is good. It is a splendid cooking apple and for baking I doubt if it has a superior. Whether it will prove to be an annual bearer I do not know. It certainly is a fine-looking apple and is, in my judgment, worthy of trial.

While I am speaking of old and somewhat neglected apples, I wish to call attention to the Vandevere, commonly called the Vandevere Pippin, and sometimes called the Newton Spitzenberg, while the well-known Spitzenberg is known as the Esopus. The Vandevere is the best cooking apple that I know of. From the time it is mature in September till the following spring as an apple to stew there is certainly, so far as I know, no superior.

I have four trees of the Vandevere in my experimental orchard. With me it is not a heavy bearer every year but never proves a failure. E. G. Grindrod, of Ellensburg, who is no mean judge in such matters, says that with him the Vandevere is a good bearer, a good apple to eat out of hand, a good cooking apple and sells well in the local market. The color of this apple is somewhat against it—it is green in color till it is fully matured and then it turns yellow and finally becomes golden in appearance. A red apple is all the rage now, and with the exception above noted, a pale colored apple will not sell like the crimsons.

People often ask how many trees will be on an acre at a certain distance apart. The rule by which anyone may answer these questions is a simple one. Divide the number of square feet in an acre by the product of the distance the trees are apart in the row multiplied by the distance the rows are apart. Now remember that there are 43,560 square feet in an acre. Paste this number in your hat, write it on the barn door or repeat it every day for six months or in some way get it fixed in your mind so you will never forget it. Now let us apply the rule. Suppose we have an orchard with the rows crossing at right angles and the trees are 25 feet apart each way. Then multiply 25 by 25 and the product will be 625, which, being divided into 43,560, give 69 and a fraction over. There

will be slightly over 69 trees to the acre. Now, if your trees are set on the equilateral triangle method, it is not easy to get the distance the rows are apart. But a rule has been worked out by some one that simplifies this: Divide the number of trees to the acre on the right angle method by the decimal 866 and you have the correct number. Take the example above given and the result will be 80 trees to the acre. It matters not what the distance may be in the rows or between the rows; if you work by these rules you will have the number of trees or plants to the acre.

A man called on me the other day and wanted to furnish me some trees to set in front of my house in Seattle and I wanted two trees for my park strip so it looked as if a sale was imminent; but not so. When I saw the man's trees I would not have them. The roots were all right, but it was the top or lack of top, that I objected to. The trees were two inches or more in diameter and had not a single limb on them. The man said that form of tree would make a better top than where some small limbs were left. I give the man credit for being honest, and I can go a little further, and say that in time the trees would have made good tops if they survived. But they would stand a good chance of starving to death before the top would be made. I know too much about the way a tree is nourished to give in to the man and so did not buy. The nutriment in the soil on which a tree lives and grows comes in by way of the roots. This is well understood and doubtless my man in this case would not deny this. But this nutriment consisting largely of nitrogen, phosphoric acid and potash, will not nourish the tree in its crude state, but must be elaborated first and this is done through the leaves. Remember that the function of the leaves in the tree growth is to convert the crude sap into sugar and starch and other ingredients necessary to the sustenance of the tree. If this elaboration can not go on the tree will starve. It is also true that some of this elaborated sap is stored up in the body of the tree but not enough is thus stored to last the tree through the whole summer. This elaborated sap will start the tree in the spring and if some limbs are left to put out some leaves the work of elaborating the crude sap will begin at once and the tree will grow right along. But if the tree has to grow these limbs before there can be any leaves it must put in a sickly existence for three or four years and may die. If it pulls through it will finally resume the normal condition and then grow all right. But a stunted calf or colt can never make quite as fine an animal as one that is never stunted. The same law holds good in the condition of a tree. I would

## A GOOD HOME AND A Profitable Investment

I have on 20 acre and three 40 acre alfalfa ranches with perpetual water-right, which I will sell with a guarantee of a net income to purchaser of \$10.00 per acre for two years. Price \$100 per acre. Terms: 60 per cent on one to ten acre. Terms: 60 per cent cash, balance at 8 per cent interest on one to ten years time as wanted.

**S. J. HARRISON**  
SUNNYSIDE, WASH.  
P. O. BOX 208

**FOREST RESERVE SCRIPT**  
For locating timber. Write for prices. Also for new issue of cheaper script confined to the location of agricultural and grazing lands. GEO. L. BROOKS, Albuquerque, N.M.

**WE SELL REAL ESTATE**  
If your place is for sale, why not let us know? Commission 5 per cent, after your property is sold. Send full particulars to **EDD C. CARVER, SEATTLE, WASH.**  
F. S. DeWolfe, Pres.; L. S. Booth, Mrg.; C. F. Whittlesey and A. E. Hanford, Examining Counsel.

**Abstracts of Title**  
Certificates of Titles. Titles Examined and Titles Insured.  
**Booth-Whittlesey-Hanford Abstract Co.**  
Haller Bldg., Seattle. Both Phones, 194.  
Paid-up Capital Stock, \$100,000.

**Farms for Sale**  
Printed list of over five hundred Washington Farms that we have for sale will be sent free on application.  
**THE SYNDICATE COMPANY**  
211-212-213 California Bldg., Tacoma, Wash.

**FARMS FOR SALE**  
\$4,500—The "Richmond" farm, 112 acres, about 7 miles east of Auburn, on Green river. \$500—Eighty acres, 3 miles north-east of Mount Vernon. \$800—Eighty acres, 3 miles northwest of Nooksack crossing. Easy terms on each tract.  
**James Bothwell** Boston Block Establ. 1887.  
**LOANS · INSURANCE · RENTS ·**

**Free Homesteads**  
FREE HOMESTEADS and improved ranches in SUNNY ALBERTA, Canada. For settlers' rates apply to **GEO. MAY**, Canadian Government Agent, 87 Sullivan Building, Seattle, Washington.