HORTICULTURAL DEPARTMENT

Edited by F. Walden

One line of business intimately and vitally connected with fruit growing is the nursery business. I take pleasure in laying before our readers the following circular, which is self-explanatory:

"The various committees which are at work for the convention of the American Association of Nurserymen at Milwaukee, in June, report that this meeting will likely be one of the largest and best in the history of the organization. The programme committee is arranging an excellent programme, and the entertainment committee will have plenty of diversion for those who attend. One feature of the entertainment will likely be an excursion to Lake Geneva, near Milwaukee, where are located many beautiful summer homes, and where some very fine ornamental planting may be seen.

"In arranging the programme, all parts of the country are to be represented. M. McDonald, Salem, Ore., will discuss "Horticultural Inspection Laws as They Affect Nurserymen," and H. Harold Hume, Glen St. Mary, Fla., will read a paper on "Semi-Tropical Thoughts for the Nurseryman." The increasing interest in pecan culture, especially in the Southern states, will be recognized by a paper by H. D. Simpson, Vincennes, Ind., on the subject of "The Pecan." Others who have been asked to take places on the programme are Judge Eugene W. Stark, Louisiana, Mo.; J. M. Pitkin, Rochester, N. Y.; D. Hill, Dundee, Ill.; Dr. Jordan, of the Geneva (N. Y.) Experiment Station; J. B. Pilkington, Portland, Ore., and others, so that it is expected that the programme will be complete with most excellent papers.

"Nurserymen of the Northwestern states are particularly interested in this meeting, and will likely attend in large numbers, for an effort will be made to secure the meeeting for Seattle in 1909.

"George C. Seager, Rochester, N. Y., is the secretary of the American Association of Nurserymen, and will be pleased to furnish information regarding membership, which is open to all interested in the nursery business, or allied industries."

The fruit grower, in most cases, is dependent on the nurserymen. It is true that some few growers raise their own trees. I did that myself but my experience would lead me, if I were in the same, or a similar position again, to buy my trees from a good, reliable nursery. We saved money in the cost of trees but we lost money in our first crops of fruit. By raising our own trees we were put back two years. Some of my neighbors bought trees and set out their orchards the same spring in which we began our nursery business. I found that the two years that we lost in this way cost us two paying crops after a few years. We lost ten dollars in these crops where we saved one in using our own trees. Whenever a man decides to go into the growing of fruit, the sooner he can get his trees set in the orchard the better, provided his ground is in suitable condition. The time when the fruit grower is sorely tried is when he is waiting for his trees to come into bearing. Trees must be pruned, the soil must be cultivated, in some cases spraying must be done and damage from rabbits must be warded off. I have known persons to get so discouraged that they gave up and quit the business. I know one case where a man sold out for a ridiculously low price and the purchaser sold enough fruit the first year after buying to more than pay for the place. In any line of business any one to succeed must have stick-to-itativeness, but this is preeminently so in fruit growing.

It may be thought that we are more certain in getting trees true to name if we grow them ourselves. It was not so with us. We bought our grafts already put up and in some few cases they proved not true to name. There is no more certainty of getting grafts true to name than trees true to name. In some few cases nurserymen have proven to be very unreliable but such cases are rare. Most nurserymen are honorable men and would not intentionally defraud any one. Mistakes will sometimes happen in spite of every care, but the man that allows too much of this will kill his business.

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The following statement has been sent out by the State College, Pullman, Wash., and I recommend its careful consideration by every reader of the Ranch:

The codling moth ruins a couple of millions of dollars worth of Washington apples every year. How much of this wormy fruit does your orchard produce? Have you a reputation for honest, clean, worm-free fruit? If you have, isn't it worth money to you? Isn't it your reputation that fixes to a large extent the selling price of all the apples of your locality? If you have wormy apples, and a wormy reputation, read this: No orchard is so badly off but that it can be reclaimed by a single season's spraying.

If you want to find out:

1. Why you should use arsenate of lead and nothing else.
2. Why you should not use misty vermorel nozzles.
3. What pressure to use.
4. How much spray to put on a tree.
5. When it pays to get a power sprayer.
6. When you can spray in a rain.
7. How long a time a spraying is effective.
8. Whether your spraying is so poorly done that you should do it over again at once.
9. How to fit up an extension rod that is better than the one you are using.
10. What sprays should not be combined with codling moth spray.
11. How to tell when late sprayings are not necessary.
12. An easy way to time sprayings.
13. Whether to band the trees.
14. About codling moth traps.
15. What danger you have from your neighbor's moths.
16. The value of the dust spray or the gas sprayer.

If you want to find out about any of these points, or a hundred other suggestions on codling moth spraying—in short, if you want to raise 100 per cent of clean fruit with a single spraying, write to the director of the Washington Experiment Station, Pull man, for a copy of Popular Bulletin 5, entitled "Spraying for Codling Moths," by A. L. Melander. It is free.

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George Heatherbell, of Colwood, B C., makes the following request and gives the reason why he wants this information: "I would like if you would be kind enough to give me some of your best reasons for advising the vase form of apple trees. Also give any other good authority for same, you may know, that believes the same as you do. Does Van Deman or Professor Piper or Lake believe in the vase form?

"Why I am troubling you on this question is that our Superintendent of Institutes, J. L. Anderson (whom you perhaps will know) and others here think the vase or goblet form is no good. I have had a quarter of a century of experience with fruit trees, and firmly believe with you that the pyramid form is not the best, and when talking on fruit tree planting at our institute meetings I always advise the vase form of heading the tree. They say I am wrong, and say that the pyramid form is the best with the first limbs starting out nine inches from the ground. I always anxiously look over your column for information."

In replying to this request I wish to say that where good men differ it ill becomes anyone to dogmatize, so I have no disposition to try to carry my point by assertion. I can give my reasons for preferring the vase shape tree, and others can give their reasons for the pyramid shape, and there we must let the matter rest. There are some very good authorities on both sides of this question. I think this difference arises mainly in what is meant by the best shape. If the strength of the tree is the point sought, then I would not hesitate to decide in favor of the pyramidal shape. If the quality of the fruit is the determining factor, I would certainly decide in favor of the vase shape. The pyramidal tree looks well on paper and looks well in the orchard when young, but when it becomes loaded with fruit it folds up like an umbrella and does not readily admit the sunlight. This is its chief defect. Let me give a little experience: On April 16, 1895, I set a tree of the pyramid form where a tree was missing in an orchard set in the spring of 1894. It was a fine specimen. I wanted to give it a thorough trial. It was a beautiful tree, having the limbs coming out on the different sides of the main stem and something like a foot apart, but on all sides. In a few years I found the top was entirely too thick and I had to cut out some of the large limbs, and that marred the tree and left large wounds to heal over. That tree today is in bad shape, and never can be what I want a tree to be in shape. The vase shaped trees all about it bend apart when loaded with apples, but this tree tends to fold up. The trees that bend apart let in the sunlight far better than the one that folds up. I do not need to remind my readers that sunlight is the one indispensable factor in securing color for apples, and quality and color go together. From my experience, not only in this one case, but in many others reaching back for fifty years, I would never train my trees with a center stem, but would use the vase shape.

As to what Van Deman, Piper and Lake have said on this question of shape I am not prepared to say. I have nothing at hand from either one of these men favoring one side or the other on this question. Piper has twice visited my orchards and expressed his admiration of my trees, but so far as I can call to mind he expressed no preference for the one shape or the other, for that point was never mentioned. His admiration for my trees without a note of criticism might be construed to be an indorsement of the vase shape. While I cannot give the views of these men, I can give some very decided indorsements of the vase shaped tree from others of our leading pomologists in the United States.

The present head of the Department of Pomology, which is a division in the Department of Agriculture, Washington, D. C., is G. B. Brackett. No man stands higher in pomology than he. In the Yearbook for 1901 Brackett has this to say about pruning the apple tree: "Pruning and training are important factors in the successful management of an apple orchard. The objects to be attained are (1) symmetrical and evenly balanced heads, and (2) the admission of sunlight and free circulation of air into all parts of the tree top while maintaining a sufficient density of foliage to protect the trunks, branches and fruit from the direct rays of the sun, which are liable to scald and injure both tree and fruit. If the trees are one or two years old when set they should be cut back to the height from the ground it is proposed to form the head of the tree. This cutting back will cause several of the upper buds to grow, which will form the head at the proper height. These should be watched and only such left to grow as are to form the main branches. Those left should be the strongest shoots at equal distances apart around the stem, and should tend to an outward growth to spread and make an open head." See Yearbook for 1901, page 601. Nothing here is said about vase shape, but