

Horticultural Department

EDITED BY F. WALDEN.

(All inquiries for information from this Department should be addressed to No. 3 Howe Street, Seattle.)

FORCING FRUIT INTO BEARING

W. J. Taylor, Entiat, Wash., under date of October 24th, writes: "I have read and heard more or less about forcing Spitzenburgs into bearing by summer pruning, manuring etc. Is there anything in this and can it be controlled with any degree of certainty? We have—I think—an ideal location for Spitzenburgs, especially for color, and I would like to plant some more in the spring if I could have a reasonable assurance of a crop but I am almost afraid to risk them. In my orchard—which is a recent purchase—I have quite a bunch of Wageners. Is this a profitable commercial apple? Or would you advise top-working to some standard variety, say Stayman or Rome Beauty? An answer through The Ranch would greatly oblige."

It must be remembered that the Spitzenburg is not an early bearer and, like the Northern Spy, can not be forced into bearing at a very early age. We must expect to wait till it attains a suitable age before we can expect good crops. Why does one tree bear early and another only after it

has reached a considerable age? The answer to this question is, one forms fruit buds while the other puts forth all its strength in the growth of new wood and the production of leaves. When are fruit buds formed? Not in the spring, but during the previous autumn. Whatever we do therefore to cause the formation of fruit buds must be done at the time of their formation. If a tree is kept growing vigorously it will not form any fruit buds but its whole strength will go to the leaves. Sorauer in his valuable work entitled "The Physiology of Plants" says on page 234, "An increase in the number of fruits demands an increase in the number of flower-buds, and as these are generally formed the preceding season, the horticulturist must extend his operations to that period. Every experience teaches us that the period of sexual reproduction does not, as a rule, set in until the vegetative growth (production of leaves) begins to diminish or to cease entirely." Careful study of this quotation will show any one when fruit buds are formed and that is, at the close of the growing season. In order to have fruit buds formed we must have stored up about the axils of the buds food material and this will not take place when the tree is kept growing vigorously, hence, Sorauer further says, "On this point we know by experience that plants will only develop flowering buds when the food material formed in the leaves is copiously stored up in the stem and branches as reserve material and not when this material is immediately used up in the production of new vegetative organ (leaves). In horticultural practice it is common to observe in the case of perennial plants that a continuous and excessive formation of leaves is detrimental to the production of flowers. Of our apple trees it is well known that in warm insular climates they grow into magnificent foliage trees, but remain unproductive of fruit." Page 222. I might go on and quote pages from this valuable treatise but I must not do so now.

Sorauer says that in order to facilitate the formation of fruit buds the trees must have a period of rest and this is best secured by drought. Now in a country where you irrigate, this period of rest can be controlled by the cessation of the use of water. I am confident that many damage their trees by allowing the water to run into the orchards after the growing period. Sorauer says again: "A damp spring will cause the production of strong foliage in a well manured soil, and an early, dry and warm summer following upon this will prevent the leaves from growing too long, and will cause the production of flowering buds." P. 223. Anything that will check the growth at this critical time will assist in the formation of fruit buds. Here is where summer pruning does good in bringing a tree into fruitfulness. Anything that checks the vigorous growth after the middle of the summer will have the same

effect. Ringing and notching the branches causes the retention and storing up of the food material.

Not long since in an article in this department, I showed by quoting Sorauer and other authors, that fruit buds already formed could be changed into leaf buds by stimulating the growth by the application of water. This changing of flowering buds into leaf buds can not be done in the spring but is done only in the fall according to our best authors.

I have had no experience with the Wagener. I have often seen it at our fairs. It is classed by our leading writers on horticulture as "very good to best." In the book "Apples of New York" this variety is treated quite extensively, its good points and its unfavorable ones being impartially presented. After all that is said for and against this apple in this book the account ends by saying: "Some fruit growers consider it a profitable variety, but many do not. Although it was introduced about a half century ago and is now sufficiently well known so that it may perhaps be regarded as a standard market variety, yet it has not established itself to any considerable extent in the commercial orchards of this state and is not being extensively planted."

My own observation is that it does not sell very well in the markets of this state, not as well as its merits seem to demand. I would not plant it to much extent but just what I would do with my trees if I had it already in my orchard, as friend Taylor has, I do not know. The tree is not considered a very vigorous grower and would not prove to be a very good stock on which to graft some better selling apple. I think if I did not have too many trees of this variety, I would at least try it a while longer.

MIS-NAMING FRUITS

By the way, the name of this apple is very frequently mis-spelled—it is not Wagner but Wagener. It was named for Abraham Wagener of Penn Yan, Yates county, N. Y. It originated in 1791 but was not brought to public notice till 1847. I suppose that no injury is done the apple in misspelling the name or to those who grow it but I do like to see things right.

Speaking of misnamed apples reminds me that as I was passing an apple stand in Seattle, a few days ago, I saw some large greenish apples with a card on them reading "Glory Munda." The name of this apple is Gloria Mundi and means, as any scholar knows, the glory of the world. The gloria was translated correctly but not the mundi. While I am telling this let me say that the other day I saw some quite fine Jonathans marked "Delaware Red Winter." Brother Jonathan certainly would blush to be called a Delaware Red Winter. This apple never gets mellow. Its other name is Lawyer. H. E. Van Deman was once asked about this apple in my presence, "no," he said, "it never gets mellow and after

BUY NOW

Notwithstanding the very heavy plant of fruit trees in our own nursery and in practically every other nursery in the Northwest, it now seems apparent that there will be just as great a scramble for many varieties as prevailed last season when long before planting time, nearly every nursery was out of standard sizes.

The facts are, the stand of trees in nearly all nurseries is considerably less than last year, and the demand keeps on apace. Instead of a 75 to 90 per cent stand such as was common last year, many blocks today show 50 per cent or less.

In our own case we planted more than twice the trees we put in in 1909, so notwithstanding the less percentage we still have trees to sell in most varieties. However, it's not wise to wait. If our salesman fails to see you at once, drop us a line.

WASHINGTON NURSERY CO.

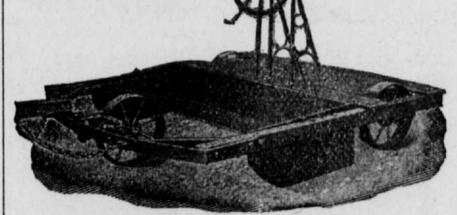
Toppenish, Wash.

Agents Everywhere.

More Wanted.

Irrigation Graders

The Shuart



One Irrigationist says it is a pleasure to irrigate land graded and ditched with our machinery. Let us tell what others think. It means MONEY to you. Catalog 8. is yours for the asking.

The Ohio Road Machinery Co., Oberlin, O.

IRRIGATION PROBLEMS

IN ORCHARDS solved with no expense for pumping by

RIFE RAMS

Pump water automatically day or night



RIFE ENGINE CO. 2512 Trinity Bldg., New York

The first cost is low, there's no operating expense. Raises water 30 feet for every foot of fall. Fully guaranteed. If there is a stream, spring or pond within a mile, write for Free Plans, Free Book and Free Trial Offer.

NURSERY STOCK

Inducements-Profitable

We are making it a special object to all who need nursery stock now or next Spring to give us an idea now of what they will need then, or for immediate orders. Write us for information. A tree that will do well and produce a profitable crop East of the mountains may not be half so profitable when planted West of the Cascades.

Apple Trees—

All leading varieties, strong and clean. Graysteins, Klugs, Jonathans, Wealthy, Spitzenburgs, Spys, Grimes, Winter Banana, etc.

Pear Trees—

Choice one to three year old Bartletts, Bose, Anjou, Comice, Easter, Nelis, etc.

Cherry Trees—

Lambert, Bing, Royal Ann, Dukes, Morrillos, etc. Fine stock.

Plum and Prune Trees—

Italian, Sugar, Silver, Hungarian, Damson, etc.

Small Fruits—

Strong Gooseberry, Currants, Blackberry and Raspberry plants. All leading varieties.

Ornamentals—

Choice berry-bearing Hollies, Rhododendrons, Hydranges, Variegated Dogwood, Cypress, choice Rose Bushes. Complete nursery in all classes. Large, clean, fine trees and plants.

Write for List and mention this paper.

Christopher Nurseries Co.

(Established 1889.)

John A. Stewart & Son, Props.
(Nurserymen for Four Generations.)

Christopher, (King Co.) Wash.



ROOFINGS

We are exclusive Agents for Bird NEST PRODUCTS. (The original Ready Roofing.)

They are made from the highest grade materials by expert and used the most service and wear the longest. If you are going to build it will pay you to investigate Nest-Set Products before deciding. Your dealer does not see them, write us for free samples, prices, full information.

F.T.CROWE & CO.
SEATTLE · SPOKANE · TACOMA · PORTLAND