

tain. The planting wires were almost indispensable, and worked like a charm. They saved time, worry and prevented crooked rows. They were laid across cotton fields, ditches and all without hinderance. The long lines of stakes are a sight to see, stretching about a mile each way, and as straight as those on a checkerboard. The post hole augers also were a great help, for they were easily worked, and took earth out perfectly and in a much shorter time than it could have been done with spades.

The varieties planted are few and only such as have been tested long enough to prove them to be reliable bearers as well as excellent in the size and quality of their nuts. There are 5,000 trees of Stuart, 2,750 Van Deman, 1,750 Money-maker, 450 Pabst, and the other 50 of varieties for testing. There may be other varieties as good or better, but if so I do not know them, although there are some that are very good, and doubtless, time will develop others as good or better than those we now think best. In the later plantings they may be used, for the 10,000 now set are only a part of what we expect to plant within the next few years.

I am planting a lot of fig trees between the pecan trees, for early returns, with the purpose of canning the fruits. Vegetables will also be grown instead of all cotton, for this crop that has long been called "King" is one that often seriously injures its subjects. Our intention is ultimately to change entirely from cotton to pecans.

#### Next Year's Crop.

Opinions are conflicting as to the prospect for the coming orange crop in this state. Some of our state exchanges claim that the crop is smaller than that of last season. Others say it is as good or better. Much the same condition seems to exist in California. The last Citrograph has two items on the subject, which we quote:

The Highland Messenger makes the statement that the "June drop" in oranges was rather heavy, yet the crop of the coming year would be a fair average. The Messenger's informant disbursed news considerably different from that which filters over this way. Our news is that the coming crop will run about two-thirds that of this year. Some say three-fourths. None claim as big a yield as that of this year. Of course, it is too early yet to make anything like an accurate estimate, but it certainly now looks as if there would be not to exceed 18,000 to 20,000 cars next season. This season will run considerably less than 24,000 cars, which was our estimate made last October, when wild guesses of 30,000 to 35,000 cars were being made by newspapers and railroad men.

The other item is as follows:

#### The Navel Orange Crop.

Monrovia News: An orange grower of this section who is a close student of the culture of citrus fruits, gives it as his opinion that the coming navel crop of oranges will be the smallest in the history of the industry in Southern California, taking into consideration the number of bearing trees at this time.

The healthy, vigorous trees set well with buds and blossoms, and were followed by a large setting of young fruit and everything promised well.

Since the then young fruit has dropped at a fearful rate, far greater than ever known before, and this is true of groves absolutely free of pests, and in the best condition. The trouble is attributed to climatic conditions—late cold rains in the spring and the early hot spell, conditions that in past years have had no such effect. The records fail to show any such season, late cold rains and an early blistering hot spell.

Just what territory this condition covers this grower was unable to say. He had carefully examined his own orchard and a number of his neighbors', as well as other groves in this vicinity, and finds the conditions about the same in all of them.

The Citrograph also has the following paragraph about the past season's crop:

Orange shipments up to Thursday night were 21,197 cars, as against 24,467 cars last season, a shortage of 3,270 cars.

#### The Oranges Outlook.

The Orlando Reporter-Star talks thus of the prospect for an orange crop this season:

Now that oranges and grapefruit are beginning to size up on the trees, except in groves where there is a short crop, it is seen that the trees are doing well. The fruit will probably average a trifle larger than usual though not so large as to overdo the thing.

The crop in Orange county will be considerably larger than last year, yet not so large but that considering the shortage in some other sections the price will probably be fully as good as they were at their best last year if care is exercised in picking, packing and marketing.

It is a fact lost sight of nearly every year, that the three last noted particulars are fully as important as the crop itself.

To pick in a wet season, as was done by many growers and buyers last winter, is simply worse than letting the fruit rot on the ground, because if shipped not only the fruit itself is lost but the reputation of the Florida oranges is irreparably injured.

To pack carelessly in these days of fancy packages and fastidious tastes of the people is only inviting low prices and damaged fruit and will result in consequent loss to the state of thousands of dollars.

To market through irresponsible commission men or to load the market up with more fruit than it is capable of absorbing means a direct loss every year to the orange shippers of the state. However, this is only temporary in its effect upon the industry and only hurts those who are unwise enough to practice it.

In a word, it requires as much skill to sell the oranges as it does to grow it and the best grower is not always the best seller.

#### Oranges in North California.

A correspondent, of the California Cultivator, tells of the progress that has been made in orange culture in northern California.

Orange growing on a commercial scale in the Oroville district has passed through the experimental stage and certain problems are now settled for a time at least. Like Southern California, they made mistakes in va-

rieties and large orchards were planted to the wrong ones. These are now being budded over to Washington navels, which are as well adapted to that section as they are to Southern California.

Mistakes have been made in location; groves often having been planted on soil that was too close to the bed rock. In such situations the trees made a splendid growth for the first few years, but as the roots finally filled the soil which was but one to two feet in thickness the growth became retarded and finally refused to make further progress. Such conditions are found along the zone of foothills of Butte and Yuba counties, where the scrub oak and pines grow. On the lower benches some orange groves demonstrated that the orange and lemon find congenial conditions. Here again we find evidence that it requires constant attention to details to develop a first-class orange grove. Mr. Eban Boalt of Palermo has demonstrated this. He has made frequent trips to the orange groves of Southern California, observed methods of care and thus saved himself the time and expense of working them out as it was necessary for the southern growers to do. Local problems of course required to be worked out. These require constant attention in any industry in any situation; changing seasons bringing about different conditions. For instance, drainage has to be provided in some instances. The abundant winter rains fill the soil with water and any depressions which may exist in an orchard must be drained or the orange tree will die.

Mr. Boalt has Washington navel orange trees that for vigor and bearing qualities will compare favorably with the best groves in the southern citrus belt. He tells us that by regular fertilization and judicious irrigation he has brought the time of ripening (the bright orange color and sweet juice) from December 1st to November 1st. It is a significant fact that there are orchards under indifferent care which have not shown this improvement and also that there are in the district groves which netted the owner upwards of \$300 per acre per annum, while groves at a short distance under different care but other conditions being equal, have not been profitable. This is Southern California over again.

There are in Butte county which has been proven a choice orange growing section, is not as large as the proven sections in any one county in Southern California. The area from Orangevale north through Placer and Yuba counties has not been tested to show the extent to which it is adapted to citrus culture. Northern California surely has a future for it in citrus culture, but the growth promises to be slow. It takes a first-class horticulturist to raise oranges at a good profit in any section and it appears that they are not in sufficient majority to assure such results soon. A few energetic leaders with capital would soon put the business on a basis of considerable magnitude.

Now, if we can keep the government inspectors from selling out to the meat packers! With us the trouble is that so many men, after they get in office, sell out to the very influences the people elected them to watch and control—American Farmer.



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#### How to Prune the Lemon.

Possibly some of our lemon growers may be interested to know how they prune their trees in California. The following is from the Citrograph:

Paper read by L. R. Nichols, before Corona Farmers' Club: In the early days of the colony, the lemon growers hardly knew what to do with the trees. A very few said they would take care of themselves—that Nature knew what was best. I saw one of these orchards that Nature had taken care of for several years, and it was quite a sight; long shoots in all directions that would have made fine fishing poles, and so long in many places that it was almost impossible to get through with a wagon.

This orchard did fairly well for a while in the way of bearing lemons, but in the end had to be cut away back to get in into shape; but the greater number of growers thought that the trees should be pruned in some way, and that a pair of hedge shears was the proper tool to do it with; so they got the shears, and clipped a little off the top and sides, leaving the trees as large as possible each time they thought it proper to prune, until each tree was about the shape of a ball, balloon or whatever form the pruner thought proper.

Now this continual clipping simply made the trees a dense jungle, so thick that not a ray of sunshine, could enter, nor air hardly penetrate, and then the trouble commenced. The trees became so wide that you could hardly reach as far as the center to trim, and the pickers could not get to the middle to cut the fruit, and then it became apparent to most every grower that if the inside of the tree was to continue to bear that more air and light must enter.

Then the real thinning out and pruning commenced. It was a sad sight to see the great loads of trimmings that were hauled from the groves and burned. This was a great loss, grown at an immense cost on high-priced land and with more costly water.

Let us make up our minds that we will not have these great costly prunings. Not a leaf nor twig need be carried from the orchard if the pruning is done at the proper time. It will cost no more to go over the trees three or four times in the year making light trimmings each time, and I believe by so doing we would have more even bearing trees—not a great picking at one time, and almost none at another. At any rate, I think it worth trying.

In pruning the lemon I think it is well to strive for a rather low, wide-spreading tree, so that most of the fruit can be reached by the pickers from the ground. I prefer an open center, for it seems to me that by