

FARM AND ORCHARD

Notes and Instructions from Agricultural Colleges and Experiment Stations of Oregon and Washington, Specially Suitable to Pacific Coast Conditions

PLANTING THE ORCHARD.

By Prof. C. I. Lewis, Department of Horticulture, Oregon Agricultural College.

A large acreage of young orchards will be planted on the Pacific coast this season. Many of the orchardists are adding new plantings to their present holdings, but a great many people will be planting new orchards and it will be their first experience along this line. These new people should try and avoid many of the mistakes that were made in the past, such as too close planting, planting of poor trees and the use of the wrong system. Many of the growers have planted thicker with the idea of thinning out later, but one could find that they made a mistake in their mathematical calculation and that they have to take out a great many more trees than they expected to. The first thing to observe in establishing the young orchard is to get good trees. Get nothing but one year old trees. The larger the trees are at the base the better. Trees of a good caliber are better than trees of extreme height. Good sturdy medium grown stock is to be preferred and where one can get a good root development it is also advantageous. It is often desirable to visit the nursery to look over the trees before you purchase. The nurserymen always welcome visitors, and will gladly show the prospective planter the trees which they have on hand. In many cases it will be impossible to get the trees you desire owing to the large demand. Prune trees have been in very heavy demand the past year. Some varieties of pears have been hard to obtain, as well as apples. The rule should be to order early. Get your orders in by summer so as to be on the safe side. The number of trees that you will put to the acre will depend upon the system that you will use in establishing your orchard and the distance will also be influenced by such subjects as type of fruit, nature of soil and elevation. For instance, you should give a greater distance on the strong clay loams or rich river bottom loams than on the lighter and thinner loams. Generally on the lower elevations one allows a greater distance than on the higher elevations. This is especially true when the higher elevation begins to approach the limits of the tree growth, although right here in western Oregon, on our hill lands of the Willamette Valley we would not probably need to give as great a distance as we would on the river bottom lands. On our hill lands I would plant apples 25 to 28 feet, while on the very strong soils I would put them from 30 to 35 feet. Pears from 20 to 25 feet, mature sweet cherries will need from 25 to 40 feet, while the sour cherries should have about 20 feet. Walnuts need 40 to 60 feet. Before determining the exact number of trees you need, you will have to know the system you are going to use in planting. The three systems used are the Rectangular, Hexagonal and Quincunx. The Rectangular system means that the trees are planted in squares or rectangles. Its chief advantage is the ease of cultivation, especially after the trees become older. It does not give as many trees to the acre and the trees are not as equally distributed as regards area of ground upon which they feed or in regard to the distribution of light. The Hexagonal system is a very popular system. In this the trees are planted in hexagons, or we could say they are planted in a circle with a tree in the center. It is laid out on the basis of an equilateral triangle. Its advantages are that it gives 15 per cent trees more to the acre than that of the rectangular and also gives an equal distribution of the trees over the property. It is a harder system in which to use fillers from a horticultural point of view and it is more difficult to cultivate it successfully after the trees become matured. The third system is the Quincunx. It means setting out in fives, which is a modification of the rectangular or square. Simply add a tree in the center of each. It is probably the best system to use for fillers gives 75 per cent more trees to the acre than the rectangular. The number of trees to the acre are given in the following table:

Distance apart.	Rectangular.	Quincunx.	Hexagonal.
16x16	170	303	196
18x18	134	239	154
20x20	108	192	124
22x22	90	148	104
24x24	76	132	87
25x25	70	125	80
26x26	64	114	74
28x28	56	100	64
30x30	48	85	55
32x32	43	76	49
33x33	40	71	46
36x36	34	60	39
40x40	27	48	32
45x45	22	39	25

Where it is possible to do so I would urge you to plant the young trees before April. The fall or early winter plantings are apt to become better established and make a quicker and better growth in the spring, especially if the spring happens to be a rather dry one. Set the trees firmly, at least two inches deeper than what they were in the nursery row. Cut off all mangled and broken roots. We generally remove from

one-third to one-half the root system. Where the winds are strong, set the trees in such a way that they lean slightly toward the wind. Be sure that the trees are planted firmly. On heavy clay soils do not dig the holes long before planting, as the soils of this type bake very readily, but on the free, volcanic ash, etc., soils, the holes can be dug at any time and not as much care is needed in digging these. Do not use chemical fertilizer of any kind in the holes. Well rotted manure could be used in very moderate quantities. These are some of the first principles to remember in establishing the young orchard.

FEEDING TANKAGE TO HOGS.

Corvallis.—Because it has been proven that wheat alone does not produce the best gains in pig fattening, it is suggested by the Oregon Experiment League that the wheat farmers in eastern Oregon try supplementing it with digester tankage. Digester tankage is the refuse of the packing houses thoroughly cooked, dried and ground. It comes in sacks and will keep indefinitely. It may be obtained from a North Portland meat company for about \$47 a ton, and with freight added will cost about \$55 a ton in most parts of eastern Oregon. If bought in smaller quantities the cost would be slightly greater.

Thrifty shoats of fairly uniform size and quality, weighing between 60 and 100 pounds would be suitable animals with which to try the experiment. They should be divided into two lots as nearly uniform as possible, and each lot should be carefully weighed at the opening of the experiment. It is best to weigh for three successive days and take the average as the correct weight for the second day.

The first lot should be given three pounds of ground wheat a day, divided into two feeds, gradually increased in amount until the animals are getting all the grain they will clean up at each feed. They should come to the trough hungry and stay there until all the feed is cleaned up. The second lot should get a mixture of one part tankage to nine parts wheat, fed at the same time and in the same way as the other pigs.

At the end of about 60 days the animals should be weighed and the average gain per day for each should be estimated, as well as the total amount of feed consumed by each, and the food consumed to produce each pound of gain. The difference in the appetite and the thrift of individual pigs should be noted and the lot in best market condition.

It is unnecessary to weigh the feed every day, as a few sacks for each lot may be weighed and each group of pigs be fed out of its own sacks. If scales are lacking the amount of feed may be compared fairly well by the number of sacks consumed if the sacks are uniformly full. Stock scales are needed to weigh the pigs, but a small number can be weighed on common platform scales.

This is one of four experiments prepared by Prof. E. L. Potter, of the Oregon Agricultural College, for the members of the Experiment League. Many others dealing with different branches of scientific agriculture are being carried on by members of the league. Those interested in obtaining membership may write either the secretary, Mr. Stanton Griggs, Medford, or president, Leonard Carpenter, O. A. C., Corvallis.

FASHION HINTS



Long lines distinguish this simple evening gown for a young girl. Crepe Meteor is the material used, veiled in Marquisette. Silk fringe and a knotted silk thread insertion effectively trim the waist and overskirt.

For the LITTLE ONES

LEGEND OF THE MISTLETOE

Some Claim Goddesses Kissed All Who Passed Under Plant as Symbol of Love.

(By E. R. GAILLARD.)

According to Scandinavian mythology, Loki (the god of evil) was the sworn enemy of Baldr (the god of light), and tried by every means in his power to kill him, but failed because he was invulnerable to everything that came from earth—air, fire, or water.

Loki, at last, conceived the idea that the mistletoe, springing from neither, would serve his purpose, and, having an arrow made from that wood, he helped Hodl (the blind god of darkness), to aim it, and Baldr fell dead—shot through the heart.

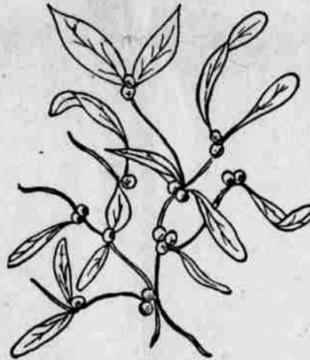
All the gods and goddesses prayed for his restoration to life, and when the prayer was granted it was decreed that the mistletoe should nevermore have power to do harm unless it touched the earth, and the goddess of love was appointed to guard it.

Some legends claim that the goddess kissed all who passed under the plant as a token that it was no longer a weapon of death, but a symbol of love, while others assert that she exacted a kiss from each as a propitiation, or the bough should be allowed to work harm.

Another reason for the kissing privilege conferred by the plant is said to be that a lovely maiden preferred death to the kisses of an old monk who pursued her, and her prayers for deliverance were answered by transforming her into a mistletoe branch and placing her in a tree.

The monk waited for her return, but rather than that, she clasped the tree and remained clinging to it, leaving the waiting monk to kiss whom-ever he could catch.

The custom of "kissing beneath the mistletoe" is so old that no one knows when or how it originated; but when young people are found selecting the branches that have the



Mistletoe.

most berries on, it is fair to suppose that they know a kiss must be given for each berry plucked, and that the ceremony is never complete until every berry is off the branch.

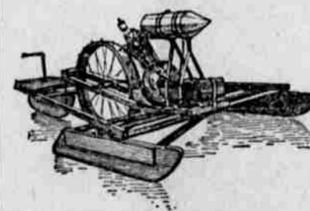
There was once a common, though mistaken belief that the mistletoe grew on oak trees only, but that was so far from true that the Druids, who held the oak as absolutely sacred because they believed it to represent the One Supreme God, deemed the mistletoe doubly sacred if found on one, and carefully guarded it until the sixth day after the first new moon of each year.

When this time arrived, priests robed in white surrounded the tree and held solemn ceremonies, among

HOME-MADE MOTOR ICEBOAT

One Constructed to Take Place of Regular Sail Iceboat and Used With Success Last Winter.

This motor-driven iceboat was constructed to take the place of the regular sail iceboat, and the one from



Iceboat Propelled by Engine.

which the accompanying illustration was made was used with success all last winter.

The boat is 4½ feet wide at the widest part and ten feet long. The runners are about ten inches high, shod with steel ground concave the

SNOWBALL BATTLE.



See the soldiers all in line! Now the battle's on! Every man will have to test His mettle and his brawn.

Ammunition's piled up high To use throughout the fray Which just begins when school is out And ends at close of day.

The Big Snow Fort is near at hand, And soldiers great and small, Will strive to win the victory With the powerful snowball.

which was the sacrifice of two white bulls.

After the ceremonies, a priest in spotless robes ascended the tree and, with a golden knife, cut the mistletoe and let it fall on to a white cloth held by other priests.

The branches were then formally "blessed" and divided among the people who believed the sprays given them to have miraculous powers.

The common belief in the efficacy of the plant was such that it was called all-heal; but according to an old legend, a certain lover searched many days for a specimen growing on an oak tree, that he might secure its branches for the cure of his betrothed, who was sick unto death, but when he found it he touched the sap while cutting the branches, and fell dead near the tree, indicating that the sap was a deadly poison.

The plant thrives in America from New Jersey southward and westward, and those who know it only as a part of Christmas decorations can have little idea of how often it overruns trees to the extent of being a nuisance.

Questions and Answers.

What coat is put on without buttons and put on wet?
A coat of paint.

What is the greatest surgical operation on record?
Lansing, Michigan.

How can you make a tall man short?
Borrow money from him.

Why are fixed stars like pen, ink and paper?
Because they are stationary (stationery).

Why should a person not like to gaze on the Niagara forever?
Because he would always have a cataract in his eye.

What bridge is warranted to support any strain?
The bridge of a fiddle.

Why are laws like the ocean?
The most trouble is caused by the breakers.

Appropriate Locations.

The place for baby carriages—Wheeling.

The place for bank savings—Port Deposit.

The place for an auto center—Mobile.

The place for a laundry town—Washington.

The place for the national game—Baltimore.

The place for earthquakes—Cleveland.

A place for connoisseurs of rare old wine to avoid—Newport.

Served Two Purposes.

"George, my son, don't you think it is rather extravagant of you to eat butter with that delicious jam?"

"No, mother; it is economical. The same piece of bread does for both."

As a Great Statesman boasted. "Aspasial I have done with these cares, with these reflections. Little of life is remaining, but my happiness will be coetaneous with it, and my renown will survive it; for there is no example of any who has governed a state so long, without a single act of revenge or malice, of cruelty or severity. In the thirty-seven years of my administration I have caused no citizen to put on mourning. On this rock, Oh, Aspasial stand my Propylaea and my Parthenon.—Walter Savage Landor: Pericles and Aspasia.

TRY MURINE EYE REMEDY for Red, Weak, Weary, Watery Eyes and Granulated Eyelids. Murine Doesn't Smart—Soothes Eye Pain. Druggists Sell Murine Eye Remedy, Liquid, 25c, 50c, \$1.00. Murine Eye Salve in Aseptic Tubes, 25c, \$1.00. Eye Books and Eye Advice Free by Mail. Murine Eye Remedy Co., Chicago.

Slight Misunderstanding. Mrs. Oldtimer—"When we were in Egypt we visited the pyramids. They were just covered with hieroglyphics." Mrs. Newch—"Horror! Weren't you afraid that some of the ugly things would get on you?"

IOWA WOMAN WELL AGAIN

Freed From Shooting Pains, Spinal Weakness, Dizziness, by Lydia E. Pinkham's Vegetable Compound.

Ottumwa, Iowa.—"For years I was almost a constant sufferer from female



trouble in all its dreadful forms; shooting pains all over my body, sick headache, spinal weakness, dizziness, depression, and everything that was horrid. I tried many doctors in different parts of the United States, but Lydia E. Pinkham's Vegetable Compound has done more for me than all the doctors. I feel it my duty to tell you these facts. My heart is full of gratitude to Lydia E. Pinkham's Vegetable Compound for my health."—Mrs. HARRIET E. WAMPLER, 524 S. Ransom Street, Ottumwa, Iowa.

Consider Well This Advice. No woman suffering from any form of female troubles should lose hope until she has given Lydia E. Pinkham's Vegetable Compound a fair trial.

This famous remedy, the medicinal ingredients of which are derived from native roots and herbs, has for nearly forty years proved to be a most valuable tonic and invigorator of the female organism. Women everywhere bear willing testimony to the wonderful virtue of Lydia E. Pinkham's Vegetable Compound.

If you want special advice write to Lydia E. Pinkham Medicine Co. (confidential) Lynn, Mass. Your letter will be opened, read and answered by a woman and held in strict confidence.

Our 112-Page Seed Catalog No. 94 Free



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