

Orchard and Garden.

THE LOUDON RASPBERRY.

Where the plantation is solely for fruiting we set the plants 4 ft apart each way, the same as hills of corn in the field, marking the land both ways with a corn marker. This enables us to do nearly all of the work with a horse and cultivator. It is not necessary to stake the Loudon raspberry, since it is not a rank grower like the Cuthbert. We set out the plants in the fall, or in very early spring. One cause for failure in planting the red raspberry is in planting in late spring, when the plants often perish if dry weather follows. Set the plants 4 to 5 in. deep, firming the soil carefully over the roots, cutting back the canes to within 4 in. of the ground. If the cultivator is kept going both ways every few weeks the plantation will need but two or three hoeings throughout the season. The plants are perfectly hardy and will require no winter protection except in the northern U S and Canada.

In the early spring we clip with a pair of hedge shears about 1 ft from the top of the raspberry canes, leaving canes about 2 to 3 ft high. The second year keep the cultivator going both ways between the rows once a week all through the season, being careful not to cultivate just before the pickers go through the rows, since this would knock off a portion of the ripe fruit. We market the Loudon invariably in pint baskets. Do not plant the Loudon or any other raspberry on low or wet land. When the plantation is desired partially for fruit and partially for plants, the rows are cultivated only one way with rows 5 ft apart, sucker plants being allowed to form a continuous hedge row. A fair amount of fruit can be secured by digging out the sucker plants entirely for a space of 2 or 4 ft along the row, leaving a good-sized hill after the digging is over.—[Charles A. Green, Monroe Co. N. Y.]

BIRDS AND FRUIT GROWERS.

A method to exterminate entirely in our orchards all the insect pests is impossible. However, the birds are the natural enemies of these pests. They feed, especially during the breeding season, almost exclusively upon insects, and they require no care or expense on the part of the horticulturist. They will do their beneficial work anyhow, whether their efforts are received thankfully or not. As the birds increase, the insects must decrease. The closer settlement of our state has seemed to greatly decrease the natural enemies of our bird friends, but, alas, has been the bringer of far worse enemies—the boy with a gun, the woman with a feather in her hat, and, too often, the horticulturist even proves an enemy.

The depredations of the birds upon fruit are few and of little consequence. The robins, it is true, will knock the cherries off, and the owner in his rage will not pause to think of the many slugs and curculio beetles those same birds have destroyed for him. All the year round the woodpecker digs for borers and when the apples are ripe he is killed because he makes a hole in the side of a big red apple. We have often wondered, too, if even in this case he was not after the apple worm on the inside.

Among the winter birds the owls can well claim some of our attention. The injury caused annually by mice and rabbits amounts to many hundreds of dollars. It is to be regretted that the owls so easily fall a prey to the hunter's gun, as their food through the winter, and to a large extent during the summer also, is composed entirely of small mammals. In many parts of the state the sapsuckers and woodpeckers remain during the winter. Among them all the food habits are much the same, so the separate species need not be taken up in detail. Borers of various kinds, notably the flat-headed borer and round-headed borer of apple trees and the hickory borer are among the most destructive insects. These claim the constant attention of the woodpecker, the long spear-pointed tongue of the latter easily reaching the larvae which are unmolested by other birds. Many other tree insects are also killed and the protection to the forest trees by these birds is doubtless of far greater value than the work they do in the cr-

chard. Among certain of the woodpeckers, especially the flickers, ant eating is a favorite pastime. The yellow-shafted flicker or golden-winged woodpecker is a common bird throughout Iowa, and in the southwestern part of the state the closely related species, the red-shafted flicker, is not at all uncommon. Prof Beal, in examining bird stomachs, found in a single stomach of one of these birds over 3000 ants. The number destroyed by even one bird in a year must be enormous.

As to the common birds, we can safely conclude that the harm they do to the horticulturist is of little consequence; the amount of good done by them is in direct proportion to their numbers; protection is the only thing necessary to insure their rapid increase and maintenance of numbers to almost any point.—[Wilmon Newell, Conn. Co. N. H.]

Potash in Ashes; 20 bbls unleached wood ashes would usually weigh about 2400 lbs. This amount would supply as much potash as would be furnished by from 250 to 300 lbs muriate of potash. Double this quantity of ashes might be used if the soil were quite seriously in need of lime, although such an amount would furnish more potash than would be required immediately. Better results would be secured by harrowing in the ashes than by plowing them under. [Prof H. J. Wheeler, R I Exper Sta.]

Cold Storage Pays—The Jersey elder apple under ordinary conditions will not keep later than Oct, and is but an indifferent fruit at the best, both as to quality and appearance. In the summer of 1899 these apples were worth only 75c p bbl and with little demand. One farmer placed 500 bbls in cold storage at Philadelphia, where they were kept in perfect condition until last April. The manager of the cold storage house stated that they could have been kept the full year. In April the apples found a ready sale at \$4.50 p bbl. The charge for keeping the apples in cold storage was 60c p bbl, so that the grower realized a net increase in price of 3.25 p bbl, or a total profit of 1695.

A New Variety of Corn I have been testing differs from any other corn in cultivation. The New Century Wonder corn stools out like winter wheat, producing from 10 to 20 stalks from each seed sown. Each stalk bears six and seven good ears, very uniform in size and shape; the ears being about 10 in long. The kernels are of a beautiful snowy white. This variety, when used green, is a most excellent sweet corn. When ground it makes the finest, whitest meal known. It rises like wheat flour and can be used in bread, pies, biscuits, etc. The corn produces at the rate of 150 bu p a. In regard to yielding, it is probably the greatest multiplier of any vegetable product known, as by fair comparison, it yields 40 000 kernels to every one planted. It is a most excellent feed for horses, cattle and hogs.—[S. L. Watkins, Erie Co. N. Y.]

Marketing Apples in N E—According to a leading Mass orchardist this is 62½c p bbl in carloads. He estimates picking 12½c, facing and sorting 5c, heading 2½c, barreling 20c, drawing to car 5c, freight to Boston 13½c, cartage 5c. He also estimates spraying 20c p tree for each time, or 60c for three times, and thinning 5c p bbl.

The Demand for Beans is slack, buyers feeling prices too high. The new crop is moving more freely, but there is no particular accumulation of stocks.

Lifted i. Three Years—The farm was mortgaged for \$300. The first year sales included four pairs steers at \$50 or 200. A son turned in 100 from the winter's logging. Hay and potatoes in spring brought 200 and carried the family through the summer. The \$300 was paid on principal. The second fall a pair of steers brought 60, and 5 tons hay 60. In spring, seven tons hay brought 150, which with 30 earned in the woods made 300; this was applied to the principal. Interest account was 88. The third fall two pairs steers brought 120, and the hay, sold in spring, brought 150. From work in the woods 30 was received. This paid for principal, interest and the mortgage. Home-raised wheat was ground into flour and

hens bought the groceries. Every year potatoes were sold to help along.—[Lyman Abbott, Oxford Co. Me.]

I have been a subscriber to F & H 12 yrs or thereabouts. I have always worked in and around coal mines, but often thought what is the use of me reading farm papers. The way I came to first subscribe was through a neighbor getting up a club. I told him if he was one short he might set down my

name. That year has swelled to 12 yrs and still F & H comes. But I have a greater interest, in reading it than 12 yr ago. The farm that I used to mine coal under 12 yrs ago has been purchased by the coal miner and I must blame F & H for doing it; that is, I kept reading it and saving my wages until I got a farm. The farm contains over 100 a and is generally considered a good one.—[Samuel Edge, Mercer Co. Pa.]

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If you are sick or "feel badly," begin taking the famous new discovery, Dr. Kilmer's Swamp-Root, because as soon as your kidneys are well they will help all the other organs to health. A trial will convince anyone.

Among the many famous cures of Swamp-Root investigated by Farm and Home, the one which we publish this month for the benefit of our readers speaks in the highest terms of the wonderful curative properties of this great kidney remedy. Mrs. Mary Romans, Manchester, Texas, writes: "I write to let you know I am well and owe my health to Swamp-Root. I was so weak in my back that I could sit up but a little while at a time. Had to get up to urinate from seven to ten times through the night; could sleep but a few minutes at a time; would wake so tired I could hardly move; felt like a heavy weight on my chest; feet cold and swelled in day time; headache all the time. I could not keep my mind on one subject more than a few seconds at a time. I would forget what I was talking about. I sent for a sample bottle of Swamp-Root, and since then I have taken six large bottles purchased of my druggist, and am as well as ever I was. I can't thank you enough for the wonderful good your Swamp-Root did for me. I gave Swamp-Root to my little girl. She could not hold her urine. It cured her. Seven bottles cured us both. If you wish to print any of this letter, do so. I remain your friend, and wish you success and long life. May you find rest after your labors are finished."

Jan. 4, 1900. MRS. MARY ROMANS, Manchester, Texas.

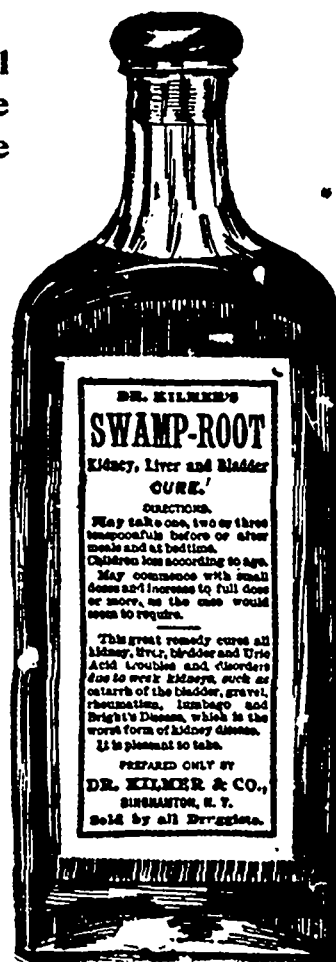
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