Lewiston Orchards Life

AN EXPONENT OF PROGRESSIVE HORTICULTURE AND THE SUCCESSFUL RURAL COMMUNITY

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The Conservation of Bird Life

By Victor Kutchin

This is from the pen of one who has made almost a life study of birds, and especially of their value to the orchardist and farmer. Dr. Kutchin is a resident of Wisconsin, and this article was written for the people of the Badger State, but it seems equally applicable to conditions in Idaho and ten times as pertinent in an orchard community, where the control of pests is a matter of supreme importance. We publish with the consent of Dr. Kutchin.—Ed.

I NSECTS and rodents cause a billion dollar loss annually to America, and birds are the natural check upon these pests, facts, which if admitted, have only to do with a more generous filling of the flesh pots, which by no means should be the last appeal.

I profoundly regret that it should ever be necessary to say to any man: "Spare the robin and catbird, for they have saved you a hundred cherries for every one they have devoured, by keeping down the ravages of parasites that, left alone, will ultimately destroy both fruit and tree." How much more delightful would it be to hear the orchardist say: "I made one of the best trades of my life this morning when I traded a sour cherry for a song of such wondrous sweetness that it brought back my vanished youth and opened heaven at my feet. I had much rather have the singer spared for the song than killed on account of what he had for breakfast.

With people of education and culture I am not willing to admit that other appeal is necessary for the conservation of

"all the throng

That dwell in nests and have the gift of song."

beyond the song itself, but for those who have no ear for music it is necessary to talk worms, caterpillars, and green lice. If any of you are at all curious to know what insects are capable of in the way of fecundity, come and look over my shoulder and take a peek. The hop aphis, developing thirteen generations

in a single year, would, if unchecked to the end of the twelfth generation, have multiplied to the inconceivable number of ten sextillions of the individuals, of which Forbush says, if this brood were marshalled in line, ten to the inch, it would extend beyond the farthest fixed star that has been brought into view, to a point so remote that light from the head of the procession, travelling at a rate of 184,000 miles per second, would require 2,500 years in which to reach the earth. Kirkland tells us that a single pair of gypsy moths, if unchecked, would produce progeny enough in eight years to destroy all the foliage in the United States. The voracity of insect life is as astonishing as its power of reproduction. Many caterpillars consume twice their weight in leaves per day, which corresponds to an ordinary horse eating a ton of hay daily. A certain flesh eating larva consumes 200 times its weight in twenty-four hours. A parallel case to this would be that of a human infant consuming 1,400 pounds of food in one day. Some increase in size 1,000 times in thirty days-a ten pound baby at maturity weighing 80,-000 lbs. The question naturally arises: Who is to take care of these many billions of insects? Shall it be the forester, the agriculturist, or the birds?

There can be but one answer and that was well expressed by that grand man. Professor Bowman, head of the training school at Menomonie, Wis.: "The killing of a single bird is a national, a

continental loss." Have we reason to be proud of a civilization that in the last five years has practically lifted no hand to prevent the ruthless slaughter of countless millions of birds?

"A slaughter to be told in groans, not words, The very St. Bartholomew of birds."

The Incas, called savages by the historians, were certainly in earnest on the subject of bird protection, for they meted out death to any one proved guilty of killing birds in the breeding season. But in Wisconsin, of which we are so justly proud as a progressive state, the spring shooting of ducks is to be again fought out before the legislature. Inca savagery has a reproof for twentieth century civilization, calculated to make a fair minded man want to hide his head. Schools and colleges, women's clubs and churches ought to unite in a common effort to stamp out that lust to kill that we have inherited from some cave dwelling ancestor. So far education has been away from nature instead of an earnest effort to penetrate to the heart of the great mystery of creation. How few there are who occupy more than a single room in the House of Life in which we were intended to live and have our being. The greatest thing in the world is to have that nearness to nature that we can at times hear her voice and understand her language, but whether we listen or not,

"The birds make sweet music for us all In our dark hours, as David did for Saul."

Opinion of Prominent Bond Man

The Lewiston Orchards is the finest proposition I have ever seen and it is hard to realize that this project has been developed to its present condition since I was here five years ago. I believe within the next three years this orchard will become the orchard show place of the world. They talk about their orange orchards in California, but they have nothing to compare with this. In California you will find stretches of fine orchards and you will pass into orchards where weeds have been allowed to grow undisturbed, and there are all

kinds of fences with but little highway improvement. The uniformity of fences, perfect cultivation and miles and miles of scientifically cared for fruit trees is something that will keep Lewiston Orchards distinct from all other orchard projects.—Frank Robertson, of Portland, a recent visitor.

Community Life in Lewiston Orchards

Lewiston Orchards Assembly

The February meeting of the Lewiston Orchards Assembly was devoted to the discussion of hog-raising in the Orchards. Practical talks were given by G. W. R. Peaslee, of Clarkston and by Messrs. L. H. Briggs, C. R. Burns and D. W. Clark of the Orchards. Numerous questions were asked and answered, thus making the meeting an occasion of much practical value.

This was the first of a series of meetings to be devoted to the dicussion of allied orchard industries, which need development. The meeting this month, on March 10, will be for the discussion of the poultry industry in the Orchards. A number of speakers will take part, including Professor O. M. Osborne, of the agricultural department of the Lewiston State Normal School.

The school and literary committee of the Assembly gave a dancing party at the school house on the evening of Feb. 21, at which about 75 person:s were present. Plans are now being made by the committee for a fine literary and dramatic program to be given later this month.

Ladies' Aid Society

The ladies aid society broke all previous records at its last meeting, Feb. 13, when 75 persons were served at the noonday lunch in connection with the all-day meeting. All but eight of the forty eight members were present the full membership being as follows: Mrs. G. E. Ames, president; Mrs. G. G. Ames and Mrs. J. L. Klapp, vice-presidents; Mrs. H. H. Smith, secretary; Mrs. F. B. Mesdames Josiah Gano, theasurer; Butler, J. E. Butler, W. Albrecht, W. H. Bankson, L. A, Blackman, Kate B. Chase, H. A. Canter, R. W. Cram, P. W. Clark, D. W. Clark, A. J. Duffus, W. Eddy, W. French, H. S. Gano, D. H. Guilland, L. C. Gieseker, F. J. Hunt, J. W. Haben, J. Kouwenhoven, Tracy Keedy, N. R. Lee, J. H. Long, F. B. Laing, S. Maxwell, W. Moffitt, R. T. McUmber, S. E. Pickering, H. H. S. Rowell, D. H. Sipes, A. J. Sipes, C. W. Tyler, F. D. Webb, J. B. White, D. S. Wallace, J. H. Wallace, S. W. Whitford, E. Watkins, S. E. Bonnell, Emily Kennedy, M. E. Fuller; Misses Ethel French, A. Rudo'ph and Hattie Whitford.

At this meeting, the refreshment committee consisted of Mrs. L. C. Gieseker, Mrs. J. W. Haben, Mrs. J. H. Long, Mrs. N. R. Lee, and Mrs. W. H. Bankson. The table decorations were appropriate to the Valentine season. A chicken-pie lunch was served. Several piano selections were given by Miss Helen Gieseker.

The next all-day meeting will be held March 13, when the refreshment committee will consist of Mrs. G. E. Ames, Mrs. H. H. S. Rowell, Mrs. D. W. Clark, Mrs. R Pickering, Mrs. C. Tyler and Mrs. J. Kouwenhoven.

The society has recently bought a sewing machine, paid \$15 on the piano, and paid \$20 on its subscription of \$100 toward the church expenses. The society is preparing to give an entertainment, the arrangements for which are in charge of a committee of which Mrs. Walter Eddy is chairman.

Hospital Auxiliary

The Orchards auxilliary to the advisory board of St. Joseph's hospital had a very successful meeting Feb. 20, at the home of L. A. Blackman, the hostesses for refreshments being Mrs. Kate B. Chase and Mrs. H. H. S. Rowell.

The first meeting this month was held March 6, at the home of Mr. and Mrs. A. J. Duffus, with Mrs. John H. Long and Mrs. Walter Moffitt as the refreshment committee. There was a large attendance, the members present being Mesdames L. A. Blackman, P. W. Clark, G. E. Ames, D. W. Clark, A. J. Duffus, W. Eddy, L. C. Gieseker, J. W. Haben, J. H. Long, F. B. Long, S. Maxwell, W. Moffitt, H. H. S. Rowell, S. W. Whitford; Misses Augusta Rudolph Hattie Whitford, Helen Gieseker. Visitors present were: Mrs. W. S. Shearer, Mrs. C. R. Burns, Miss Burns, Mrs. W. H. Bankson and Mrs. L. L. Detrick. Musical selections were given by Miss Gieseker.

The next meeting will be held March 20, at the home of Mrs. G. G. Ames, Sr., with Mrs. John F. Morse assisting.

The Good Times Club

The Good Times Club, or old ladies' club, had a double celebration Feb. 21, at the home of Mr. and Mrs. R. Pickering, it being the occasion of the 46th anniversary of the marriage of Mr. and Mrs. Pickering and being also a celebation of the birth of the "Father of his country," the anniversary of which came on the following day. The decorations included flags and hatchets and some very toothsome refreshments were served. In the resulting joyment, the club proved true to name. All members were present including Mrs. J. L. Klapp, Mrs. S. E. Bonnell, Mrs. R. Pickering, Mrs. Emily Kennedy, Mrs. G. G. Ames, Mrs. H. H. Smith, Mrs. Walter Eddy, Mrs. Josiah Butler, Mrs. F. B. Gano, Mrs. H. S. Gano, and Mrs. M. E. Fuller; while Mrs. G. Maxwell, Mrs. F. J. Hunt and Mrs. S. W. Whitford were present as visitors.

CHANGES IN SCHOOL HOURS

Upon request of the school affairs committee of the Lewiston Orchards Assembly, and by approval of Supt. F. H. Huntworth and the teachers of the school, the school hours in the Orchards school will be changed, beginning March 10, so that the first grade and chart class pupils will have but one session, from 8:30 a. m. to 12:00 m., and the second grade pupils will have one session from 8:30 a. m. to 12:30 p. m. Each will have a ten-minute mission. The pupils of the fourth, fifth and sixth grades will have two sessions, one from 8:30 a. m. to 12:30 p. m., and one from 1:30 p. m. to 2:30 p. m. This will give all of the pupils more time at home without shortening the school hours, and it is thought will be better for all concerned.

Word came too late for mention in the Life last month of the death, Feb. 9, at the Good Samaritan Hospital, in Portland, of Chas. A. Ruddy, civil engineer of the Wisconsin Logging and Timber company. He is mourned here by a number of good friends whom he made during a visit of several weeks in the Orchards in 1911. Mr. Ruddy was the owner of a fine ten-acre tract in the Orchards. Elsewhere in this issue appears a sketch of his life.

Lewiston Orchards Life

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For the information and aid of orchard owners here and elsewhere,

H. H. S. ROWELL, Editor.
W. S. THORNBER, and CHAS. A. COLE,
Horticulturists, Contributing Ed.tors.

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FAVORABLE FOR FRUIT

Observers of many years' experience in the Lewiston-Clarkston valley predict for the present year one of the largest fruit crops ever known. This estimate is based on the favorable conditions of the winter just past. With a prolonged period of low average temperature, but no extremes, and with an abundance of snow that came when there was little frost in the ground and remained throughout the coldest period, all fruit trees and plants were kept dormant, with no frost injury even to the most tender growth. With the ground but slightly frozen, the moisture from the melting snow sank at once into the soil, which is well saturated and fitted for successful cultivation.

This situation is in favorable contrast with that of some other important sections of the country. In California and Colorado the unusual severity of the winter has not only destroyed the tender fruit buds but has entirely killed many fruit trees. In the former state the loss has been in citrus fruits and in the latter the peach crop has suffered. In the eastern portions of the country, a dangerous mildness prevailed during the early portion of the winter which encouraged the awakening of bud life, and this was followed by severe weather in some localities which has greatly endangered the fruit crop.

While in most fruit regions the greatest danger period is yet to come, in the Lewiston-Clarkston valley, and especially in Lewiston Orchards, comparatively little fear is felt. In this district, it is not believed that late spring freezes will ever be severe enough to warrant smudging operations, as the altitude of the Orchards is sufficient to delay the period of bloom until danger from frost is past. It is not believed that the apple

crop will ever be endangered from frost in Lewiston Orchards, while the most likely effect of a freeze on the peach trees is a desired thinning of the fruit.

Another advantage of the prolonged winter is the delay in the development of insect life and a conse quent shortening of the period in which they must be combatted. This district is yet comparatively free from orchard pests and diseases, and the general disposition of orchardists is to co-operate with the Orchards management in the work of orchard sanitation. It can thus be seen that many causes unite to make the fruit outlook one of promising prospects for the coming season.

LANDSCAPE BEAUTY

Lewiston Orchards residents are peculiarly favored in the beauty of their natural surroundings. The panorama of landscape that spreads out on every hand affords a delightful variety of elements of never-failing enjoyment. In every direction can be seen hills or mountains, many of the latter snowcrowned during a greater partion of the year. The mountain peaks of three different states can be viewed at the same time. In the lower valley, more than five hundred feet below the orchards, nestle the cities of Lewiston and Clarkston, at the junction of the Snake and Clearwater rivers and beyond rise the picturesque bluffs which border the latter stream. Forests, fields, mountains, rivers, cities and orchards unite to form a picture of surpassing beauty.

With such a scenic setting, Lewiston Orchards are fitted to form a gem of landscape art prepared by the hand of man. With the systematic arrangement of the district, harmony of development in landscape effects is encouraged. The soil and climate favor luxurious growth of roses, shrubs, vines and trees of great variety. The irrigation system affords facilities for the development of all landscape features, making possible the transformation of the entire orchard district into a park and garden region, without detracting from the features of horticultural utility.

Now is opening the season of landscape development, and every orchard owner can do a worthy part in the work of improvement. Planned from the beginning and carried on in a systematic manner, under expert advice afforded in this district, every orchard home can be made a bower of beauty that will not only add to the delights of life but greatly increase the money value of all orchard property. While excelling in important horticultural advantages, Lewiston Orchards has a very valuable asset in its landscape beauty.

UNITED FOR ACTION

Of most important bearing on the future success of the district was the recent action of resident stockholders in the Lewiston Orchards Association by means of which the organization will be put upon a sound financial footing and provision made for further extension of its activities. The spirit shown was one of the utmost harmony, indicating confidence in the management of the body and faith in the purpose of the co-operative work for which it was established.

The fact that such a feeling prevails in the face of a most trying initial season speaks volumes for the intelligence and far-seeing wisdom of those who have united for the working out of the fruit-marketing problems of the district. It means that the organization will be supported by the growers and carried on to permanent success, in accordance with the principles that prevail in the leading fruit districts of the Northwest.

That in union is strength is a truism that is especially applicable in the fruit industry. While united action has heretofore been an advantage in such matters, it has now become a neecssity for the insurance of success in commercial orcharding. An organization movement covering the entire Northwest, and involving interests aggregating \$50,000,-000 in value, is now in progress; and to take future advantage of this it is essential that local districts have strong organizations also. It seems assured that Lewiston Orchards will now be prepared to do its part in the systematic handling of the orchard products of the Northwest.

HEALTH, AN ORCHARD ASSET

Estimates of orchard life based on its commercial returns may vary according to locality, but the fact that good health is one of the common assets of the fruit-grower's environment is a powerful argument in favor of such a life. It is not in vain that thousands of business men have left the cares and crowds of the great cities and have found

relief from mental and bodily ills in the free air of horticultural pursuits. Many have thus secured a new lease on life and added many useful years to their existence. Many have delayed such a change until too late for permanent benefit and many have fa'len victims to the modern Moloch of city business life before reaching the promised land of orchard health and happiness. It is not idleness and ease, that the orchard life promises, but opportunities of useful,

healthful activity, and in this fact lies one of its most important elements of value.

DIVERSIFIED ORCHARD INDUSTRIES

Recent practical discussion by the orchardists of the hog-raising industry, and the meeting to be held this month for the consideration of poultry-raising, are indications of the trend of sentiment as to the diversification of orchard industries. Hogs, cows, poultry, bees, and other animal adjuncts, suited to a horticultural district will afford by-products that can be made a means of ample support for orchard residents, not only during the period of orchard development, but even after the orchards come into bearing. Thus the orchard trees will afford a clear profit, and an occasional loss will work no special hardship.

Interesting Replies to Questions from the Correspondence Course

Q UESTION,—In what three general ways does tillage affect the

Answer,—Tillage kills weeds, conserves moisture and renders unavailable plant food available. (M. C. Hinshaw.)

Question,—When and how are grass or clover mulches beneficial? When injurious?

Answer,-When trees are making undue growth at the expense of fruit production, a grass or clover mulch is beneficial. A mulch as above named is always valuable on hillsides too steep or rocky for cultivation. Tillage, as a rule, will generally be found more satisfactory, but the clover mulch system is becoming more popular in bearing Orchards of the Pacific Northwest each year. Where the soil is exceptionally fertile and moist the mulch system is sometimes found satisfactory. One of the most serious disadvantages is the girdling during winter, of the trees by mice, which live in the grass and another is the tree roots grow too closely to the surface unless plowed occasionally. (M. C. Hinshaw)

Ouestion.—Discuss the intercropping of young orchards.

Answer,-Crops may be raised between the rows of trees until three years old or in some cases up to the time of bearing. Wheat should not be sowed as it draws too heavily on the moisture. A cultivated crop in general should be used.. Vegetables are satisfactory, corn and potatoes are less desirable, as they are harder on the soil, the former having a tendency to unduly shade the young trees and should therefore be planted not nearer than five feet to begin with. As the trees grow older, nothing should be planted nearer than four feet from the ends of the branches. (M. C. Hinshaw)

Question,—How does a cover crop improve the soil?

Answer,—The cover crop takes up surplus moisture, al'owing the young wood to ripen before cold weather, furnishes nitrogen or humus according to crop raised, holds soil together preventing erosion during thaws and spring freshets and protects the roots of trees from winter cold. (M. C. Hinshaw.)

Question,—Name in order of importance and discuss briefly the unit factors of a commercial variety.

Answer,—Important factors of a commercial variety are:

- Prolific, since the value of a crop is proportional to the yield.
- Look well, since fruit that is not well co'ored and of pleasing appearance will not sell.
- Keep well and ship well, since the opportunity for marketing is proportional to this factor.
- 4 Quality, since flavor, etc., create demand for a given variety, other things being equal.
- 5 Freedom from (lisease, since susceptibility to disease means more care, i. e., watchfulness, spraying, etc. and even then crop or trees may be lost.
- Interpollination. Where trees not self-fertile, as some apples and pears, varieties must be chosen to complement each other.
- 7. Time of ripening. Where a number of varieties are grown, they should be chosen so as to demand labor for thinning, spraying, picking, etc.., at different times. (M. G. Lloyd.)

Question,—What is a filler tree? Name and discuss its advantages as well as disadvantages.

Answer,—A filler is a quickly maturing tree planted between the main varieties in order to more fully utilize the soil in the early years. It should be cut down as soon as the main varieties have grown large enough to need the space. If so cut, its only disadvantage is to slightly impede cultivation; but there is always a tendency to retain it too long for the sake of immediate returns in increased yield. Its advantage is in giving greater returns than could be obtained from the main varieties alone. (M. G. Lloyd.)

MR. STEDMAN INJURED.

Mr. S. B. Stedman, sales manager of the Orchards Company, and a man well known to many of the readers of Orchards Life, was quite severely injured in an automobile accident February 24th, and as a result was confined at St. Joseph's hospital for ten days.

At the time of the accident Mr. Stedman was in the front seat of the car, beside the driver, one of the Company's mechanicians, who was trying to locate some little engine trouble. In taking the curve at the foot of the 9th street grade leading from the business to the residence section of the city, skidded into the embankment and Mr. Stedman was thrown out, striking on his head. He received some cuts on face and scalp, which necessitated the taking of 33 stitches. This work was done while Mr. Stedman was in a perfectly conscious condition by Drs. Hurlbut and Morris. Mr. Stedman also sustained a fracture of the right wrist. He probably owes his life to his perfect physical condition and strong constitution, and to the promptness with which his wounds were treated.

He was back at his desk on March 10th, but it will be some weeks before he is again able to drive visitors through the Orchards in the big red car.

Joys of the Apple-Eater, from Youth to Age

(From Chapter 7, "The Apple," in Volume entitled "Winter Sunshine," by John Burroughs. By permission of the Publishers, Houghton, Mifflin & Co.)

THE Tallow apple has an unctuous feel, as its name suggests. It sheds water like a duck. What apple is that with a fat curved stem that blends so prettily with its own flesh—the Wine apple?

Do you remember the apple hole in the garden or back of the house, Ben Bolt? In the fall, after the bins in the cellar had been well stocked, we excavated a circular pit in the warm mellow earth, and, covering the bottom with clean rye straw, emptied in basketful after basketful of hardy choice varieties, till there was a tent-shaped mound several feet high of shining variegated fruit. Then, wrapping it about with a thick layer of long rye straw, and tucking it up snug and warm, the mound was covered with a thin coating of earth, a flat stone on the top holding down the straw. As winter set in, another coating of earth was put upon it, with perhaps an overcoat of coarse dry stable manure, and the precious pile was left in silence and darkness till spring. No marmot, hibernating under ground in his nest of leaves and dry grass, more cosy and warm. No frost, no wet, but fragrant privacy and quiet. Then how the earth tempers and flavors the apples! It draws out all the acrid unripe qualities, and infuses into them a subtle refreshing taste of the soil. Some varieties perish, but the ranker, hardier kinds, like the Northern Spy, the Greening, or the Black apple, or Russet, or the Pinnock, how they ripen and grow in grace, how the green becomes gold, and the bitter becomes sweet!

As the supply in the bins and barrels gets low and spring approaches, the buried treasures in the garden are remembered. With spade and axe we go out and penetrate through the snow and frozen earth till the inner dressing of straw is laid bare. It is not quite as clear and bright as when we placed it there last fall, but the fruit beneath, which the hand soon exposes, is just as bright and far more luscious. Then, as day after day you resort to the hole, and, removing the straw and earth from the opening, thrust your arm into the fragrant pit, you have a better chance

than ever to become better acquainted with your favorites by the sense of touch. How you feel for them, reaching to the right and left! Now you have got a Talman Sweet; you imagine you can feel that single meridian line that divides it into two hemispheres. Now a Greening fills your hand; you feel its fine quality beneath its rough coat. Now you have hooked a Swaar, you recognize its full face; now a Vandevere or a King

smells them out and makes short work of them.

In some countries the custom remains of placing a rosy apple in the hand of the dead, that they may find it when they enter paradise. In northern mythology the giants eat apples to keep off old age.

(Continued next month.)

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The attractive bungalow of W. S. Shearer, who has just returned from New York for permanent residence

rolls down from the apex above and you bag it at once. When you were a school-boy you stowed these away in your pockets and ate them along the road and at recess, and again at noontime; and they in a measure, corrected the effects of the cake and pie with which your indulgent mother filled your lunch-basket.

The boy is indeed the true apple-eater, and is not to be questioned how he came by the fruit with which his pockets are fillled. It belongs to him, and he may steal it if it cannot be had in any other way. His own juicy flesh craves the juicy flesh of the apple. Sap draws sap. His fruit-eating has little reference to the state of his appetite. Whether he be full of meat or empty of meat, he wants the apple just the same. Before meal or after meal it never comes amiss. The farm-boy munches apples all day long. He has nests of them in the haymow, mellowing, to which he makes frequent visits. Sometimes old Brindle, having access through the open door,

RECEPTION TO MRS. MORSE.

Mr. and Mrs. John F. Morse recently returned from a winters' visit with relatives at Shiocten, Wis., where they experienced a winter unusually mild for that locality, (fifteen below zero) but they are glad to be in the orchards again. On the afternoon of February 28, Mrs. Morse was given a reception at the home of Mrs. G. G. Ames, on Burrell avenue, with friends and acquaintances in attendance as follows: Mesdames G. G. Ames, Josiah Butler, G. E. Ames, L. A. Blackman, Kate B. Chase R. W. Cram, P. W. Clark, Walter Eddy, F. B. Gano, H. S. Gano, M. E. Fuller, J. W. Haben, J. Kouwenhoven, J. H. Long, S. Maxwell, W. Moffitt, S. E. Pickering, H. H. S. Rowell, C. W. Tyler, S. W. Whitford, J. L. Klapp, H, C. Jackson; and Misses Augusta Rudolph and Miss Hattie Whitford.

Spray if you don't want to harvest a crop of bugs.

Now Is the Time to Clean Up the Raspberry Patch

By Chas. A. Cole, Horticulturist.

D URING the month of March, berry growers should put their plantations in ship shape for the season's crop. This work will consist of a careful pruning, cleaning up of trash and a thorough cultivation.

If the grower has given his plants the two summer prunings required, that is, pinching back the new shoots at a height of two to four feet, and then removing the old fruiting canes just as soon as the crop is harvested, the task will be very simple, as it consists of thinning out the clumps to eight or ten of the most vigorous canes and heading back the side branches to about one-half of their length. Summer pruned plants of the red and black varieties will receive the same pruning at this time.

If the plants have not been pruned during the summer the reds must be carefully thinned, removing all of last year's fruiting canes, and leaving only the number of new canes that you think your soil can support to the best advantage. Head back the remaining canes to a height of four or five feet and cut back side branches to one-half of their length. The blacks are pruned similar to the reds except they are usually headed lower.

After the pruning is completed, go through the field and collect all prunings and burn them. This will get rid of a lot of insect eggs and various diseases that are hibernating in the old canes for the winter.

A cultivation must be given as soon as

the soil is dry enough to work without injury. A one horse vineyard plow is a very satisfactory tool for stirring up the soil. If the plow is sharp it will cut off a great many of the suckers common in This plowing red raspberry fields. should not be over three inches in depth near the plants to four or five in the center of the row. Throw the dirt to the center of the row then work back to the plants with cultivators and clod mashers. A plan that insures stirring all the soil in the center of the row is to run a furrow down the center then coming back up the same row, plowing the drift right back into the first furrow. This makes two trips in the same row for the first furrow but it pays as it does not leave a hard strip up the middle of the row.

Home Happenings

E. T. Cairns, of Westfield, N. J. recently spent a day looking over the Orchards and his ten-acre tract in Block 141. Mr. Cairns had never seen his property before, but, although the time of his visit was most unfavorable, owing to the muddy condition of the roads, and the dormancy of the trees, he expressed himself as greatly pleased with his investment and selected the spot on which to build a house when he comes here to live.

The residents of the Orchards welcome Mr. and Mrs. John Spetch, of Minneapolis, who arrived Feb. 26, to make their home in the Orchards. Mr. Spetch owns a fine ten-acre tract on Powers avenue, about a mile east of the Relief reservoir. Until arrangements can be made for building a home of their own, they will occupy the cosy bungalow of David A. Smith, on Fifth street and Preston avenue. Mr. Smith remains as a boarder.

Mr. and Mrs. W. S. Shearer have arrived from New York and are occupying their home on Bryden avenue. They now expect to become permanent residents. Mr. Shearer is recovering from a recent attack of pleural trouble.

One of the welcome and interested visitors last month was J. F. Simpson, of Prindle, Wash., an owner in the Orchards.

Harry H. Tondevold's Rangers' class of boys won the contest for largest attendance and collections, in proportion to membership, in the Orchards Sunday school, the three other competing classes being the Brotherhood class, F. D. Webb, teacher; Philathean class, Mrs. A. J. Duffus, teacher; and the Bible class, J. B. White teacher. The winning class will be given a supper by the other three, in the near future.

Mrs. L. A. Blackman went to Spokane Feb. 28, to officiate on the following evening in the installation there of the first lodge of the Daughters of Isabella, (women's auxiliary to the Knights of Columbus) to be instituted in the State of Washington. Mrs. Blackman is grand regent of Cataldo court, the Lewiston branch of the order. Among other officials who accompanied her was Mrs. C. L. McDonald, prophetess. They returned on the evening following the installation.

A valentine social was given by the girls' Philathean class at the church on the evening of Feb. 15. The program included a piano duet, a vocal solo, by Nora Lee; reading, D. A. Smith; piano solos, Paul White and Helen Gieseker; recitations, Wayne Jackson and Dinah Lee; vocal duet, Miss Hattie Whitford and Mrs. Griffin; and a song by the quartet. Decorations were appropriate to the occasion and a dime lunch was served.

Z. A. Johnson has extended the time 45 days, or until April 15, for the securing of the \$100,000 subscription

to the railroad that he proposes to build between Lewiston and Vollmer. Meanwhile, the survey for the road is being completed. A meeting of farmers interested was held March 2, at the upper Tammany school house, and another meeting will be held there March 16.

R. G. Bai'rey's Western Poultry this month has an issue of 48 pages, being three times as large as was the first number six months ago and the circulation having grown from nothing to 3,000 at the present time. It is one of the good things of the Orchards.

The people of the Orchards rejoice with those of Lewiston in the passage of the free bridge bi'l and in the appropriation of \$1,200,000 for the completion of the Celilo canal, both of which mean much for the future development of this vicinity.

The first bluebird to be seen this season in the Orchards was welcomed February 16, as a sure sign of spring. Though a month or more late here, it was about two months earlier than it is usually seen in Minnesota.

Glenn Sewell, formerly a school boy in the Orchards, recently passed with high honors an examination held before the Washington state pharmacy board in Seattle, being one of the 14 to pass out of the 61 applicants.

L. T. Cushing, of Glendive, Mont., and L. F. Stewart, of Hastings, Minn., were among the visitors last month.

One of the Attractive Homes in Lewiston Orchards

THE accompanying cut presents a view of one of the beautiful homes in Lewiston Orchards, that of C. W. Hall, on Powers avenue and Twelfth street. At the present time Mr. and Mrs. Hall are in Tucson, Arizona, and

their home is occupied by Mr. and Mrs. P. W. Green.

The building is a bungalow, of the type familiar in the Orchards. It is a structure of ten rooms and cost about \$6,000. It stands in an orchard of thirty acres, with a wide lawn and ornamental

home grounds.

The orchard trees are four years old, being chiefly apples, with peach fillers, but several acres are planted to pears only. The home commands an extensive and beautiful view of the surrounding country.



Residence and grounds of C. W. Hall, on Powers avenue and Twelfth street, Lewiston Orchards

Practical Points About Hog-Raising in the Orchards

A T the regular meeting, Feb. 10, of the Lewiston Orchards Assembly, the subject of "Hog-Raising In The Orchards" was discussed.

G. W. R. Peaslee, who was an invited guest from Clarkston, took occasion to congratulate the people of the Orchards on the interest shown for the development of the community, and advised them to be sure that no dissensions arise. He declared that he believed that hog-raising as a by-product of the orchard industry was destined to become a very important factor in making profitable the orchards, nothing being more effective than a few hogs in the orchards. He then gave an amusing account of the way in which he accidentally got started in the hog business in connection with his orchard home in Clarkston. In the se'ection of stock he advised hog-raisers to go a little more on breeding than on the individual. The marketing, he thought, should be done through a community association, and cooperation even in feeding might be followed. Much food otherwise wasted can be fed to hogs. Many hogs can be kept on alfalfa grown between the trees. at the same time fertilizing the orchards.

L. H. Briggs, who has 160 acres in the Orchards, and is engaging in hograising on a large scale, explained that he had gone into the hog business because it was a good way in which to market some products of the orchards. He advised all to cooperate, and spoke of his recent visit to North Yakima, Wal'a Walla and Sunnyside districts on a tour of investigation, having found the advantages here superior. He hoped to have developed a community interest in the hog-raising industry here where hogs are free from disease.

D. W. Clark, one of the pioneer residents of the Orchards, gave a very instructive account of his observations in hog-raising. He declared that there was no danger of getting too good stock. as it costs as much to feed a poor hog as it does to feed a good one. He found that twenty hogs could be raised on an acre of irrigated alfalfa.. The breeding should be done so as to have pigs from the first to the fifteenth of March, so that hogs could be brought to a weight of from 225 to 250 pounds in time for market, weaning at two and a half months, it costing about five dollars to raise one hog. Middlings and shorts he found the best feed for small pigs. He had found that a division of the alfalfa pasture in three parts was better than two, as it could then be fed when the alfalfa was three to four inches high. The breeding period is 112 days. For pork hogs, one litter is preferable. Wood ashes are good for worms, and salt should be used in the slops. Trees could be protected with chicken wire placed around them on small posts, the cost being from four to six cents per tree.

C. R. Burns, an orchardist who spoke from practical experience in the hog industry, said that the primary object of hog-raising here is to make money. In feeding hogs he had used alfalfa, peaches, potatoes, canteloupes and other products of the orchard that might otherwise have been wasted, and had found that the hogs could be handled to profitable advantage.

The general conclusion of the meeting was evidently in agreement with that expressed by Mr. Peaslee, that if properly taken care of and handled, hogs would be the best by-product of an orchard district

Lewiston is to have a Chautauqua season, probably in June.

A boy was added to the family of Mr. and Mrs. Harry Tondevold, March 4.

Mr. H. L. Powers is spending several weeks in an eastern trip, visiting the eastern offices of the Orchards company.

An effort is being made to consolidate all telephone interests in the Ororchards and a meeting for such purpose was held March 6.

Life and Death of Charles A. Ruddy

I N the death of Charles Alfred Ruddy at Portland on February 9th, there passed away a man whose whole life was a testimony to the triumph of character over environment.

In his varied capacity as civil engineer, prospector and lumberman he had seen much of the life in the outposts of civilizaton. He figured in the first rush to Nome and in numberless other stampedes for gold all over the north where the primal instincts of men hold sway. To him the sordid side of mining camp life held no attactions. His pick and his camera were his companions and plodding on over fields of snow or arid plains he kept the cleanness of heart and the lofty ideals of his youth.

Mr. Ruddy was born in Milton, Ontario, forty-two years ago, and even as a child betrayed the passionate love for nature which swayed his life later on. In his native country there was not a foot of woodland for miles around with which he was not famliar as a boy. Curious stones and Indian relics which had lain unnoticed by two generations of white settlers came naturally to his hand.

While still in his teens he came West and after some time spent in prospecting, he entered the State College at Pullman, Washington, and later enrolled as a student in the University of Washington at Seattle, specializing in geology During the last two years of his student course there he acted as assistant in geology and was managing editor of the college annual in his junior year.

In 1901 he graduated with an A.B. degree and immediately set out for Nome, Alaska. Here he had many thrilling adventures, but did not find gold.

Upon his return he took a post graduate course in Leland Stanford University in California and then followed several years of prospecting before he entered the employ of the Wisconsin Logging and Timber Company at Oak Point, Washington. Here as civil engineer he surveyed railroads and built bridges, and besides cared for the education of the children and interested himself in the welfare of the whole camp.

Through all his contact with the rougher sides of life, he never lost the purity of soul and the quiet dignity and refinement of word and action which had always been his.

He had been brought up in the Methodist church and under the teachings of a devoted Christian mother, and though modern Bible criticism affected his faith somewhat for a number of years, he came back to the old simple trust and died resting on the old fundamental truths.

It was a rare pleasure to walk in the woods in his company for he combined the unerring instincts of the practised woodsmen with the knowledge of the expert geologist, and to him every plant and every stone told its story.

His wonderful photographs of the woods adorn the walls of every home in the camp. He took hundreds of them along the Columbia river and he gave them away on all sides. Many of them have been used as illustrations in magazines and others are of rare value.

He made friends easily and held them forever. His strong lovableness won the little children and the people who needed a friend.

It was only natural that the Lewiston Orchards should appeal to a man of this character. He took great pleasure in his tracts here and was looking forward eagerly to the time when he should make Lewiston his home. It was not to be. On Christmas day he was hurried to the Good Samaritan hospital at Portland from the camp, seriously ill. For a while he responded so well to the treatment that he was allowed to leave the hospital and was even advised to come to Lewiston for change and rest. He did so but arrived ill and in a few days was a patient in St. Joseph's hospital. His case puzzled the physicians here and the Sisters took him back to Portland. His sister from Ontario, Canada, came to him and four days later he died from the effects of a growth on the brain. He was buried in the West, which he so much loved, in River View Cemetery at Portland.

Men, women and children came from the camp seventy miles away to look on the face of the man whom they loved and who had been their friend.

FAVORED BY COMPARISON

Mr. Robert A. Foster of the Lewiston-Clarkston Improvement Company, a few weeks ago received a letter from Alexander Hutchins of Cambridge, Mass., relative to a trip he took through the Northwest last fall. He makes the following comments and comparisons concerning the Lewiston-Clarkston country:

"After leaving Lewiston-Clarkston I visited North Yakima. I found the city itself very pleasant, with good accommodations of all kinds. The out-lying country I did not like as a place of residence. It is dreary and desolate. As a place for raising apples, however, I formed a favorable impression. The trees were fully as far advanced as trees of the same age at Lewiston-Clarkston,

and I saw many fine orchards. But there was lacking the consistency of development which is so conspicuous around Lewiston; and the climate, freedom from dust, (comparative of course), superior water system, (i.e. no open ditches), and community spirit of the Lewiston-Clarkston valley, make the latter a more deirable place of residence. I spent an entire day of ten hours riding through the valley of the Yakima with one of the most prominent apple growers and shippers of that district, and learned many things of interest. As an orchard community, however, the Lewiston-Clarkston valley is in a class by itself.

"I went from North Yakima to Hood River where I saw the finest individual orchard of my experience. As a unit I still prefer Lewiston-Clarkston, however. I hope though that the latter place will copy Hood River in its standard of cooperation, honest packing and shipping."

LIESURE HOUR CARD CLUB.

The Liesure Hour Card Club closed its season March 4, in a meeting at the home of Mr. and Mrs. Walter Eddy, concluding a series of six meetings, one at the home of each of the following couples: Mr. and Mrs. L. A. Blackman, Mr. and Mrs. L. S. Gieseker, Mr. and Mrs. G. E. Ames, Mr. and Mrs. S. W. Whitford, Mr. and Mrs. F. B. Gano, Mr. and Mrs. Walter Eddy. The game was that of "500" and the ladies were opponents of the men, the latter winning by 23 points. The winners are to be banqueted as the guests of the losers.

The Yellow Newtown—Greatest Export Apple

THE Yellow Newtown apple was the first American apple to attract attention in Europe, and while its origin does not date back as far as seve all other varieties it probably is known by more names than any other variety in cultivation. A recent list of varietal names and combinations gives the Yellow Newtown apple twenty-four distinct names, however, the two, Yellow Newtown and Albemarle Pippin , are better known than all of the other names together and of these two the simpler, Yellow Newtown, is the far more preferable.

The Yellow Newtown originated prior to 1759 on the estate of Gersham Moore in Newtown, Long Island, the original tree surviving until about 1805 when it died from excessive cutting of scions for top-working and propagation purposes.

The Yellow Newtown variety is considered the greatest export apple grown. It is popular in all foreign markets and generally brings the highest prices paid for standard varieties of apples. It is a reasonably early bearer, a heavy biennial cropper and the friut hangs well to the tree. It ships well and keeps perfectly in ordinary storage until March or April and in cold storage until May or June. It is easily the best of our very late sorts, and gives to us a crop that can be depended upon without fail for fancy market purposes.

During the first year of the reign of Queen Victoria of England, she was presented with several barrels of this variety and was so delighted with the perfect flavor and excellence of the fruit, that she had the small tax removed from the Yellow Newtown which then existed on all imported apples.

Since that time the Yellow Newtown has been growing in constant favor with all English peoples, as it gives them exactly what is desired in a fancy dessert apple.

While the highest grades of this variety can be grown only in a few districts of the United States, yet the young trees on the Lewiston Orchads, during the past year, demonstrated beyond a doubt that this district is to be one of the favored few for the production of this variety.

Why make the same mistake thousands of others have and attempt to grow a dozen to fifteen common varieties when it is possible to produce a variety of this class of fruit?

C. S. Jacobs, an orchard owner who lives at Kenosha, Wis., says in a recent letter: "I look forward eagerly

selves as better than ever satisfied with Lewiston Orchards.

Arthur F. Lewis, who expects to build a residence in the Orchards this season, has lately formed, with others, an incorporation, the Michigan-Idaho Fruit Land Company, of which he is secre-



Yellow Newtown Pippin Apple Tree, five years old, Lewiston Orchards

for each issue of Lewiston Orchard Life as it is so bright and full of just the right kind of news. Best wishes for the success of the entire Orchard movement."

Mr. and Mrs. J. E. Butler and family arrived home from Fowler, California, March 7. They express them-

tary and treasurer, with a capital stock of \$21,000. They have purchased forty acres in block 116, directly east of the headquarters camp, and will operate it as a commercial proposition.

The arrival of a son is reported at the home of Mr. and Mrs. Chas. Foley, March 6.

Appreciation of the School

The winter session of the Lewiston-Clarkston School of Horticulture closed on February 14th, on which occasion the student body expressed its appreciation of the work done for the school by the unanimous adoption of the following resolutions:

Resolved by the students of the Lewiston-Clarkston School of Horticulture, on the conclusion of the second annual winter session of the school:

That we hereby express our sincere appreciation of the faithful, kindly and efficient efforts of Professor W. S. Thornber, Director of the School and of the work of his several able assistants in class-room, laboratory and field demonstrations;

That the school has not only fulfilled but exceeded our early expectations of its beneficent possibilities as an institution for practical training work in modern, progressive horticulture;

That it is our firm conviction that the school has made a distinct advance along the lines of practical horticultural education; that on the broad highway of fruit-growing we have been afforded valuable information as to the best kinds of orchard products; that we have traveled with pleasure and profit the important avenues of nursery practice, small fruits and vegetable gardening; that we have had pleasant, helpful hours on the pathway of plant pathology, animal husbandry, soil physics and chemistry; that we have been helpfully warned against pitfalls and dangers of plant pests and diseases; that we have been taught by practical demonstration in the fields along the way that the horticultural educational tree must be carefully planted, properly pruned, thoroughly sprayed, well cultivated and nurtured and intelligently top-worked; that there is no forbidden tree in the horticultural garden, if it is wisely placed, and its fruit properly picked, packed and distributed; that we have learned the need of utilizing the by-products of all orchard opportunities; that we have been feasted on apples of golden orchard precepts, on peaches, pears, prunes and plums practical common sense, on cherries of correct principles and on small fruits of intelligent application; that it is our hope and earnest wish that the work of the School shall continue as a permanent scientific factor of future success in the horticultural fields of the Northwest.

There seems to be an absolute certainty that Lewiston, Clarkston, Asotin and Lewiston Orchards, as well as the entire back country, are going to be supplied with railroads. This would indicate that there will be a season of development here that has long been dreamed of by the Lewiston people.—Tom Richardson, of Portland, a recent visitor.

A quartet of orchardists, Messrs. R. N. Wright, J. B. White, Geo. H. Banaka and F. D. Webb, have recently formed

A Cold February

The past month was the coldest February, since the weather station was established thirteen years ago, and probably for some years previously, the mean temperature being 27 degrees, or 8.2 degrees below the normal of 36.2 The snowfall was heavy, being 14.2 inches, which, added to the 23.4 inches in January and the one inch in December, makes a total of 38.6 inches or more than three times as much as the normal. Despite the low average, there were no great extremes of temperature and conditions were favorable for fruit trees.



Residence of P. H. Mullarky, corner Sixth street and Burrell avenue, Lewiston Orchards

a strong firm, the Lewiston Security Company, taking over the real estate and insurance business of Mr. Wright. All of the members have had previous experience in these lines and the combination should be a most effective one.

Mrs. J. B. White has just returned from a visit with friends at Seattle. Mr. White met her at Spokane on the way home.

An eight-pound boy came as substitute for Cupid, on the eve of St. Valentine's Day, to the home of Mr. and Mrs. Tracy Keedy.

The Y. P. S. C. E. will give a free social with refreshments, at the church March 14.

Mrs. Storey Buck has returned from a visit to California.

Don't permit a tree of a worthless variety to take the place of a valuable variety.

DO AND DON'T

Be sure to eliminate the loafers.

* * * *

Topwork all trees not recognized of commercial value.

Don't cut off the fruit buds if you want your trees to bear fruit.

Be sure to prune, even though you pruned last year and the year before that.

Don't cultivate when the soil is sticky but be sure to start cultivation just as soon as the soil is ready to work.

* * * * *

Spring is the wrong time of the year to do extra heavy pruning. Better prune moderately now and do some of it in August and thus avoid the crop of water sprouts.

Grape-Growing in the Inland Empire

By Robert Schleicher. (Continued from last month)

IN reviewing the possibilities of grape growing in the Inland Empire, we must not overlook the humble and much despised Sweetwater, and I am willing to go on record with the statement that any locality that can grow a good Sweetwater is a pretty good grape country, because after all there is no better eating grape than the Sweetwater. Not the small, watery and acid grape which is the first one to be sent to our markets (and which ought to be called Sourwater) but the same grape when it is allowed to hang on the vines a month or two longer, when it becomes golden colored, firm, crisp and sweet.

Nor do I refer to the particular variety, strain or subvariety planted mostly on this coast, but to the whole Chasselas variety of grapes, which range in color from golden yellow to rose color. I have some of these in my experimental vineyard, which, if allowed to hang until October (while they are ripe a month before that) always bring forth the verdict from visitors "Best grape I ever tasted in my life," after they have feasted 'heir eyes, more than their palate upon the large and more attractive of the commercial varieties. So the time may come when the consumer in our markets becomes more critical and will buy for quality and not for appearance only, that varieties will be found out of a list of 1,500 listed varieties in Europe, adapted to the soil and climatic conditions of many parts of the Northwest which are not now considered grape localities and those places, if they can grow a good grape of the Sweetwater variety, and not Tokays and Hunisas, can console themselves with the knowledge that more than threefourths of the grape-growing countries of Europe grow nothing but Chasselas, are well pleased with them, and find a ready market for them in cities where all the larger varieties from Southern countries come in competition with them.

Nine-tenths of the grapes consumed in Paris, where grapes are part of the daily diet for rich and poor alike from September to December each year, are Chasselas, and this after hundreds of years of experience with grapes and hundreds of varieties to be chosen from.

But before the best selection of varie-

ties adapted to the different localities can be made, it will require the trying out of many varieties, and this will take years and years if left to individual planters, who mostly have neither the means nor the time nor the qualifications to do this efficiently. This brings back the thought of how unfortunate it is for the grape industry of the Inland Empire that the exigencies of politics and other reasons have combined to locate the experimental station of the colleges of Oregon, Washington and Idaho in places where climatic conditions make experiments in witiculture impossible. One experiment station central'y located would be sufficient for the three states, and of great benefit to all and if conflicting political interests make it impossible for these three states to join hands in supporting one station, can we not combine and get the Department of Agriculture to establish one, as they have established several in California.

A few words on the prospects of grape growing in the Inland Empire, and the fears entertained by some that vineyard planting will be overdone in a few years, if not overdone already. We do not today supply over one-half the grapes used in Spokane and tributary markets right at our door, within a hundred to two hundred miles from our vineyards, as against a thousand miles from California. We are not known at all in the Portland market and very little in those of Tacoma, Seattle, and other Puget Sound cities as well as British Columbia. In neither of these places is there any nearby local production and the market is entirely supplied from California,, with 800 1,200 or 1,400 miles of transportation as against our distances of 200 to 500 miles to the same markets. To the east we have Montana, the Dakotas and Minnesota, who get their supplies from California, double or more the distance we are from them. We in the Northwest have more railroads (three to one) to reach all these points than California has. What prevents us from driving California from all these markets? Nothing but the lack of favorable transportation rates, and above all, lack of sufficient production. When there are enough grapes grown so that

each locality can ship in carload lots then we will in all certainty secure rates based on mileage and lay our grapes, fresh and crisp from the vines, in the markets mentioned above, in 10 or 12 hours, as against 36 to 60 hours from California

Then taking into consideration the limited area north of the Sacramento river capable of raising grapes, and the ever increasing population to the West, North, East, and even South of us living in a climate where grape growing is impossible, if there is any branch of fruit growing in the Northwest that need not fear over-production, it is the growing of good grapes.

Home Happenings

An excellent patriotic program, in honor of the memory of Lincoln and given by Washington was the children of the Orchards school Feb. 21, under the direction of the teachers, Misses Middlekauff and Quayle. patriotic address, abounding in appropriate historical reminiscences, given by John C. Bonnell. The children gave songs, recitations and flag exercises, poems were recited, essays read and story pictures of the hatchet incident were drawn on the blackboard. A number of visitors were present.

Through the efforts of Senator J. L. Goodnight, the highway district law has been so amended as to allow of the creation of a highway improvement district for the Orchards. Under the old law, an area of at least 20,000 acres was required. The new law permits one of contiguous territory to the assessed valuation of not less than \$1,000,000.

Mr. and Mrs. Andrew Jakey of Skamokawa, Wash.., arrived here early this month and will immediately build on their tract, lot 1, block 66, near the Relief reservoir.

Miss Anna C. Ruddy, of Milton, Ont., is spending a short time here settling up the affairs of her brother, the late C. A. Ruddy, who died recently at Portland.

A girl was the welcome arrival at the home of Mr. and Mrs. Geo. H. Banaka, March 2.

Orchardists are busy pruning, spraying, and plowing. Planting will soon follow.

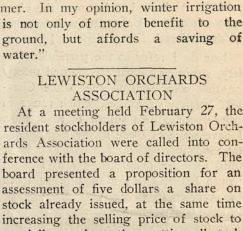
An Orchardist's Experience in Winter Irrigation

66THE winter season, in my opinion, is the proper time to irrigate," said Mr. P. H. Mullarky in a recent conversaton. Mr. Mullarky has a twenty-acre orchard, most of the trees of which are six years old, and have attracted much favorable comment, owing to their vigorous growth and wellkept appearance. His orchard is a model

four feet apart. I put the water through rapidly and then shut it down to a small stream. By starting thus with a few streams, they can be gradually increased in number until the same volume of water is irrigating the entire place. Ground irrigated in the winter will be moist, not wet. If irrigated in the summer only it will have too much water

strated as to the peaches, and its value as to apples remains to be seen. "For young orchards, I would plow

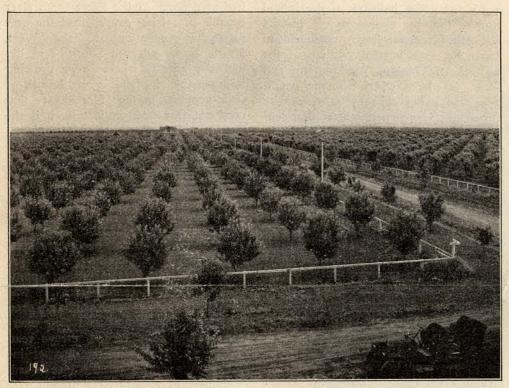
the ground after irrigating in the fall or winter. In fall irrigation, I let the water run for five or six days and then let it rest for eight or ten days, doing this perhaps three times in all. I believe the summer irrigation should be done at night, rather than in the daytime, thus avoiding probably fifty per cent loss by evaporation in hot weather. Water can be used to much better advantage in the winter than in the summer. In my opinion, winter irrigation is not only of more benefit to the ground, but affords a saving of water." LEWISTON ORCHARDS ASSOCIATION At a meeting held February 27, the resident stockholders of Lewiston Orch-



increasing the selling price of stock to ten dollars a share, thus putting all stock on a basis of ten dollars a share. The assessment on stock previously issued would take care of approximately all indebtedness and the sale of new stock would provide capital for new buildings and operation. The indebtedness was approximately represented by the loss on carload shipments of Elberta peaches under adverse conditions.

After consideration of the financial statement accompanying the report by the board, and a general discussion, the stockholders present, representing a majority of the resident members, by a unanimous rising vote, adopted a motion approving the proposition made by the board. The utmost harmony of sentiment prevailed throughout the meeting.

The board has since taken action to have the proposition carried into effect. Provision will be made whereby the assessments can be made payable by notes for one, two and three or more years, according to the amount involved. Due notice of the action taken will be sent to all stockholders, and opportunity will be given other orchard owners to take stock in the Association, which now seems to be entering upon a new and promising era of its career.



View of P. H. Mullarky's Orchard, looking east from roof of A. J. Duffee's house

in clean cultivation. For several years, Mr. Mullarky has practiced fall and winter irrigation, and his experience and observations are interesting.

"With thorough winter irrigation," said Mr. Mullarky, "the trees can be carried through the summer with little or no additional moisture. The orchard should be irrigated well in the fall, and also in the winter months. We have a soil that will hold moisture. Get it in and it will be held for future needs. A thorough irrigation will afford benefits for several years. When the ground is as wet as it is now, it will take water very readily. To hold the moisture in a bearing orchard, it is advisable to have a mulch, and for this purpose I prefer clover.

"It is economy to use water in winter rather than in summer. Six inches of water in winter and six in summer is better than a foot in summer alone. In irrigating in the fall, I put the streams about

for the fruit. We should have the ground moist, so that the tree can take up the moisture whenever it needs it.

"Irrigate in September after the fruit is off to develop new fruit buds. For winter irrigation I generally start about December 1. To start now (in March) would be winter irriga-Winter irrigation is irrigation before the sap starts. The ground is well soaked, if properly irrigated.

experience in fall first or winter irrigation was with some two-year-old peach trees, and I observed that these trees, when three years old were the only ones that had any peaches. Following the first crop, I then irrigated them thoroughly in the fall and they bore an immense crop the following year, and I have followed the practice of fall irrigation ever since. I consider that the advantage of this method has been demon-