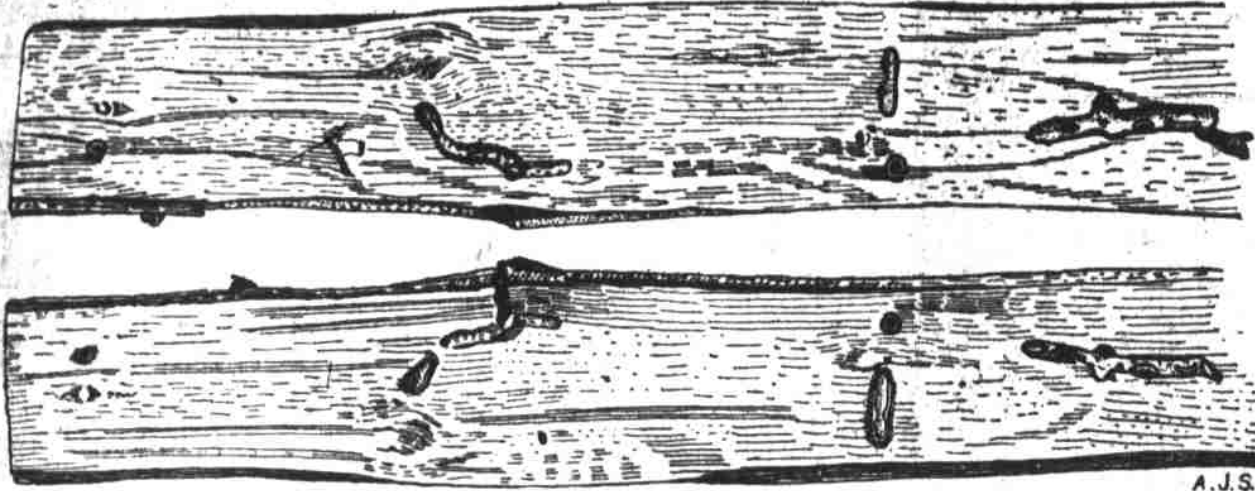
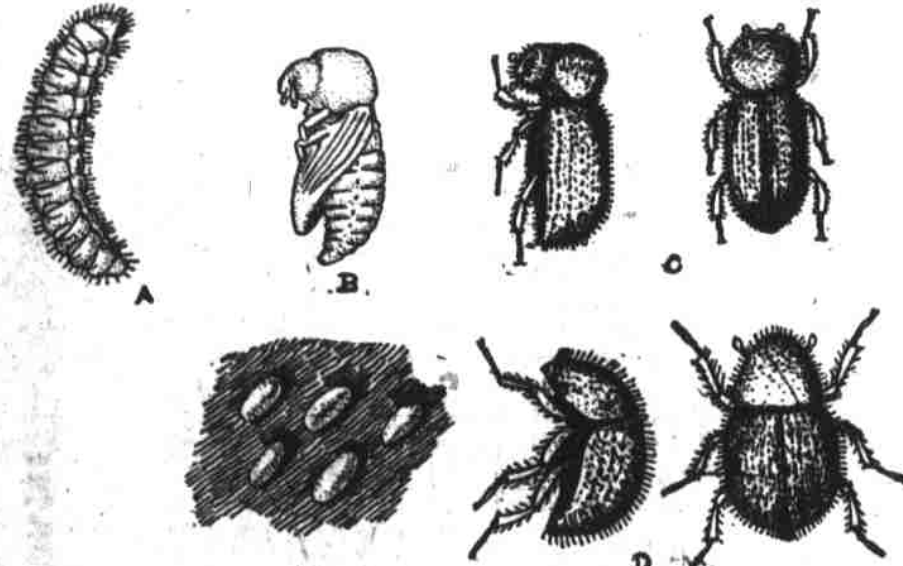


Scientist Discusses Beetle That Attacks Fruit Trees



Split branches showing burrows of beetles with larvae in them.



Xyleborus dispar; a, larvae; b, pupa; c, adult female; d, adult male; e, eggs.

(Special Dispatch to The Journal.)
Oregon Agricultural College, Corvallis, Or., July 8.—"During the past spring there were a number of inquiries made regarding the small black beetle which bores into young fruit trees, and it is supposed that they cause the death of the trees," says H. F. Wilson, entomologist at the Oregon Agricultural college, discussing a pest, which has recently caused some alarm among orchardists.

"Most of the fruit growers are of the opinion that healthy trees are so injured in one season that the trees fail to live through even a single season when attacked," he continues. "At the present date all of the available evidence, as collected by the entomology department, seems to show that only unhealthy trees are attacked."

Survey Through Valley.
"In a preliminary survey in the Willamette valley these beetles were found to be present on both sides of the Willamette river from Salem to Portland. Farther south than Salem the investigation has not yet been taken up. During the investigation a large number of trees were examined, and it was easy to see that, should the beetles work in perfectly healthy trees, they would in time so fill them with burrows as to completely honeycomb the sapwood, and ultimately cause them to die."

A single dead chestnut tree about three inches in diameter contained many old burrows of this same beetle, and while the owner seemed to think that the tree had died from the effects of beetle injury, there seemed to be plenty of evidence that the tree had succumbed to heart rot.

"The seeming injury to fruit trees this year has all been present in such as are more or less affected with winter injury, the nature of which is not thoroughly understood at this time. Investigations of this insect and its injury will be carried on throughout the summer."

"The shot-hole borer, as it is commonly known, is given the scientific name of Xyleborus dispar. In the eastern United States the name pear blight beetle is used, because it burrows into the small shoots of the pear causing them to die back as if blighted. This injury, so far, has not been noticed in Oregon, but the insect has been found to attack the trees about the trunks and lower limbs."

Dig Into Center of Tree.
"Burrows are made directly into the center of the tree, where the insect digs out a long channel and proceeds to deposit a number of clear, whitish eggs, oblong in shape and measuring one-thirtieth of an inch in length and half as wide. Before the eggs are deposited the burrows become coated with a covering of whitish fungus, which is the food of the beetle. It is not known for a certainty whether the fungus is carried into the burrows by the adult beetle or whether it depends upon other carrying agents for reaching its growing place."

"This fungus develops in the burrows, and when the whitish eggs have hatched into small whitish grubs, the grubs feed upon the fungus, keeping it cropped down, as do cattle or sheep in a clover field. Should the young beetles at any time cease to feed on the fungus, it develops so rapidly that they cannot keep it from developing its spores and filling up the burrows, so that often the grubs are smothered by an overabundance of their own food."

"When the grubs are fully matured they measure about an eighth of an inch in length, and pass into a quiet resting stage, known as the pupal stage. In this stage they acquire legs, wings, and various divisions of the body, and, casting the pupal skin, appear as the adult insects. These are small, cylindrical black beetle, having six legs and

PLAN SUGGESTED FOR PUBLIC DOCKS

Harbor Improvement Between Swan and Ross Islands Part of Big Scheme.

By J. Duthie, Marine Architect and Dock Engineer.

The prospect of building new docks for Portland, if carried out in proper form would add very much to the architectural beauty of the city. These streets on the east side which belong to the city, could lead to docks, of masonry built in geometric form, to accommodate boats of 6000 to 7000 tons displacement, and less. As to streets not required for docks, they could be fitted with beautiful and scientifically built landing stages, of marine architectural finish, adding to the attractiveness of the waterfront. Those street ends that other interests are claiming from the city are of vital importance to all classes of merchants, and to all the people, because passengers and freight can easily be landed in any part of the center of the town, on the east and west sides.

The shipping interests should start at Swan island and run south to Ross island. That is to say, a clean cut masonry or concrete wall should run from one island to the other on both the east and west sides. And where opportunities afford enclosed docks should be built of clear geometric figures. The impression to passengers on incoming steamers would be of great effect. Instead of looking at a lot of dirty, mud-washed piles, they would see beautiful

element walls for miles, with substantial fireproof warehouses to replace with all the old wooden buildings. Modern machinery and appliances of all kinds would be in view, giving mechanical force to the appearance and adding power to the beauty of the river front.

Great Expenditure Involved.
To carry out the ideas herein mentioned, requires the expenditure of many millions of dollars. As suggested above let the starting point be at Swan island, on the west side of the river. The railroads are on a curve and could be moved more to the west, where necessary the river should be widened and deepened to allow vessels to come in on one side of the island, and outgoing vessels on the other side. Excavated dry docks are one of the vital points of the scheme. Ships are now built at lengths of 150 feet, and the Inman line has intimated building a 1000 foot ship. The ships that will go through the Panama canal range as high as from 500 to 700 feet in length. Ship owners and ship captains will not place those ships on a floating dry dock if they can get an excavated one. What would those ships do? They would go to Tacoma, Seattle, San Francisco, or any place where they could dock their ships without risk. And where the ships go, the trade goes also, which means a great percentage of business lost to any city without excavated docks.

Picture Swan island with an excavated dock and a ship 700 feet long going in and coming out without having to turn one way or the other. Picture a couple of ships 500 feet long undergoing three to six months' repairs and still room to dock a half dozen more at the same time for one to six day terms. Imagine the warehouse facilities on the island, and locomotives and trucks and electric cars. The south end of the island is close to land on both sides. Let connections to land be made so the locomotives and the electric cars could go back and forth, with freight and passengers to the island. The whole of this undertaking means years for its

completion. There being but \$2,500,000 appropriated, the amount would not go very far in carrying out this project. The city's property at the foot of Stark street on the west side could be dock built, also an equivalent amount of dock construction should be accomplished on the east side, for the benefit of the merchants on that side of the river.

And the engineering of the aforesaid docks is not so difficult a problem. The dock board is responsible for the success or failure of docks. I here mention two or three men who know the requirements of docks. Thomas Brassey was employed at the Buncorn bridge which joins Cheshire and Lancashire, England, where the late W. E. Gladstone crossed many times from his haunting cattle to London. The contractor failed. Brassey made the remark "If I had 500 pounds I could finish the bridge." The river Mersey had to be excavated which made it a very large job. Brassey finished it. He then undertook the excavating of the Birkenhead great float, which is a line of docks cut through, between Birkenhead and Seacombe. It is equal to the size of the Willamette river from the north end of St. Johns to the south end of Ross island, in addition to recessed docks.

There was some disagreement on the great float, and Brassey quit it. John Laird finished it.

The finest docks in the world are in London, Liverpool and Birkenhead, surrounded with substantial stone quays, furnished with gates and properly policed.

MOTORIST GETS HALF BROKEN NECK

C. C. Inman, Medford Engineer, Injured on Bad Road in Josephine.

(Special Dispatch to The Journal.)
Grants Pass, Or., July 8.—While C. C. Inman, a mining engineer of Medford, was coming to Grants Pass from Swede basin this forenoon by auto his machine struck a high spot in the road and threw Inman against the top of the machine with such force as partially to dislocate the neck bones. Dr. Loughridge made the trip by auto 14 miles to him in 35 minutes. He brought Inman here and sent him by train to Medford after setting the dislocation.

ers at the international convention of the Christian church. He has recently returned from inspecting the missions of the Christian church in China, Japan and Corea.

The music will be an especial feature of the meeting this afternoon as it will mark the first appearance in Portland of Miss Hilary Gustafson, a singer who comes to Portland highly praised. Miss Gustafson is an Illinois young woman and has been brought to Oregon to sing in the local conference of the Methodist Episcopal church.

The mass of French Canadians were workers on the farm and in the forests and almost entirely out of touch with industrial life in shops, mills or factories.

TOURISTS VISIT COLLINS SPRINGS

New Hotel Drawing Feature for Resort; Portland Folk Enjoy Baths.

Collins, Wash., July 8.—The big new mountain hydro at this place was comfortably filled, beginning with the weather of the Fourth. Every train and boat brought its quota of regulars and tourists who would escape the heat and dust of the city for the cool air of the mountains and the mineral baths. The new Collins Hot Springs hotel, under the ownership of F. A. Young, is now pronounced by those in a position to know, to be the most complete and luxuriously appointed hotel and bath house in the northwest.

Large parties from Hood River and The Dalles come down daily and return in the evening on the boats. Through several connections with booking offices in the principal cities tourists are now visiting the springs, making a stop of several days in their northwestern itinerary. The new launch is kept busy taking parties to the various points of interest along the historical river and transferring passengers from the O. V. R. & N. trains on the Oregon side of the river. Among recent arrivals are: From Portland: E. E. Kingsley and family; J. R. Smith, Mrs. M. S. Keane, E. B. Rice, Gertrude Templeton, J. Louchat, T. E. Nesbitt, T. McCaffrey and wife, C. C. Briggs, L. T. Gilliland, Hugh Alexander, W. P. Powers, J. H. Stanley and family, W. E. Morris, Mr. and Mrs. West, Dr. C. M. Hollipies, M. E. Wiley, and Mrs. I. Parker Byron and family, Mrs. Sam Bailey, Mrs. E. Traxler, W. E. Garretson, Mrs. Frank Minto and son, Mrs. J. M. Holmes, Mr. and Mrs. E. P. McClosker. A party of Seattle men arrived for a week's stay yesterday.

Misses W. Anderson and J. K. Elderlein, Misses Gertrude Melvin and Ethel Brewer of Las Vegas, N. M., will make a month's stay. Misses Eva Wells and Belle Karnell of Kenosha, Wis., will also be guests for the summer period. Mrs. J. N. Porter and mother, Mrs. J. M. Holmes, of Detroit, Mich., will be here for a month. O. W. Stevenson and family of Los Angeles are making their annual pilgrimage to partake of the mineral baths and enjoy the mountain scenery. Among the tourist visitors for the week are Miss R. F. Smith of Salem; F. M. Demorest, North Yakima; J. G. Sequin, Aberdeen; Mrs. J. E. Dipeel, Trenton, Mo.; J. M. Riggs and family of New York, and many others. The regular summer guests are getting located for the heated term, and many new patrons are making reservations owing to the sudden change in temperature.

DOOR KNOCKS BABE INTO SCALDING TUB

Arthur Potts, Aged 3, Dies at Grants Pass From Curious Accident.

(Special Dispatch to The Journal.)
Grants Pass, Or., July 8.—Arthur Potts, three-year-old son of Sarah Potts of this city, who was thrown into a tub of scalding water yesterday afternoon, died from the effects this afternoon. A door in the house blew against the boy, precipitating him into the water. The mother, standing near, snatched the child out but before his clothing was removed he was scalded terribly. The father, Frank M. Potts, is in Alaska out from Fairbanks. The family had just been released from quarantine for scarletina when this accident occurred.

Grants Pass Business Change.
(Special Dispatch to The Journal.)
Grants Pass, Or., July 8.—An important change in the personnel of the Grants Pass Hardware company was made last evening when Lee J. Carter sold his interest in the company to J. M. Tetherow and George B. Newland. The transaction includes the Calvert block and hardware stock, representing \$30,000. Calvert has been manager of the company for eight years. He is a member of the city council. He will devote his time to other interests. The officers of the new company will be: J. M. Tetherow, president; Thomas Morland, vice president; George B. Newland, secretary-treasurer.

City Locks Horns With S. P.
(Special Dispatch to The Journal.)
Grants Pass, Or., July 8.—The city council has instructed the city attorney to bring condemnation proceedings for the purpose of opening Fourth and Fifth streets across the Southern Pacific railway right of way. These crossings are practically in the heart of the business district. The matter will probably be taken to circuit court. It is understood the Southern Pacific company will move its freight depot from the present location on Sixth street to a point where Fifth street crosses the Southern Pacific tracks.

Kelly Family All Improving.
(Special Dispatch to The Journal.)
Grants Pass, Or., July 8.—John B. Kelly and his daughter, Angela, and sons, Homer and Hobart, are all improving as rapidly as could be expected. Hobart received the deepest burns of the living children. He is badly burned about the hands and face.

The International Boot and Shoe Workers' union at its recent convention selected all its officers, including President Tobin, and decided to hold the next convention at Montreal in 1912.



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Buck's Ranges \$1.00 DOWN \$1.00 Weekly **THAT LITTLE CHILD can come and purchase here, knowing full well she will be as painstakingly and attentively served as you yourself would be. Such is the confidence you can have in this store.** **Buck's Ranges \$1.00 DOWN \$1.00 Weekly**

Chiffonier Specials

Buy Now—Pay Later

We have Chiffoniers to match nearly all our Dressers and are offering a few odd ones at greatly reduced prices.

Full quartered oak, any finish desired. Four large and two small drawers. Special **\$10.25**

Full Quartered Oak Chiffonier, five large drawers, large French plate mirror, best bargain yet offered **\$11.95**

Nicely finished golden, a genuine Quartered Oak Chiffonier. Swell top drawers, oval French plate mirror. You would willingly pay \$26 for this piece. Special **\$12.90**

A beautiful serpentine front, quartered oak, golden, large landscape mirror. Special **\$16.90**

¼ Off from prices on Chiffoniers above \$40

Clearance Sale of Dressers

Buy Now Pay Later

Stock taking days disclosed a large number of single Dressers and Chiffoniers. These have all been marked at a "Hurry Out" price. Any and all are on sale at figures that spell economy for you.

Genuine Oak Dressers priced as low **\$11.25**

Imitation Oak Dressers as low **\$6.75**

ONE-FOURTH OFF on all Dressers priced above \$40.00.

\$20.00 Quartered Oak Princess Dresser, French plate beveled mirror 18x36 inches. One long and two short drawers. Marked down to **\$14.25**

\$25.00 Full Quartered Oak Princess Dresser, swell front, finely finished, French plate beveled mirror 18x40 inches. A bargain at the regular price. Special **\$16.90**

\$31.00 Birdseye Maple Princess Dresser, straight lines, beautifully marked, mirror 18x36 inches. Price reduced to **\$19.75**

White Maple Dressers as low **\$11.50**

Similar patterns and prices in mahogany.

\$22.50 oak, golden wax finish, French plate mirror 22x28 inches. Straight lines through. Special **\$15.90**

Bedding Specials

No modern housewife would buy an ordinary Gas Stove after seeing "BUCK'S" SANITARY LINE made with WHITE ENAMELED CAST IRON OVENS.

Each customer shares the \$25,000, our annual savings in interest and taxes because we built on the East Side.

69-75 Grand Avenue **MORGAN & MCHLEYA** FURNITURE CO. INC. Complete Home Furnishers at Low Expense Prices. Corner E. Stark Street

\$1.50 PILLOWS AT 98c
Southern Feather Pillows, A. C. A. tick; size 17x24. Regular \$1.50 pair. Special **98c**

\$2.25 COMFORTERS AT \$1.65
Summer Comforters in rich Persian covering; not gaudy, but artistic. Regular **\$1.65**
\$2.25. Special at **\$1.65**

\$6.00 COMFORTERS AT \$3.75
Extra fine Comforters in dainty silkline covering, with plain silkline borders. Regular \$6.00, for **\$3.75**

Drapery Department Doings

We have just completed stock taking and of course have found many odds and ends that must be cleared up. We have hosts of good things that will appeal to the discriminating buyer.

\$5.50 TO \$7.00 COUCH COVERS, \$4.75.

Splendid values in this clean-up. All our \$5.50 to \$7.00 Couch Covers for **\$4.75**

PORTIERES, ¼ OFF.

Plain figured and two tone effects in browns, tans, greens and reds. The regular \$2.00 to \$5.00 grades, **25 PER CENT REDUCTION.**

LACE CURTAINS, ¼ OFF.

Odd lots of one, two, three and four pairs of Nottingham, Cluny, Irish Point, stenciled and plain Scrims, with filet borders; Battenburg and corded Arabians. The Summer clearance that every careful housekeeper welcomes. **25 PER CENT REDUCTION.**