## DEVELOPMENT OF LUMBER INDUSTRY IN HALF CENTURY HAS BEEN WONDERFUL Mineral Production

# **EACH** DECADE HAS SEEN MARKED

American Lumberman Tells in Interesting Fashion Development of the Last Few Years.

COAST BECOMES BIG FACTOR

Decade Ending in 1893 Was

Section of United States.

Describing the evolution of the lumber industry during the past 45 years the American Lumberman says:

The one great and noteworthy development in the lumber industry between 1873 and 1882 was adoption and improvement of railroad logging. This gradually took the mills away from the water and led to the marketing of lumber in carload lots. This actually was the beginning of the lumber industry as a national industry, the beginning of the lumber from one corner of the United States to all other corners. The band mill, however, was undeveloped. All over the country logs were sawn to the hungry whine of circular as well as slabbing and stock and saws. During this time the

were sawn to the nungry whine of circular as well as slabbing and stock gang saws. During this time the sources of supply of the different woods began to show a change.

Hardwood production for more than local consumption began in Tennessee, Kentucky and West Virginia. The cut of white pine in Wisconsin and on the upper Mississippi was increased largely.

Associations in the lumber business were either almost unknown or of little use other than for local ends. The wholesalers were dominating figures in the industry and those that made the greatest success were those that

greatest success were those that "stood in" with the rallroads, for those were the days of rebates and secret rates. Shipments of yellow pine berates. Shipments of yellow pine began to find their way into the North and East.

The decade from 1883 to 1893 was a momentous one for the lumber industry. At the beginning the swing of the price pendulum was upward; at the end it swung downward with the panic of 1893. Southern pine secured a strong markets. position in the northern markets.

Cypress came into prominence and, perhaps most notable of all, the Pacific coast woods—Douglas fir, spruce, redwood and cedar—began to find their hesitating way eastward over the Rocky mountains. The trend to move the mills away from the water and locate them on railroads continued and by 1893 a large percentage of the mills famous in the early history of lumber—best the shipment of lumber by rail came the development of the planing mill at the sawmill and the use of the dry kiln—both primarily introduced to save in the freight.

Ship Knee Plant

In the woods have been selected before they have been cut.

Not only is the use of each species of lumber they have been selected before they have been cut.

Not only is the use of each species of lumber the uses for which it is best suited, but the loggers are going into the woods and felling the trees that will cut up into the required lumber with the least waste and the best results. This may be the big-gest development of the period.

When time allows the true value of progress to be calculated the war period will probably be found to represent the greatest and most rapid development of the great shortage and high price of fresh eggs, the health committee the woods and felling the trees that will cut up into the required lumber with the least waste and the best results. This may be the big-gest development of the period.

English Town Has

Own Poultry Farm

In view of the great shortage and high price of fresh eggs, the health committee the committee of the city of Brafford, England. ition in the northern markets.

In the decade from 1893 to 1903 there were few radical changes, though there

southern pine had come to be the leading wood in production, as it is today. Marketing methods were, however, greatly changed. The wholesale yards in the northern markets to a considerable extent disappeared and the sawmills had far more to do with the marketing of the finished lumber than previously.

During this period the national for-ests were established and the forest service became a factor in govern-mental affairs. The price pendulum re-mained in the loss segment of its swing until the recovery from the panic of 1893 was well under way and then the swing was steadily upward. This was the last long period of prosperity ex-perienced by the lumber manufacturers. The annual fall car shortage began The annual fall car shortage began to make its appearance about the middle of the decade and was especially bad in the South. Prices were sensitive, especially during the last half, and while these years were the most prosperous the evils of over-production began to be plainly evident.

POTATO DEALER SAYS DAST BECOMES BIG FACTOR

In 1902 again much prosperity was experienced, especially on the Pacific coast, where the sawmills enjoyed the best business in their history. Cars were scarce—more so in the South than were scarce—but late in the fall the situation improved. Lumbermen's associations in this period multiplied and began to exert a telling influence. SHORTAGE IN SPUDS IS LIKELY NEXT FALL

> Uncertainty of Market and the Present Low Price Expected to Cause Reduced Acreage.

Surprisingly Large

According to figures compiled by E. A. Haggen of Vancouver, British Colum-

bia's mineral production in 1917 was

only about \$1,000,000 less than the ban-ner year of 1916. This is despite the loss of production brought about by strikes

at Trail smelter and in the coal fields. Placer gold production shows an in-crease, lode gold a decrease, sliver a de-

crease, copper an increase and zinc a

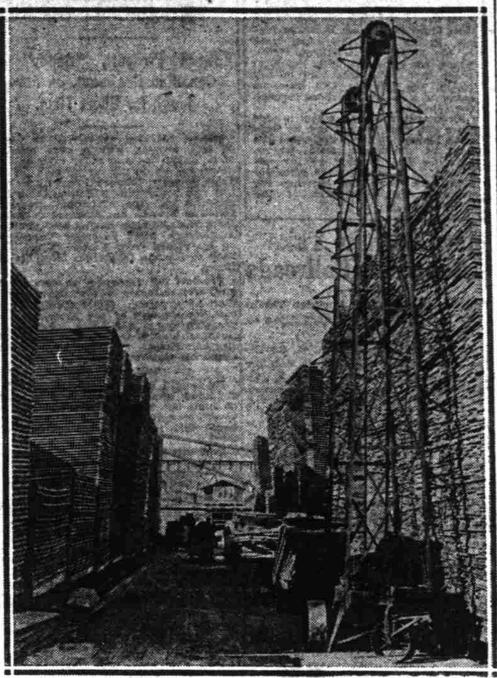
decrease. The total for the year is placed

by Mr. Haggen at \$41,299,668, against

\$42,290,462 in 1916.

If you have a large family or are otherwise independent of the labor problem, plant potatoes this year, is the advice of C. B. Buchanan of C. B. Buchanan & Co., who are among the largest dealers in the state. This advice is tased on his belief that the shortage next year will be such that potatoes will sell regardless of grade, but he admitted that if unable to take care of the crop without hiring high price labor or taking the chance of getting it at any price growers were bound to face to uncertain. ty and acreage will probably be reduced. Potatoes are now bringing around \$1 sack with no great demand. The new Motor trucks that, before, had not been used in the lumber industry began to come into common use in the woods and at retail and manufacturing plants. The war came and almost destroyed the lumber export trade; there was a period of depression, and then the prosperity that comes to a great neutral nation during a war started a boom in the lumber business. inspection rules are now in force and Mr. Buchanan laid stress on the importance of growers sacking in order to meet the inspection. Sacks must be branded with the grade they contain, and if they fail to pass the inspection must be either resacked or remarked with the lower grades. While the grades The United States entered the war and then there came the great wooden ship program, the cantonment schedule, the demand for airplane lumber. To supply much of this demand the trees in the woods have been selected before they have been cut. run from fancy to grades 1 and 2, Mr grade to be considered in shipments of Japan Is Launching Good Profit Made Buchanan said that practically the only last year's crop is grade No. 1. As is known, in quality this crop was the

### MACHINES PILE LUMBER



Thirty-five foot piler at Shevlin-Hixon mill at Bend.

## Shipbuilding Boom

were few radical changes, though there were many developments in the industry. Manufacturing and logging methods were improved, though not greatly changed except for the introduction of steam engines in logging operations. The peak of white pine production in the North had been production in the North had been production in the north had been production in the period and the

## **Cutting Ship Knees**

sioner at Yokohama, in a report to the ship knees. Prices paid by the yards department of trade and commerce, range from 60 cents an inch to \$1 an An 8-inch knee, sound and of states that Japan is launching upon a healthy timber growth, is worth \$8, a shipbuilding camaign which will involve 10-inch knee, \$10, etc. A few months the construction of 250 ships a year. He ago D. J. Foote, of the Royer Implement Own Poultry Farm the construction of 250 ships a year. He company, completed a saw device which states that at the end of September rips the knees out of the trees as a dragthere were in Japan 113 shipbuilding saw cuts cordwood, and the three men In view of the great shortage and high slips, owned by 42 firms. In each slip a operating it are making from \$10 to \$15 Ship Knee Plant

The Putio, Finer & Co. are putting a new sawmill and shipknee Plant on the which promises to be a profitable en
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The Pution Finer & Co. are putting a new sawmill and shipknee Plant on the which promises t shape of the knee, else they would not withstand the tremendous strain to which they are subject.

will be able to build more than 250 when writing to or calling on advertisers ships, aggregating 1,000,000 tons, yearly. please say you saw ad in The Journal.

## HIGHLY PROSPEROUS YEAR IS ENJOYED BY COPPER MINERS

Reports Show Greatest Prices for Metal in Past Half Century Prevailed.

All reports for 1917 indicate a highly prosperous year for copper miners. They kept their mines operating to capacity and enjoyed the highest prices for the metal in 50 years.

The American output, which was 1,497,000 tons, falls short of the previous year by more than 67,000 tons. The decrease in production was general. The war impaired land and sea transportation to such an extent that its effects are reflected even in the remotest mining centers.

The United States and Great Britain fixed the price of copper at 231/2 cents : pound, in order to prevent a runaway market. This measure has greatly bene fited copper miners. Had the price not been fixed there would have been price fluctuations, which would have led to irregular demands for the metal.

The average production cost before the war was around 8 cents a pound. Some mines roduced at around 51/2 cents. The cost is now about 10 cents, with many of the larger mines producing at 71% cents.
The prices of many metals, including

lead, zinc and iron, have lately declined. The present average price of the principal industrial metals is 86, as compared with 100.74 in September and these have raised the average of the metal index.

about 3,000,000 pounds per day, nearly wo-thirds of the American production. lead to a copper famine, but exports are ported. This number represents at least controlled by the government and will probably not adversely affect American industrial conditions. The world's copper production and con-

trification of railroads, the extension of public utilities using electricity and the distress. increasing employment of copper in the arts are all leading to new demands for

### Arrangements Made To Open Log Camp

of Columbia City. There is contained in ber. Mr. Ellwood states that he hopes

## Gold and Silver

Twenty-two tons of gold and silver buillion arrived in Seattle and were deposited at the United States assay of-fice during the calendar year 1917, the coining value of which was \$11,360. 718.86. The total for Alaska was \$6,868,-761.55; British Columbia sent \$2,115, 424:08; Yukon territory, \$1,341,33814, and 424.08; Yukon territory, \$1,341,338.14, and Nome continues the banner producing district, with the Iditared second and Southeastern Alaska third.

## FLOODS IN SIAM ARE CAUSING GREATES DAMAGE SINCE 183

Heavy Loss Done to Rice and Cattle by Incessant Rainfall During September, October.

ember 10, report the greatest floods as accurate a knowledge of mining since 1831, which are devastating the country, causing great loss to the rice changes as further investigation may since 1831, which are devastating the and cattle. The floods are caused by the inces- comb. "I believe that in defining the

tember and October. The rice fields have been completely ent grades, the revision which has been submerged, in many section of the recommended will work no hardship

the water, is entirely lost. According to the latest estimate, 400,-000 acres, representing 297,000 tons of 87.83 in October. Tin and silver, on ac- paddy, have been already lost, and as Delicious Sea Food count of abnormal conditions, have sold there has been no abatement of the for high prices in recent months, and floods, the process is steadily going on. Of the 130,800 acres planted in the province of Krung Kao, the cultivators American copper exports are running will be lucky if 40,000 acres is saved. The cattle are dying in great numbers by drowning and starvation, 1200 head, Under ordinary conditions this would chiefly water buffaloes, having been re-

a loss of \$22,000 gold. The hardship caused by the floods is inestimable, as in the affected regions the farmers have become destitute. A sumption are rapidly increasing. Elec- relief commission has been appointed and everything is being done to alleviate the

### Portland Payrolls Constantly Growing

It is pleasant to read in the daily press of the constantly expanding pay-rolls of this city. We are told by this Arrangements are being made by W. information that the shipyards have "Pioneer" brand, and the packers say about 15,000 workers and the sawmills the formula used in their preparation is half as many more. This is fine as far a secret with their institution, and that the tract to be logged between six and as it goes, but if the women of Portland by its use the delicious sait sea flavor seven million feet of fir and cedar tim- would confine their purchases to the products of our local factories, so far to have the camp going by the end of this is possible, 20,000 other names this month. The logs will be hauled by would be added to the payrolls. It is auto truck to Columbia City and dumped into the river there. The old railroad grade of the Peninsula Logging company will be used.

would be added to the payrolls. It is the first complete official record of the derivation. The attention of the Patriotic Conservation league is called to this.

The Truth About Beigium to the derivation in Belgium by Brand Whitiock; United States minister to Belgium, will be published serially in The Sunday Journal beginning Sunday, February 17.

May be cut with this drag saw. It will saw a cord in from 15 to 20 minutes. Will saw logs 6 feet in diameter. Two men can carry it anywhere. It's

DRAG SAW

Portland Machinery Co.

Durable Roofing

DURABLE ROOFING MFG. CO.

Kenton Station, Portland, Or.

Non-Skid

Rubber Heels

Right Mean and Left 20 per centicel Plates More Wear

Made in Portland Ask for

Portland Non-Skids

Rogue River CATSUP?

It is delicious,

Ask your Grocer.

KNIGHT PACKING CO.

Portland, Oregon

CASH REQUIRED

WANTEL

Have you tasted

KNIGHT'S NEW

Made in Portland to suit local o

## Weighed 22 Tons COAL OF WASHINGTON MAY BE COMPLETELY RECLASSIFIED SOON

Maximum Prices Are to Be Fixed for Every Grade if Plea of Administrator Accepted.

The coals of Washington will be completely reclassified with maximum prices fixed for every grade and preparation of coal produced by the mines, if recommendations forwarded to Washington by David Whitcomb, state fuel administrator, are accepted by the national administrator, Dr. Harry A. Garfield. Mr. Whitcomb's recommendations are based ipon the report of the mine price board which spent Bix weeks in formulating the new classification and new prices No information as to the prices suggested will be made public until the national administrator takes action.

"The recommendation which has been forwarded to Washington asks some radical readjustments in prices, some increased, some decreased, all based on show to be necessary," said Mr. Whitsant rainfall during the months of Sep- sizes and composition of mixtures, and in making different prices for differcountry the rice just beginning to ripen, upon the producer, and will in a great and, due to the continued high level of many ways be of distinct benefit to the

## Here From Aberdeen

Thinking and speaking seriously, the water, occupying three-quarters of the face of the earth, ought to be our bread basket. Doubtless if we knew how to utilize the contents of the rivers and lakes and oceans, this would be the case Fifty years ago tomatoes were not considered food and were called "love apples." Forty years ago fishermen in the Great Lakes would not carry sturgeon ashore, but tossed them overboard for food for other fishes. Today we have prepared for our tables the most deliclous luxury of minced clams, healthy and palatable food unknown to our cuisine a dozen years ago. This latter delicacy is caught and prepared for food in great quantities by the Sea Beach Packing company, of Aberdeen, Wash., and sold by most food dealers every-where on the Atlantic as well as the Pacific Coast. They are known as the is preserved. Anyway, they are dainty morsels.

#### HOME TEACH PORTLAND **BOOSTING PRODUCTS MICHIGAN LESSON TOWN** CAN

MANUFACTURERS' DIRECTORY Following is an alphabetical directory of all dvertiners on these two pages. Armstrong Machinery Co., 548 Thurman st., manufacturers of ice machinery and refriger-

Enamel Bare Overside st. ing. 504 Burnside st. Eastern Novelty Co., 202, 85 % 5th st., ladies'

or sta.

oss. W. F. & Co., mfg. jewelers, Allaky bldg.

wthorns ave.

Union ave.
Auto Works, 2d and Madison sts., auto truck bodies, bearses, wheels, Selle auto

Thaver, Shaver & Guiley, suto truck build-machinists, 193 East Water st. Universal Tire Filler Co., non-puncture suto s, 441-443 Hawthorne ave.

(Continued on Next Page)

General Machinists and Builders of TRUCK Applegath, C. G. (G. P. Rummelin & Son), namifacturer of fur garments, 2d and Wash. manufacturer of fur garments. 2d and Wash. American Bronze & Brass Works, workers in sopper, brass, aluminum, etc., 659 Upshur st. Bratton & Glaie (Portland Machinery Co.), makers of drag saws, 62 1st st. Coopey, Chas., military and civil tailor, Royal bidg., Morrison and Broadway.

Crystal Springs Finishing Works, wool batts, mattresses, 135 10th st.

Connel Lumber Co., Sam, ready cut houses, 354 Ankeny st.

Columbian Carbon Paper Co., manufacturers of carbon paper, E. 33d and Broadway.

Cutier Fruit Grader Co., manufacturers of fruit graders, and machinists. East Tenth and Mill sts. **ATTACHMENTS** 

Wood Baskets Ours are ornamental as well as useful and the floor from dirt. Ask for 'em Coast Chemical Co., janitors' supplies, 249-51 Coast Chemical Co., janitors supplies, 242-51
Calumbia st.
Coin Machine Mfg. Co., manufacturers of
brass, copper, steel and iron products, 984 E.
17th st.
Durable Roofing Co., makers of highest
grades roofing paper, Kenton station, Portland.
Davis-Scott Belting Co., leather belting makers, 240-260 Hawthorns ave.
Portland Galvanizing Works, galvanizing,
22d st. N. and Reed st.
Enamel Bake Ovens, auto and other enameling, 504 Burnaide st. the hands and clothes from pitch CORTLAND BASKET & HANDLE CO. Main 4997. 1831-38 Macadam St.

Thayer, Shaver-

Gulley Machine Co.

PENINSULA IRON WORKS Founders, Machinists, Pattern-makers, "Peninsula" Gray Iron and Semi-Steel Castings for all purposes, Transmission and Special Machinery, Mill, Marine and Gen-eral Repair Work, Phone Colum-bia 14. St. Johns, Portland, Or,

Eastern Novelty Co., 202, 85 % 5th st., ladies'
fine neckwear.
Gem. Winder Co., tatting shuttle winders,
101 6th st.
Grandma Cookie Co., wholesale cookie bakets. \$89-384 E. Stark st.
Green's Economy jar top lifter, sold at stores.
Hesse-Martin Iron works, foundry and machine works, 434 Belmont st.
Independent Cracker Co., crackers, confections, etc., 430 E. Davis st.
Jacobs, Inc., men's shirts to order, 327 %
Wash. Old Autos Made New in appearance by enam-eling Hoods and Fen-ders like done at Factory

J. C. WARNOCK Enamel Bake Ovens, 504 Burnside Main 8485. A-4249. Barrels and

Jacobs, Inc., men's shirts to order, 327 % wash.

J. J. Kadderly, Kadderly furnace, 180 let st. Kent, Thos. E., men's shirts to order, 515 Macleay bldg., 4th and Wash, sts.

Knight Packing Co., pickles, fruit juices, cider, rinegar, etc., 474 E. Alder st.

Kolls, Dr. D. W., improved optical nose less, 706 Wilcox bldg.

Lafayette Nursery Co., manufacturers celebrated Brooks Land Roller and Pulveriser, Lafayets, Or.

Layton Cooperage Co., 327 Water st., barrels, has, tubs.

Lusterol, H. J. Schwanberg, piane and furniture polish, 4610 Woodstock avs.

Millmade Construction Co., ready built garates, etc., 544 Hood st.

Multinomah Trunk Co., trunks and bags, suit-mes, 84 E. Water st.

National Vault Co., concrete burial vaulta.

Tabor 2521.

Oregon Paper Box Factory, paper boxes, cartoms, 245 % Stark st.

Oregon Brass Works, copper, brass and aluminum, 2d and Everett sts.

Oregon Door Co., doors, mah, etc., foot Spohans are.

Oregon Chair Co., chairs, 1190 Macadam rd.

Casks

"Superior" Mattresses are not surpassed on earth. They are made

United Mattress & Pad Co., 427 Hancock street. Phone East 876. Bave us renovate or make over your used mat-

Oregon Door Co., doors, sash, etc., foot Spotane ave.

Oregon Chair Co., chairs, 1190 Macadam rd.
Oregon Nursery Co., growers of fruit, shade,
nut and ornamental trees,: lawn, shrubbery,
ross, vines, etc., Orenco, Or.

Pacific Stone Works, pottery stoneware,
flower pots, 687-696 Sherlock ave.

Portland Furniture Mfg. Co., furniture, upheistering, 1249-58 Macadam road.

Paninsula Iron Works, foundrymen and machinista, Alta and Bradford sta.

Pendieton Woolen Mills, woolen cloth, Indian
blankets, Pendleton, Or.

Portland Store Works, ranges, cooking and
heating stoves, Derby st. and Columbia blvd.

Phenix Iron Works, foundrymen, machinery,
360 Hawthorne ave.

Portland Baiket & Handle Works, baskets,
handles, 1821 Macadam road.

Portland Rubber Mills, everything in rubler, rubber heels, soles, 368 E, 9th st.

Portland Bolt & Mfg. Co., bolts, 209 18th
st. N.

Rosey Implement Co., farm machinery, manny NOT IN THE TRUST INDEPENDENT CRACKER CO

Manufacturers and Dealers in Crackers, Cakes, Italian Paste 428-430 East Dayls St. Portland, On Phones: East 1946, B-1342 MINE OPERATORS

And prospectors have been patronizing the MONTANA ASSAY OFFICE for 20 years. We are assayers, sold, silver and platinum refiners; buy high grade oras, lewelers' sweepings, photo sliver, nitrates, etc. Produce dental and jewel-34-38 SECOND STREET

Phone Marshall 2728 Pacific Stoneware Co., 695 Sherlock Ave.,

Everything in Pottery.

## TRAVERSE CITY SAW IT SO WENT AFTER THEM

Home Factories Well Patronized, Example Which This City Could Afford to Emulate.

Traverse City, Mich., is located at the head of Grand Traverse bay. It is a beautiful town of about 12,000 population. It has a live citizenry, which has never permitted the accumulation of moss on their spines nor has selfishness distracted their attention from the best interests of all the people.

Traverse City citizens wisely concluded that the best way to build up their own interests was to unite them for the upbuilding of the city. To build up the town there must be payrolls, so they went after factories. Among those se-cured was one for the manufacture of shoes. A building was erected and factory machinery installed. A competent man to operate the plant was found and in due time a highly profitable business was worked up. But a few months ago the manager was taken suddenly ill and lived but a few days. Thereupon the another must be sought.

There is in Portland a man who was once the traveling representative of a large shoe factory located in Massachushoe dealers there, and upon the death Finke Bros. Cooperage Works of the manager of their factory the Portland man was communicated with and offered the institution gratis if he would go there and conduct it. His

### WRINKLES!

How removed in 15 minutes; how to prevent coming; demonstrated and sold Woodard & Clarke's drug store. Particulars for 3c stamp, addressed to Nikk-Marr Laboratory, Dept. J. No. 9, 2d floor, 386 % Wash St., Portland, Or., or call office, 1 to 5 p. m. Free bottle rouge, or small box powder to each customer, at drug store. Five cents each at office for returned cream jars. Phone Main 3271.

NEW FARM IMPLEMENT—Brooks Land color and Pulverizer (fully covered by U. S. Straddies the Rows Like a Two-Horse Guitivatoe—For use among crops planted in rows, as
corn, potatoes, beans, kale, cabbage, nursery stock,
cotton, etc. By firming the soil and crushing the
clocks between the rows, complete control of moisture can be retained. Scores of testimonials of
users on file. It is the best investment farmers,
gardeners and nurserymen can make. Write at
once for free booklet of full particulars. Manufacfured and sold by Lapaverym with a single pro-

business interests here, however, are too important to forsake, and he will remain in Portland, "but," he says, "the spirit of Traverse City is one that founds prosperity. Needed Here

"It prevails in many of those eastern cities. It is the life of Akron and transformed Kalamazoo from a sleepy, lobster village to a live, thriving city. It predominates in Seattle and there is a aint of it in Tacoma. From a different angle it is extant in California, in that the towns of that state are ex-remely loyal to their home manufacturers. While California is not strong on factory bonuses it is robust in supporting them once they are in motion no manifestation of loyalty to anything quent reference to this trait of Portland character, as, for example, in the matter it mentioned some time ago of Portland men who rented their premises to tailors and had their garments made in ing no interest in the city, come along and sell suits and shirts to Portland business men and capitalists. Their quality and make often are inferior to those of the home workman. Never do they excel those of the local shop. Their prices are no less and if they happen not to fit the body a local tailor must be paid for making the necessary changes. All this is wrong. It is against the interests of not only local industries, but of those of the man himselfthe person who spends his money for such things as are produced by the hands of strangers in strange factories. Every dollar he is instrumental in sendinstitution was without a head, and ing away from Portland, as has often been explained by The Journal, is a wrong inflicted upon himself, because places that dollar beyond his own reach. It is a wrong to his neighbor, for the setts. Traverse City was among the places visited by him. He knew the pleasure to note the attitude of The pleasure to note the attitude of The Journal in relation to this subject. Unlocal manufacturers."

ortunately it stands practically alone as the conservator of the interests of our Like The Journal this man has great faith in Portland. He likes the town. He likes the people, but thinks them thoughtless in many things they do.

#### Kay in Washington; Flax Outlook Good

Eastern Manufacturers See Great Production Possibilities in Oregon but Doubt Advisability of Factories Here. Washington, Jan. 26. - (WASHING-TON BUREAU OF THE JOURNAL.)-Thomas Kay, here on his way home after a flax investigation at Towanda, Lockport, New York city and Andover, Mass., says the outlook is bright for but until recently in Portland there was a flax industry in Oregon. Mr. Kay no manifestation of loyalty to anything found manufacturers agreed that Orebut the personal purse and individual gon is second to none in production inclinations. The Journal has made fre- possibilities, but they are not agreed concerning the advisability of manufacturing on the Pacific coast. The problem hinges on the securing of machinery and expert labor. Mr. Kay will consult with government ofthe East Itinerant 'order takers' hav- ficials here with regard to the possibility of cooperation for war needs. He is not prepared to announce his conclusions on suggested plans until his report is rendered to the Portland

### Australia Finances Additional War Loan

Chamber of Commerce.

Vancouver, B. C., Jan. 26. - A new Australian war loan of 40,000,000 pounds, or nearly \$200,000,000, has been announced by Premier Hughes of Australia, according to a cable received here

Hesse-Martin Iron Works, 460-474 E. Taylor St.

Engineers, Founders, Machinists Marine Machinery, Contractors' Equipm Sawmill Machinery

PACIFIC COAST PRODUCTS FOR PACIFIC COAST INDUSTRIES.

#### GENERAL MANUFACTURING Special Tools Designed and Built SCREW MACHINE WORK

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Steel Stampings-Gear Cutting-Machine Shop Work

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Makes Vaughan's Celebrated DRAG SAWS, produces FINE GREY AND SEMI-STEEL CASTINGS Leonard Schad, Foundry Superintendent. Phone East 726

will kill the criminals that destroy your fruit. It's so good and perfect that more than 100,000 orchardists and the United States government have it in service. It's THE GREAT PEST EXTERMINATOR OF THE AGE! It's used at nearly all state experiment stations and pronounced invaluable. It is sold on "pay-as-you-please" terms, and guaranteed for five years. Let us mall you booklet.

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Lighting & Supply Co.



Struction Co. Main 1167. Woodlawn 3615.

## Wool Bats and Mattresses

ANT SIES AND WRIGHT, Eny Direct From Manufactures, ankets, Mattresses and Peathers Benovated, We do Custom Carding. Crystal Springs Finishing Works 135 luth, Mear Aider, Phone Maia 2674

Broadway 3806—A-3805 Rust-Proof
PORTIAND GALVANIZING WORKS
Hot and Electro Galvanizers, Coppersmites Hot and Electro Galvanisers, Coppersmittee MARTIN LEISER, Manager, Office and Works, 52d and Reed sta., Portland

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