

A good opening exists for the establishment of a saw mill at Lebanon, Oregon.

Since the first of the year buildings have been erected in Olympia, Washington, aggregating \$588,500 in value.

The value of taxable property in Union county, Oregon, has increased \$673,695 during the past year, making a total for 1890 of \$3,414,455.

A large establishment for the manufacture of fire-brick and tile is to be erected at Toledo, Washington. The machinery has been ordered from the east and it is expected work will be commenced early in the spring.

The Toledo Mill & Manufacturing company has been incorporated at Toledo, Oregon, with a capital of \$150,000, for the purpose of building a canal from the Siletz river to Toledo to supply water power for manufacturing purposes.

An effort is being made to establish a circulating library at Baker City. No better evidence of the growth of intelligence in a community can be found than in the fact that there is a demand for good literature. The enterprise should meet with success.

The Gales Peak Water Company filed articles of incorporation last week, fixing the capital stock of the concern at \$100,000. The object of the company is to furnish the towns of Forest Grove, Cornelius and Hillsboro, Oregon, with a supply of pure water.

A new national bank is to be opened soon in Albina, \$40,000 of the stock having already been subscribed by residents of that place. It is the purpose of the projectors of the enterprise to have all the stock owned at home, and have all officers and employes selected from among the city's residents.

The temporary bridge constructed over the Nooksack river, in Whatcom county, Washington, by the Fairhaven & Northern Railroad Co., was destroyed by a jam of logs last week, seriously delaying work on the line and entailing a loss of about \$8,000. A second structure will be erected as soon as possible and work pushed with renewed vigor.

The Clackamas salmon hatchery will not turn out as many fry this year as was anticipated, and not nearly half as many as it should. The high water in February destroyed a portion of the dam across the river, together with racks, weirs, etc., and this with the usual congressional delay in appropriating money for repairs, has prevented securing more spawn than for turning out about 3,000,000 fish, while there should have been 10,000,000. The repairs should have been made by the first of May, whereas the money was not available until the first of July, and by the time the apparatus was ready for operation the best part of the season was past. The entire cost was not over \$200, but the loss of fish through delay can not be estimated. Then, too, the government has no representative here now. Commissioner Stone who was here for a time has gone, and no one has been sent to take his place. The government certainly can not accomplish any good in attempting artificial propagation of salmon unless a representative is kept here all the time, supplied with funds necessary for proper prosecution of the work. The fast and loose policy which has thus far characterized the work in this section is all wrong, and should be terminated as speedily as possible. Artificial propagation is an absolute necessity if the supply of salmon is not to be totally exhausted, and unless some more systematic method is pursued the salmon industry may be considered to be on the decline.

Probably the most universally distributed metal known to-day is aluminum, as it is found in clay deposits of all kinds. The extraction of it from the clay has been the only hindrance to its general use, as the processes by which it is secured have all been of such a nature as to render it too expensive. The study of this metal is attracting almost as much attention as does the development of electrical science, and a solution of the vexing problem of its successful reduction may be looked for any day as there are perhaps a thousand men busy in their laboratories in various parts of the world seeking for some means by which to make the metal as cheap as iron. When they shall have found it, who can calculate the change there will be in the construction of railroads and steamships, the building of houses and bridges and the making of thousands of things where iron and steel are now used? Take for instance a steel rail, such as is used in the construction of the

modern standard gauge railroad. The usual length of a rail is thirty feet, and the weight is twenty pounds to the foot, or 600 pounds to the rail; the same sized rail made of aluminum would weigh but 200 pounds and would be stronger and better, much easier handled and a great deal cheaper for transportation. Aluminum is of a bright silver color, and is susceptible of a high polish. It is non-corrodible, is both malleable and ductile to a high degree, and is almost as good a conductor of electricity as copper. It readily unites with other metals, and as an alloy reduces the melting point of steel, and frees both iron and steel castings from the bubbles or "blows." It hardens silver and copper. Aluminum's chief use just now is for mixing with bronze, producing what is known as aluminum-bronze, used in the highest grades of arts. A short time ago its price exceeded that of silver, but one discovery has succeeded another in the matter of cheapening its production until now it can be secured, considering the difference in weight, at but a slight advance over the cost of iron. This, however, is not the aim of the chemist who are working on the problem. It is considered by them all as probable that it will be produced at less expense, pound for pound, than iron, when the proper process of reduction shall have been discovered, and until then the industry will be limited chiefly to experiment. A Chicago chemist recently secured letters patent on a process whereby he claims he can produce the metal at a cost of about five cents a pound, which, as compared with iron, allowing for difference in weight, is equal to one and three quarters cents a pound. Even at that price it is cheaper than steel, and will in a great measure enter into the construction of many articles now made of the latter metal, on account of it being lighter. A company has been organized in Chicago and capitalized at \$2,000,000 for the purpose of establishing a plant for the production of aluminum, and a bank of clay has been secured which it is estimated will furnish material for operation of the works for nearly a hundred years to come.

To assist in improving the channels of the Columbia river and its tributaries, the United States engineer in charge of that work in this section has constructed a large snag boat for removing loose rocks, logs, snags and other obstructions which have lodged in the path traveled by the vessels plying on these waters. In pursuing this work many articles are fished up from the bottoms of streams which have incidents of great interest connected with them, many of them recalling the pioneer days of Oregon and Washington, when both were united, together with Idaho, under the one name of Oregon. One of the obstructions of this nature now receiving the attention of this new snag boat is the wreck of the *Sylvia de Grace*, which for nearly half a century has laid at the bottom of the Columbia river near Astoria. The wreck, says the *Columbian*, lies nearly abreast of Hanthorn's cannery, and most of the timbers are still visible at low tide, notwithstanding the fact that forty-one years have passed since the vessel came to her last anchorage. The *Sylvia de Grace* was a clipper ship built along in the forties to ply between New York and England, but when news of the discovery of gold in California was received, she was sent around the horn with a cargo of general merchandise and passengers for San Francisco. On arriving there her master found that lumber was selling at fabulous prices, and was impossible to be obtained in that country. He accordingly set sail for the Columbia river, where he had been informed lumber was plentiful and comparatively cheap. On arriving at Astoria, he proceeded to Hunt's mill, which was located nearly opposite where Cathlamet now stands. It was a small mill and the vessel was a long time receiving her load, in fact a portion of it had to be rafted down from Love's old mill above Vancouver, and from a mill at Oregon City. At last the cargo was completed and on a pleasant July morning, in 1849, she moved down the river with what was probably the most valuable cargo of lumber that ever floated. She carried 300,000 feet, for which the captain was to receive \$500 per thousand in San Francisco. In the afternoon the vessel reached Astoria, and the pilot in charge, a young man named Johnston, let go anchor just above a ledge of rocks abreast of Hanthorn's cannery. On the ebb tide the ship dragged anchor and drifted broadside against the reef, knocking a hole in the bottom from which the hull gradually sank never to rise until the advent of the snag puller forty-one years later. The weather was calm and the vessel did not break up, in fact she never was broken up, but was hacked to pieces by wreckers. For nearly two months she was undisturbed; but in September her cargo was removed and loaded on other vessels which took it to San Francisco where it was still worth over \$100 per thousand. The people of Astoria in those days showed no disposition to take possession of everything they could get hold of, consequently the wreck remained almost intact for a long time, and whenever an Astoria boat builder needed a piece of seasoned oak he could paddle out to the wreck with a hand saw and a hatchet and cut out just what he needed. In this way the wreck was gradually cut down until nothing was left above water, and the sand settled around it, making the place a serious obstruction to navigation. In this condition it has laid for a generation, but at last Uncle Sam has concluded to remove it and in a few days the "wreck of the *Sylvia de Grace*" will exist only in the memory of the old residents.