

IS GIGANTIC TASK

Continuous Shifting of Sand at Mouth of Columbia Is Engineering Problem.

GREAT AREA IS AFFECTED

W. D. B. Dodson Declares That Will Aid to Navigation Prosperity Will Be Established by Low Rates for Transportation.

BY W. D. B. DODSON,
(Trade Commissioner of Portland Chamber of Commerce.)

A diminutive sand pile, with a maximum width of 400 feet, is the present barrier to full and free commerce in the Columbia River. This petty obstruction is soft, pliant and easily handled. But above it is 23 to 27 feet of troubled waters. These waters are lashed into a phenomenal state of unrest by the conflicting forces that struggle around the mouth of the Columbia River. Because of the tempestuous seas and the battering force of the Pacific when directed against a puny work of man which might Neptune never contemplated in shipping his shoglines, the most daring jetties project ever attempted to make a direct, safe channel for ships has been slow, costly work.

This petty sand dune and the fighting waters above it constitute the bar of the Columbia River. When, white men first saw it, the bar had a width of five to seven miles. It has since then narrowed slowly and certainly until today the great between the 30-foot contour lines is from 1800 to 2000 feet. This narrow, confined space the entrance has been converted into a great deep channel for the ships of the world, capable of accommodating any vessel now floating upon the Pacific, at any state of weather, and the channel maintains its fixed position with the changing seasons and succeeding years.

Wide Area Affected.
All the hopes and expectations of the entire basin of the Columbia, embracing an area of 250,000 square miles, now hang in their progress upon that one little ridge of sand. If it were on dry land, a cut through it could be made in a few days at a trifling cost. But the continuing force of the ocean above it are taxing the engineering genius of the best minds of the Pacific Northwest. Upon the successful and immediate removal of this barrier, or removing this bar, of cutting a permanent channel through the little sand dune, rest the maximum prosperity of the entire basin of the Columbia and the fate of every city and community of the Columbia district having any plans for becoming a satisfactory, permanent deep-sea port.

When the South Jetty was projected in 1852, it was believed that three or four miles of the structure would provide ample directing force for the currents of the bar, and give a depth of 35 or 40 feet. By the time that the jetty had reached four miles in length, a profound influence was being exercised. In the year 1859 surveys showed a channel of 20 feet depth across the bar. Then it was believed another two or three years would see the complete force of the Columbia cut a channel through the sand equal to the best of the Pacific harbors. But the hundreds of millions of tons of sand that are subject to wave and current movement at and near the mouth of the river began reshaping a bar beyond the point of the jetty.

Sand Continues to Shift.
An extension of the south jetty was decided upon. By 1902 the project as it now exists was outlined, and soon construction was started. Within another month the outermost stone of the south jetty will be cast into the sea, in defiance of the powers of the Pacific. Rapidly the sand deposits have been shifting. Clatsop Spit has been carried about three miles beyond Point Adams, and spits have been projected farther. It seems probable that the rents outside have undertaken a race with the jetty builders, to see if sand could not be piled up in the deepening waters faster than man could cast stone.

At seven miles from the starting point the jetty is to be called finished. Shortly beyond this point is found 40 feet of water, from which the ocean bed dips downward gradually. Along the line of the jetty, the currents are accumulating sand, and it is probable that in due time the seven miles of rock will become the core of a practically continuous sandspit.

Result in Disappointing.
When the surveys were made this year, with the south jetty nearly complete, keen disappointment spread among the ranks of engineers and shipmen. There was no more water than expected in the ship channel over the bar. For some reason which had not been calculated, the struggling currents prevented the intended force of water discharge and ebb tide eating through the now reduced bar.

The tremendous volume of water was a known quantity, its current velocity on ebb tide was also accurately determined; the establishment of a channel 40 to 45 feet deep so far as the jetty has extended was also set forth; but beyond the point of the jetty, where the concentrated currents of the stream met the forces of the ocean, the sand had piled up in a small ridge called the remnant of the bar, and was ready to bump with threatening force any steamship drawing 24 feet of water or more that tried to pass over it when the waves reached a certain strength on the surface.

Some shippers are disheartened. They have waited long for deeper water, so that heavy craft would pass in and out without weather delays and without having to bear high insurance risks. They have not studied the steady line of improvement made by the costly petty work, and thus are to get the point of future hope. It is a pity to note briefly varying conditions on the Columbia River bar from the time it was first sounded.
First Records Made in 1792.
In 1792 Admiral Vancouver entered the mouth of the river, made careful soundings over the bar and in the waters adjacent. These are the first authentic data of the physical conditions prevailing beneath the surface. He found a channel with 27 feet of depth close under the rocky heights of Cape Disappointment, and about 18 feet depth over on the south side next to Point Adams, where the main channel is found today. At that early time Baker's Bay had considerable depth of water and was the anchorage inside the bar.

MANY ATTRACTIVE DWELLINGS ARE ERECTED IN GLENEYRIE ADDITION

Houses Are Modern and Distinctive in Type—Most of Streets Have Been Paved—The Addition Adjoins Irvington.



Alice Seeley, E. 24th and Stanton Sts.

A LARGE number of beautiful homes are being erected in Gleneyrie Addition, which is located on the east of East Twenty-fourth street. North streets have been paved for some distance. The beautiful home of Harry D. Jaeger stands at the corner of East Twenty-fourth and Stanton streets and is one of the most attractive homes in this district. Alice Seeley is having a fine residence erected at the southwest corner of East Twenty-fourth and Stanton streets. Arnt Anderson's new home stands at the corner of East Twenty-sixth and Stanton streets. Mr. Anderson has erected a number of houses in this neighborhood.
The new home of W. L. McCabe is located at 572 East Twenty-fifth street. It is one of the most beautiful homes erected in Gleneyrie Addition. A large manse is being built for Rev. George Thompson, on East Twenty-fourth street, on the grounds of the Church of the Methodists. It is a two-story structure and the outside is covered with concrete plaster of dark color, or, corresponding with the exterior of the church. It will cost about \$10,000.
Roseburg Farm of 800 Acres Sold.
ROSEBURG, Or., July 5.—(Special.)—Pikens Brothers Wednesday disposed of their 800-acre farm to William Banney & Sons, recently of Argentine Republic. The consideration was \$15,000. The land lies about eight miles from Roseburg on the Dear Creek roads, and is one of the most sightly ranches in this section. It is highly improved and is adapted to general farming. The new owners contemplate a number of substantial improvements on the property during the present summer, including the erection of several new buildings. The land was purchased for a home.
Salemen Are Banqueted.
The Umbdenstock-Larson Company gave a banquet for its sales force at the Portland Commercial Club Monday night, and the occasion proved a jolly "family affair." Frank Motter, one of the chief boosters of the Halsey-Street Improvement Association, was toastmaster. Several talks were made by those present were: J. Fred Larson, William Umbdenstock, Frank Motter, D. C. Prentiss, George R. Boehm, C. M. Dallard, George W. Stitt, G. C. Osborne, William Penn, J. M. Brunner, Fred Stetzell, H. F. Pfeiffer, Charles V. Beede, Al Larson, J. McIntosh, J. H. Ness, A. F. McNair, Oscar Gustafson, R. G. Bulmer, M. J. Pfister, F. M. Nottingham, J. R. McClure, C. W. Myers, C. F. Hoyer, R. F. Scott, Sam M. Pyett, T. P. Keeley, F. C. Spear, A. L. Levisse and M. C. Plank.
G. H. Jones to Locate in East.
George Howell Jones, son of T. E. Jones, former architect for the Portland School Board, graduated with honors at the Boston Institute of Technology last month. He is now temporarily located at the Delta Upsilon Fraternity House of Columbia University, in New York, and expects to take up his profession as architect in New York or some other Eastern city.

CITY'S POPULATION SWELLS BY 10,000

Prosperous Lents District Is Annexed to Portland After Many Years' Wait.

IMPROVEMENT PLANS BIG

More Than 90 Per Cent of People in Territory Are Homeowners. Attractive Business Buildings at Present Under Way.

Annexation of the Lents district brings into Portland more than 10,000 people, the majority are homeowners. The new boundary line is just beyond the junction of the Mount Scott and Gresham lines and while the settled district is brought in under the annexation ordinance, there is still a well-settled suburb extending on to Sycamore station. Gilbert's school district, which comprises the territory just outside the new lines, will erect a new seven-room schoolhouse.

This indicates something of the growth of Portland toward the southeast, which has been as great as toward the Columbia River. The old boundary line was at East Eighty-second street, but is now moved a mile further eastward, taking in the Lents schoolhouse of 23 rooms and 1000 school children. This already belonged to the Portland district. Rapid settlement of the Lents district began when the Mount Scott Railway, operated by steam, was electrified in 1895. At present one can start at Lents and travel to St. Johns on a single fare of 5 cents, a distance of about 15 miles, while the road to the longest distance in any city in which 5 cents will carry a passenger.

Lents Once Tent City.
The first growth at Lents was stimulated by the owners of the land surrounding Lents. In order to induce settlements they offered lots at \$25 a lot and 5 cents a month, with no down payment for a lot every week. As soon as this plan was adopted tents sprang up all about Lents which furnished shelter for the homeless who were in the place of their own. These tents were replaced with cheap shacks and as the homeowners paid out they built better and more pretentious homes. Perhaps no suburb of Portland has more homeowners. Indeed, renters are very few between Grays Crossing and the city limits at Junction. This is true of the entire South East Side, known as the Mount Scott territory. In the territory between East Fifty-second street, south of the Powell Valley road, and the new city limits the proportion of homeowners is 90 out of every 100 of the residents, which is as high as higher than in other suburbs of the city.

Another characteristic of the attractive gardens that may be seen connective with these homes. They may be seen to some extent from the Mount Scott line to Junction. Within the past three years a much better class of homes have been built throughout this district.
Carline Is Taxed.
There is no suburban carline which carries more passengers than the Mount Scott line to the Junction. A car starting from the Junction for Portland makes a few passengers and by the time it reaches Hawthorne avenue, even during the middle hours of the morning, it is full. Morning and afternoon, however, there is another story to tell. The cars, which are double-deckers, are always filled, crowded to their capacity with passengers and one-half operated every five minutes. A special car is operated to take care of the local traffic and relieve the through cars running to Lents Junction. It is estimated that more than 400 trips are made daily through to Lents.

Lents has become an important center. Besides the Lents Schoolhouse of 23 rooms, the Catholics have a private school of six rooms, Westport School, where an addition of eight rooms, under construction, is an offshoot of Lents School, and yet the attendance at Lents School has not been materially reduced. The Oddfellows lodge, Lents is erecting a two-story concrete building at a cost of \$10,000. H. A. Dallard, owner and publisher of the Beaver State Herald, is erecting a second story to his concrete building on Main street. O. E. Lents has just finished a \$10,000 concrete business building on Grays Crossing, at East Eighty-second street, and several modern garages have been built.
Improvement Club Formed.
The Lents Civic Improvement Club, with H. Rodstad as president and Mrs. Theckia Bright as secretary, was recently organized for the general development of the district. The club has started a movement to secure mail delivery and petitions have been circulated. Lents will probably be made part of Portland's mail delivery soon. Also the club has started a movement for improved streets, electric lights and police protection. Lents people are supplied with Bull Run water and beginning July 1 they were charged city rates for water. Reduction from what they had been charged. This reduction alone will save many Lents people for many additional expenses through annexation to Portland.
CLUBHOUSE WILL RISE SOON
Fine Structure Is Planned by Laurelhurst Property Owners.

With a large part of the building fund already subscribed, the directors of the Laurelhurst Improvement Club expect to see work started on the new clubhouse early next month. The structure will cost about \$25,000. The site for the building and grounds comprise an entire block and lies next to Ladd Park. Part of the tract will be improved and used for tennis courts. Landscape treatment will be a feature of the development.
A meeting of property owners in Laurelhurst will be held tomorrow night at East Twenty-ninth and East Tenth streets. Matters to be considered for completing the building fund.

HOMES ARE IN DEMAND
Trading in Residence Property Shows Strength.
Trading in residence property was the special feature of the Portland realty market last week. Not only was there considerable activity in dwellings, but subdivision operators enjoyed brisk business. It is the

MEDFORD ELKS WILL BUILD
Plans Drawn for Three-Story Hall to Cost \$45,000.
MEDFORD, Or., July 3.—(Special.)—The local Lodge of Elks has abandoned its plan of leasing the Medford Furniture & Hardware Company's building for a clubhouse and will build on its own property at a cost of \$45,000. Plans have been drawn by Architect Clark of this city, and if present arrangements are carried out, ground will be broken in 90 days. Officers of the Elks are now passing subscription lists among the members and it is expected the entire issue of bonds will be taken up by local members. The plans provide for a three-story building, which will include a lodge hall, billiard, pool and reception rooms, ballroom and ultimately bachelor apartments and a luncheon room will be added.

BEET SOIL INVESTIGATED
German Scientist Visits Lewiston Seeking Sugar Factory Locations.
LEWISTON, Idaho, July 5.—(Special.)—Dr. F. Schuchert, a German scientist of Berlin, who located at Vancouver, B. C., has been in Lewiston this week investigating the climatic and soil conditions surrounding Lewiston for the purpose of determining sugar beet possibilities. After his examination Dr. Schuchert reports that conditions are most favorable for growing this staple, but, before taking any definite steps toward establishing extensive factory systems here will make technical tests of soils. Dr. Schuchert represents extensive sugar beet interests of Germany, which has a Model in which several factories in the Northwest.

opinion of dealers that the market will show gradual improvement during the month.
One of the important parcels in the old residence district that was sold last week is the fractional lot on the west side of Park street, between Mill and Market streets. The property was purchased by John M. Winter from Inez A. Stevens for \$11,000. Catherine Kavanagh sold to Clara Goins residence property for \$2500. Stella M. Ohlson purchased from W. B. Moore property on East Portland Heights for \$500.
Jane Middaugh purchased from Lidia G. Crampton a house and lot in Alhambra for \$4000. Morris A. Carter sold to Albert Taylor residence property in Mount Tabor Villa Annex for \$2500. Neva Blanch Watson sold to P. E. Taylor improved property in Broadway Addition for \$2800. Sale purchased from J. H. Wilson property in Woodstock, the consideration being \$7500. C. W. Hayhurst sold to George A. Conroy residence property in Park Addition for \$4500. Frank H. Gloyd has purchased from George M. Anderson improved property for \$5000. A modern home in Laurelhurst Addition was bought last week by Nellie B. Carver from John E. Palmer for \$5000. R. S. McFarland sold to W. B. Armstrong a home in Mount Heights for \$2800. Abigail L. Shaughnessy sold to A. Jackson Detsch a residence in Crystal Springs Park for \$400.

Fishermen Dump Valuable Cargo to Load Up With What They Think Is Ambergris.
NEWPORT, Or., July 5.—(Special.)—The discovery of a gold deposit would not have caused more excitement or lent more romance than the discovery of what was supposed to be ambergris in Newport, where everybody wants to collect "ambergris."

Carl Herrin and Captain Cramer went out in the launch Olla S. a short time ago to cut fire-ice along the coast. The reefs along the shore. As codfish only bring about 2 cents a pound at the local market, they changed their plans en route to the reefs and continued to the halibut banks, as halibut bring 4 cents a pound. Nearing the banks they saw a body of "ambergris" floating on the water, and threw the sea otters overboard, loading the launch to the gunwales with ambergris.
This started a "ambergris" boom. Lee Doty, proprietor of the sturge route South Beach and Waldport, hired a driver and put in his time gathering more than 100 pounds of ambergris. James Gaters, gun wader, has secured the services of a deputy while he hunts "ambergris" along the beach. Loren Bywater, a fisherman, hunts ambergris all day and dreams about it all night. Charles Mapes, a jeweler, has risked his diamonds and agates while he keeps afloat in his safe.

BIG FISH MAY BE GUANO
SOME NEWPORT RESIDENTS FACE DISAPPOINTMENT.
Specimens have been sent to Washington and abroad. Sea Lion Charlie says when he was a sailor, they handled lots of the same kind of stuff, he said it was called "guano." It is thought this was washed overboard from a sailing ship. Its value is approximately \$10 a ton.

MANY DWELLINGS RISE
ACTIVITY IN RESIDENCE CONSTRUCTION BRISK.
Progress in New Additions Is Notable—Several Fine Homes on West Side Are Planned.

In the construction of homes Portland is making an excellent showing this summer. In all parts of the East Side many fine homes are being built. In the subdivisions near West Hill several costly homes are under way and others are planned.
Among the things started during the past week is the two and one-half-story house being built by the investors' Building & Trust Company, on Alameda drive, near Wistaria avenue. The house will be modern and attractive. It will cost about \$7500.
W. C. Nash has taken out a permit for the construction of a modern house on East Salmon, near East Forty-ninth street. The house will cost \$3000.
George E. Briggs has taken out a permit to build a bungalow on Alameda drive, near East Forty-seventh street. The house will be very attractive and will cost \$4500.
E. J. Grabs will build a bungalow on Moore, near Jarret street, at a cost of \$2500. Robert McCracken has prepared plans for a two-story dwelling to be built on East Seventeenth, near East Taylor street. The house will cost \$2500. Ernie W. Bruns will build a house on East Twenty-eighth, near Knott street, at a cost of \$2400.
E. Drake has let the contract for the construction of a two-story dwelling to be built on East Fifty-ninth, near Thompson street. The house will cost \$3500.
J. H. Tomlinson has started the erection of a bungalow on Borthwick, near Dekum avenue. The dwelling will cost \$2500.

MEDFORD ELKS WILL BUILD
Plans Drawn for Three-Story Hall to Cost \$45,000.
MEDFORD, Or., July 3.—(Special.)—The local Lodge of Elks has abandoned its plan of leasing the Medford Furniture & Hardware Company's building for a clubhouse and will build on its own property at a cost of \$45,000. Plans have been drawn by Architect Clark of this city, and if present arrangements are carried out, ground will be broken in 90 days. Officers of the Elks are now passing subscription lists among the members and it is expected the entire issue of bonds will be taken up by local members. The plans provide for a three-story building, which will include a lodge hall, billiard, pool and reception rooms, ballroom and ultimately bachelor apartments and a luncheon room will be added.

BEET SOIL INVESTIGATED
German Scientist Visits Lewiston Seeking Sugar Factory Locations.
LEWISTON, Idaho, July 5.—(Special.)—Dr. F. Schuchert, a German scientist of Berlin, who located at Vancouver, B. C., has been in Lewiston this week investigating the climatic and soil conditions surrounding Lewiston for the purpose of determining sugar beet possibilities. After his examination Dr. Schuchert reports that conditions are most favorable for growing this staple, but, before taking any definite steps toward establishing extensive factory systems here will make technical tests of soils. Dr. Schuchert represents extensive sugar beet interests of Germany, which has a Model in which several factories in the Northwest.