

BIRDSYE VIEW OF THE WILLAMETTE HEIGHTS FAIR SITE, LOOKING WEST FROM THE RIVER.

wharves adjoin the railroad so that any exhibits, foreign or domestic, can be handled with convenience.

"Further, a branch line would serve all excursion and with direct transportation to the grounds. Thus all freight, exhibits and outside visitors would be provided with direct railroad transportation facilities.

"The street railway connection to the city is already solved, there being two competing lines now in operation to the proposed site. A few blocks of additional tracks of light grades would give connection to all the lines in the city and make good service possible, especially with the central portion of the city.

"It is desired to maintain water in the lake at an average depth of six feet so that the water will reach the belt of green willows bordering the lake and cover the low and unimproved lands.

"During high water or flood season of the Willamette it would be impossible to keep out the flood water of the Willamette and maintain the six-foot level in the lake. Expensive dikes would have to be constructed along the north shore of the lake for at least half a mile in length, but even if the lake by means of diking and sheet piling could be hermetically closed at that season against the extra hydrostatic pressure, the level of the lake would gradually rise to the surface of the Willamette on account of the constant inflow of water into the lake from the watershed. This inflow would have to be pumped out to keep the surface of the lake at a six-foot level.

"It might be possible even under those conditions to reduce the average high-water mark in the lake by several feet. At extraordinary high water only work of the greatest magnitude and at enormous cost could possibly keep the lake at a lower level than the Willamette.

Summary of Features.

"The site known as Willamette Heights, on Guild's Lake, for an exposition such as contemplated by the Lewis and Clark Centennial Exposition, has the following main features:

"Location of site and lake—One and three-quarters miles from center of population.

"Area of lake—Two hundred and seventy acres.

"Area of Exposition site—One hundred and fifteen acres.

"Watered (visible springs, Balch Creek)—Fifty-three thousand two hundred gallons per 24 hours.

"Outlet—Well-defined artificial channel.

"Nature of subsoil of lake—Clay.

"Nature of lake embankments—Subsoil, clay.

"Embarkment of east shore—Dredgings from Willamette.

"Dam and dike and their location—Between Guild's and Kittredge Lakes, sheet piling and earth embankment now in place; dam in outlet sheet piling and gates easily constructed.

"Evaporation and seepage—Evaporation is more than offset by inflow; seepage not objectionable.

"Quality of water in lake—Originally fed by springs and creeks and from watershed; now colored and impregnated with decomposed vegetable growth.

"Pumping to lake—Eighteen-inch discharge centrifugal pump, pumping from Willamette; capacity, 10,000 gallons per minute.

"Topographical features—Exposition grounds slightly sloping towards the lake, with higher plateau south level for main grounds.

"The city crematory is situated about 100 feet easterly from the main grounds. This is an objectionable feature, but can be almost or totally remedied by either smoke-consuming device, or additional height to the present chimney. It also ought to be fenced in, so as to exclude it from view.

"Sanitation—Direct connection with present sewer system.

"Water supply—For domestic purposes, direct connection with present city system; for fire and sewer purposes, independent pumping plant and standpipe.

"Transportation—Adjacent to railroads and steamers, and in direct connection with present city railway system.

"Effect of high water in the Willamette—It will affect level of Guild's Lake, but not gain site for Exposition grounds.

Estimated cost of dam and dike.....\$1,500
 Cost of fencing.....5,000
 Cost of centrifugal pump with engine.....2,500
 Cost of boilers.....850
 Cost of compound steam pump.....1,750
 Cost of boiler gas to boiler.....1,700
 Pipe line to stand pipe, 2000 feet.....3,000
 Cost of tank and freight.....4,500
 Cost of grading and treating temporary road.....2,300
 Total.....\$24,075
 Cost of operating centrifugal pump, \$1.50 per day.
 Cost of operating power pump, \$19 per day. Submitted respectively, "MAXWELL & HUBER, "Civil Engineers, "Portland, Or., September 2, 1902.

After Terminal Port Honors.

NEW YORK, Sept. 5.—A new claimant has arisen for the honor of being selected as the British terminal port proposed for the new Canadian service, says a London dispatch to the Tribune. Active steps are being taken to lay the claims of Holyhead before the proper authorities, and the London & Northwestern Railway Board has been approached, it is said, with a view to securing the company's co-operation.

ALSTERTHAL FROM CALLAO

SHIP COMING A LONG DISTANCE FOR A LOW FREIGHT RATE.

Is Chartered for December Loading at 25¢ 3d.—Semantha Caught in Calm—Engineers' Trouble Unsettled.

The German bark Alsterthal, one of a large line of "Alsters," many of which have loaded in Portland was chartered yesterday to load wheat at Portland in December at 25¢ 3d. The Alster is one of the smallest vessels of the line, registering but 1025 tons, and, size and position considered, she is about as cheap as anything that has been offered this season. The vessel is now at Callao discharging cargo from Hamburg, and will come north in ballast. This voyage affords a striking illustration of the demoralized condition of the freight market, for under normal conditions the vessel could secure a nitrate freight over 600 miles nearer home than she will when she gets around to her wheat cargo. Under normal conditions, there is a differential of 10 shillings per ton in favor of the nitrate ports as compared with North Pacific ports. This, if in force at the present time, would mean 15¢ 3d for nitrate, which would give shipowners that tired feeling.

With ships like the Peter Rickmers sailing across the Pacific in ballast from the Orient to accept a 25-shilling rate, and the Alsterthal coming up from Callao for 25¢ 3d, matters certainly look gloomy for the shipowners. Not all of them, however, are prepared to accept such rates, and it is not improbable that all Pacific Coast ports for an indefinite period. The latest arrival, the Semantha, refused 25¢ 6d before she arrived, and owners will probably lay her up at this port to await an improvement in the market. She belongs to a firm which is addicted to the habit of giving its ships long rests, one of its vessels remaining idle in San Francisco for a year and a half. Another was obliged to wait 12 months for a freight rate which met the approval of the owners.

NO STRIKE YET.

Engineer F. F. Smith says Peaceable Methods Will Be Tried First.

There seems to be little danger of an immediate strike among the marine engineers, but they do not hesitate to say that there are points of concession that will have to be made by the steamboat owners before things can again run smoothly. The settlement of the last strike was incomplete, and there are still many points of difference between the employers and employed. A number of meetings have been held by the Engineers' Association during the last of the National president, George Uhler, and meetings have been arranged between Mr. Uhler and the employers. At these meetings, however, nothing has ever been said of a strike, and an attempt is being made to have the troubles adjusted peaceably.

In his meetings with the employers, Mr. Uhler went over the ground thoroughly, and endeavored to show them that the engineers were not paid as much as they ought to be in comparison with the wages paid elsewhere and in other lines of work. "I have been all over the United States," said he to a reporter, "and I am in touch with all of the engineers' unions, but I do not know of any that are as poorly paid as the Portland engineers." President Uhler left yesterday for his home in Philadelphia. His counsel to the men while here was to try, if possible, to secure their demands without trouble. He has placed the case in a strong light before the employers, and it is hoped by him that his words may have some effect. No communications have been received, however, since the conference.

"While it is a well-known fact that the engineers are not satisfied," said F. F. Smith, business manager of the Engineers' Union, "I cannot say that there is danger of a strike. We are adopting other methods. We wish to try to convince the employers that our conditions are not what they ought to be, and we believe that we can gain what we want in that way. We have had some encouragement since the last strike, and many of us have had our conditions bettered. President Uhler put our case in strong words, and I believe that his words had their effect."

When asked what points of complaint the engineers had, he said: "We are not satisfied in any way. Our wages are smaller than wages for similar work are in other communities. Our hours are not satisfactory, and the conditions under which we work are not to our liking. The points have been gone over so often that it is no use to go over them again."

"Have you made any demands on the employers since the last strike?" he was asked.

"We have not," said he; "we have simply laid our case before them and asked that they try to give us better conditions."

"You think that they are disposed to improve the condition under which you work, and that there is little doubt but

BRITISH BARK SEMANTHA LOST MUCH TIME OFF THE COAST OF OREGON.

Captain Crowe, of the British bark Semantha, which spoiled her good record by using up five months in coming from Hamburg to Portland, says that there is nothing the matter with the Semantha, nor her skipper. She made a good start from Europe, and left a smoking wake behind her as she journeyed down the Atlantic, but when down about the latitude of Montevideo, she struck a calm belt, and for nearly a month lay "like a painted ship on a painted ocean," occasionally clawing off sideways like a crab for a few miles, and then drifting back to where she started from. Captain Crowe has these little drifting matches marked out on a chart, and it would break a sea serpent's back to follow her around some of the turns.

After working around into the Pacific, she spoke the overdue schooner Honolulu, which was wandering aimlessly about the Pacific with a broken chronometer, over 1500 miles out of her reckoning. Captain Crowe gave the skipper his position, and he was so astonished to find himself so far from where he supposed he was that he asked whether the position given was east or west longitude. Captain Crowe was not surprised when he arrived at Astoria to learn that 40 per cent of the steamer's cargo was missing. The steamer was being paid on the Honolulu, and by withholding the information, which he could easily have done, he could

BRINGS SALMON FROM ALASKA.

ASTORIA, Or., Sept. 5.—(Special.)—The American ship St. Nicholas, which arrived in from Bristol Bay, Alaska, last evening, brought 2,179 cases of salmon from the Mushagak River cannery of the Columbia River Packers' Association.

MARINE NOTES.

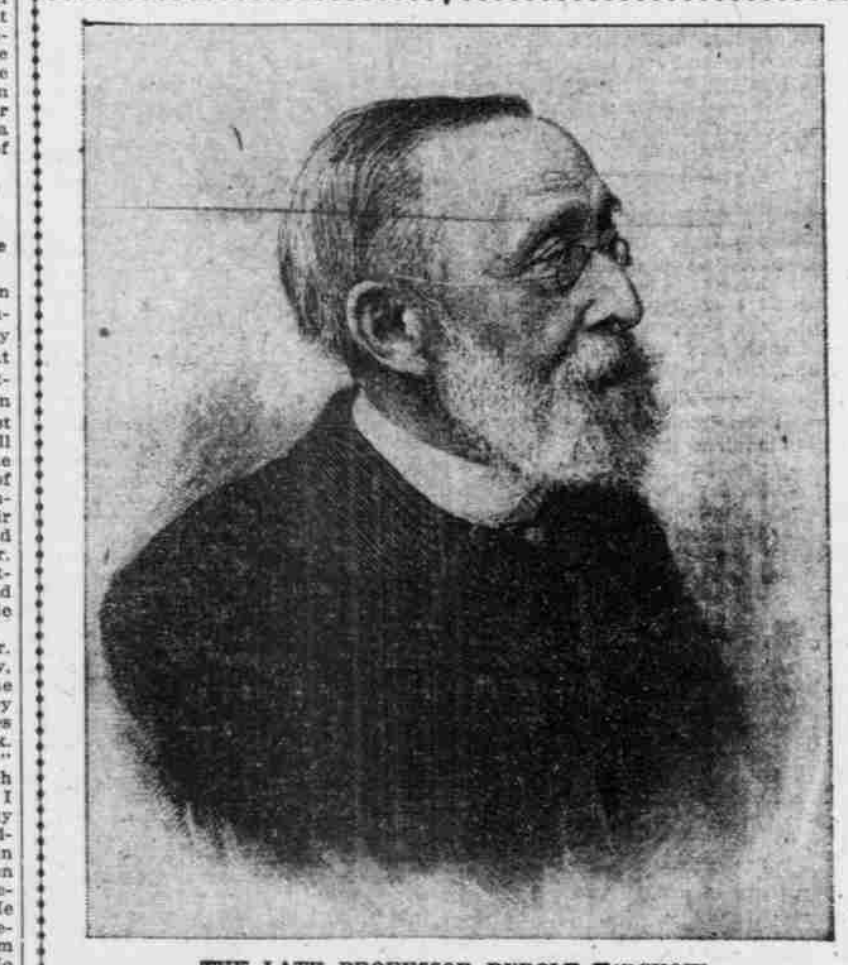
The schooner Alert, mentioned in yesterday's Oregonian, was launched at Honokiam, will be commanded by Captain Krebs, formerly master of the schooner Jennie Stella.

The steamship Elba sailed from Astoria at 3 o'clock yesterday afternoon. Three of her deserting sailors went down to Astoria in charge of Deputy Marshal Roberts Thursday night.

The big German bark Magdalena, which has loaded here every season since 1897, sailed from Yokohama for Portland Thursday. Captain Susewind has always made fast passages with the vessel, and will probably reach Portland in about 30 days.

DOMESTIC AND FOREIGN PORTS.

ASTORIA, Sept. 5.—Sailed at 8:45 A. M.—Steamers Elmore and Harrison, for Tillamook.



THE LATE PROFESSOR RUDOLF VIRCHOW.

LARGEST IN THE WORLD.

White Star Line Will Build a Ship 720 Feet Long.

LONDON, Sept. 5.—The White Star Line has ordered another steamer to be built by Harland & Wolff, of Belfast, which is to be 20 feet longer and a few feet wider than the same company's steamer Celtic, now the largest liner in the world. The Celtic has accommodations for 3000 passengers, and is 700 feet long.

FOREIGN COAL COMING.

Many Thousand Tons of British Anthracite Coal Contracted For.

LONDON, Sept. 5.—Twenty thousand to thirty thousand tons of anthracite coal are contracted for immediate shipment to New York, which demands 500 tons daily. The dealers, however, regard the New York market as ephemeral. They prefer to serve their regular customers, and can-

Sailed at 1 P. M.—Steamer Columbia, for San Francisco. Arrived at 1 P. M.—Schooner Lisia Yano, from San Francisco. Arrived at 3:30 P. M.—American bark Henry Morse, from Alaska. Sailed at 3:30 P. M.—German steamer Elba, for Port Natal. Sailed at 3 A. M.—Steamer Despatch, for San Francisco. Sailed at 4 P. M.—Steamer Alliance, for San Francisco. Condition of the bar at 4 P. M., smooth; wind north; weather hazy.

Yokohama, Sept. 5.—Sailed, September 4—German bark Magdalena, for Portland.

San Francisco, Sept. 5.—Sailed at 11:40 A. M.—Steamer Eldor, for Portland. Sailed—Schooner Novetty, for Portland. Arrived—Steamer Charles Nelson, from Seattle; schooner Charles B. Wilson, from Gray's Harbor; ship Star of France, from Bristol Bay. Sailed—Steamer Rainier, for Seattle; steamer Montana, for Seattle; steamer Lakme, for Portland.

New York, Sept. 5.—Arrived—Island, from Copenhagen. Sailed—Celtic, for Liverpool.

Cherbourg, September 5.—Arrived—Columbia, from New York, via Plymouth, for Hamburg.

Yokohama, Sept. 1.—Arrived—Empress of Japan, from Vancouver.

Seattle, Sept. 5.—Sailed—Steamer Parallon, for Skagway. Arrived—Steamer Dolphin, from Skagway.

New York, Sept. 5.—Arrived—Campania, from Liverpool and Queenstown.

The family medicine in thousands of homes is Hood's Sarsaparilla. Take only Hood's.

PROFESSOR VIRCHOW DEAD

GREAT GERMAN MEDICAL AND SCIENTIFIC REFORMER.

Berlin Papers Praise His Activity in Improving Hospitals and Other Sanitary Institutions.

BERLIN, Sept. 5.—Professor Rudolf Virchow, the pathologist, died here at 2 o'clock this afternoon. The evening papers here print glowing eulogies of the deceased professor, classing him as the world's greatest medical and scientific reformer, and saying that no other man had so deeply influenced modern medicine and that no other had such a worldwide reputation and so many followers in all lands. The papers also praise his humanitarian activity in improving the Berlin hospitals and other sanitary institutions and the liberal organs extol his political activity and unswerving liberalism.

(Rudolf Virchow was born at Schivelhelm, Pomerania, October 13, 1821. In 1843 he graduated in medicine at the University of Berlin, and began to lecture on anatomy, being also professor of the Charite Hospital. Aroused by the revolution of 1848, he entered the political arena as a Liberal leader, and was elected to the Prussian House of Deputies. His liberal politics served to deprive him of his lectureship in 1849. Upon this he accepted a call to the chair of pathological anatomy in the University of Wunzburg, where he obtained fame by his lectures on cellular pathology. In 1856 he was recalled by the University of Berlin to assume the chair of pathological anatomy and to become director of the Pathological Institute at Berlin, which he soon raised to the first rank among such establishments. In 1858, he entered the Reichstag, where he soon became famous by his coinage of the word "Kulturkampf," a phrase signifying the conflict of the state with a reactionary church. In the wars of 1856 and 1870 Professor Virchow was director of the German hospital service. The cancerous disease that carried off Frederick III in 1888 brought Virchow prominently before the world as the ultimate authority on the pathological problem. He wrote "Cellular Pathology of Tumors," and many other technical works, besides "Fremden Fieber" (1859); "On Famine Fever" (1859); "A Collection of Treatises on Scientific Medicine" (1859); "Four Lectures on Life and Illness" (1862); "Alimentation and Well-Being" (1862); and "The Function of Science in the New National Life of Germany" (1881). Beside his discoveries in physiological science he rendered important services to anthropology in connection with the lake dwellers and the Egyptian tombs. In politics he was a bitter opponent of Bismarck and a friend of the workmen. He always labored hard for sanitary reforms and as Alderman in Berlin took a deep interest in all municipal work.)

FILIPINO FANATIC.

Rios and His Band Attack a Town in Tayabas and Are Routed.

MANILA, Sept. 5.—Rios, a fanatic leader of the natives in the Province of Tayabas, Luzon, attacked the town of Laguanan, September 3, at the head of 30 riflemen and 150 men armed with bolos. The band wantonly killed two women and one girl and wounded several other persons. A detachment from the native constabulary arrived unexpectedly at

LADIES' HANDS.

My experience with PEARLINE leads me to think it milder on the hands, and it takes less of it than of—to soften hard water. I am pleased with results.

Mrs. Rev. S. E. V.

One of the Millions.

Major Glen Restored to Duty.

Major Edward F. Glenn, of the Fifth Infantry, who was tried by court-martial for administering the water cure to natives, found guilty and sentenced to be suspended for one month and to forfeit \$50 of his pay, has been restored to duty and ordered to return to his company at Bayama, Luzon.

Guid Will Sail October 1.

ROME, Sept. 5.—On account of the impossibility of securing berths for Manila at an earlier date, Mgr. Guidi, the apostolic delegate to the Philippines, will sail from Port Said October 1, and is due to arrive at Manila November 14. Archbishop Chappelle, of New Orleans, has called his congratulations to Mgr. Guidi on his appointment.

Neely's Troubles Not Ended.

NEW YORK, Sept. 5.—Edward K. Jones, the special assistant Attorney-General engaged by the United States to conduct proceedings against Charles F. W. Neely and other officials and employees of the United

Forest Fires Revived.

DENVER, Sept. 5.—The forest fire in Allen's Park, which began five weeks ago, and which had nearly died out, has been revived by the strong wind of the past 24 hours and is now raging in the heavy timber of the Middle St. Vrain Valley. Several ranches are threatened with destruction. A new fire started at noon today on the north fork of the Thompson, near Green Ridge, and much valuable timber is being consumed. Two ranchers' houses are in the track of the flames. A destructive fire has started nine miles south of Idaho Springs.

Inchepo Rock's Crew Saved.

PORT ELIZABETH, Cape Colony, Sept. 5.—The crew of the British ship Inchepo Rock, which arrived at Algoa Bay August 21, from Portland, Or., and which was among the vessels wrecked in Algoa Bay on September 1, were all saved.

33 to Coast—Daring Elks' Carnival.

including September 11, O. R. & N. makes a rate of \$2 for round trip. Inquire city ticket office, Third and Washington.

STATE NORMAL SCHOOL

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Next term begins September 10, 1902. Equipped for thorough and practical training of teachers. Location unsurpassed for beauty or healthfulness.

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Two 30-minute lessons a week, \$8 per month.

One 30-minute lesson a week, \$5 per month.

(Krause Method). Six years director of department of music University of Oregon. Special attention given to technique and expression. Beginners taken.

Portland Academy Hall

For Girls

The Academy will open September 15 a boarding hall for girls at 191 Eleventh street. The hall will accommodate not more than 20 girls, and will be complete in all its arrangements, offering the comforts of a well-appointed home.

The hall will be under the immediate care and supervision of Miss Collina Campbell, of Portland. Miss Campbell brings to the office qualifications that assure parents that their daughters, while held to the careful observance of school requirements, will be under the influence of a refined home life. For further information, address Miss Campbell, Portland Academy, Portland, Or.

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For further particulars, call or address, MRS. MARTHA G. CROWELL, 334 First St., Portland, Or.

MEDICAL DEPARTMENT

Of the UNIVERSITY OF OREGON

Sixteenth annual session begins Oct. 1, 1902. Address S. E. JOSEPH, M. D., Desk 610 Dekum building, Portland.

WILLAMETTE UNIVERSITY

1902

OPENING ANNOUNCEMENT

1902

College Liberal Arts, Sept. 16.

College of Music, Sept. 16.

College of Oratory, Sept. 16.

College of Art, Sept. 16.

College of Theology, Sept. 16.

Normal Department, Sept. 16.

Preparatory Dept., Sept. 16.

Business Department, Sept. 16.

College of Medicine, Oct. 1.

College of Law, Oct. 6.

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Tenunions open to inspection at his studio.

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North Pacific Dental College

Tenth Annual Session Begins Oct. 1st, 1902

Students admitted later than October 10 will not receive credit for a full course.

For information and announcement address DR. HERBERT C. MILLER, 609 Oregonian Building, Portland, Or.