

SANDS RICH IN ORE

Report of Dr. Day Read at Chamber of Commerce.

MORE SANDS WILL BE TESTED

Model Electric Separator in Operation in Chamber—Smelter May Be Built at Chinook—Natural Gas Would Help Economical Production.

That the concentrating of magnetic iron and other valuable metals from the sands of the seashore, and their manufacture into iron, steel, and various other metals, can be made a valuable industry, was proved conclusively by the report of Dr. Day of the United States Geological Survey, read at the Chamber of Commerce, last night. Included in the report, were figures in detail, showing the difference in the sands gathered and tested, and the quantity of the various kinds of metal which they contained.

The report was addressed to the Honorable Charles D. Walcott, director of the United States Geological Survey, and will later be sent to Washington. It was sent by Dr. Day, to Secretary Higgins of the Chamber of Commerce, and accompanying it was a letter, in which he said:

"I have pleasure in mailing you herewith in addition to the first rough preliminary report sent to you in regard to the Columbia river sands, the enclosed manuscript draft of the more complete preliminary report, on which I have been engaged for the last few weeks, and the results of which have just been computed.

"I have also pleasure in sending you a sample of the magnetic iron ore, zircon, monazite, ilmenite, olivine, quartz, and a sample of mixed minerals obtained from Columbia river sands, as well as a small button of gold, containing also platinum, obtained from your sand, with the hope that this button of gold

will be a permanent souvenir in your collection and actual testimony of the fact that your sand does contain the precious metals.

"It is a pleasure also to advise you that we have now erected a small but efficient electric smelter, and that we have succeeded from the very first trial in demonstrating the fact that it is perfectly easy to smelt the magnetite found in your sand in an electric furnace. We are preparing a pig of steel from the first run ever made from Columbia river sand, which will be sent to you as an exhibit from your sand to be kept by the Chamber of Commerce.

"For use in our electric smelter I think it would be well to have about five carloads more of the sand from Hammond station taken from the surface directly downward. This we will run through and save the precious materials from it as before.

"I would advise you that in addition to the use of the iron ore for smelting purposes I am in correspondence with the General Electric Company in regard to the use of magnetite in the East and also ilmenite, i. e. titanic iron ore, with a view to disposing of more or less of this material for the manufacture of electric light pencils in the place of the usual carbon, a matter which I know will be of considerable interest to you."

Dr. Day's letter and report were called forth by the request of the local Chamber of Commerce some time ago, to test a quantity of the sands to be found on Clatsop beach. It is on these sands that the report is made.

He now suggests that another batch of sands be forwarded, and this will be at once done. To this end, a committee consisting of H. G. Van Dusen, C. R. Higgins and Dr. J. A. Fulton, were appointed to raise the necessary funds and another committee consisting of John H. Smith, C. F. Lester and F. J. Taylor was appointed to gather the sands. The cost is estimated at about \$100.

A model of a magnetic separator, the kind used to separate the sand, in all the tests that have been made, was on exhibition at the meeting last night, and a considerable quantity of sand was run through. I. B. Hammond, T. J. Lovet and W. H. Adams of Portland and W. B. Moore and Ben C. Holt of Walla Walla, who are interested in the

machine, and the industry as a whole, were present and conducted the exhibition.

At the close of the meeting, a vote of thanks was given to Dr. Day for his painstaking effort in making the tests, and for kindly advising the chamber of the results. The chamber was crowded with visitors last evening and much enthusiasm was manifested.

"It was reported yesterday that a stock company will be incorporated at Chinook, where the sands are also very rich, for the purpose of equipping and operating a smelter.

The principal cost in the reduction of the ore is in the operation of the smelter, and by many the belief is held that the recent discoveries of natural gas, will prove very useful along this line. Even though the smelter should be located some distance from the place where the crude material is found, this would be quite immaterial, when the low cost of production is considered.

Tests were made from sands taken from eight different locations along the beach, as follows: From Moore's Hotel, Seaside; from Gearhart Park Beach; from West Station; from Carnahan's Station; from Warrenton Station; from Hammond Station, 150 feet North of Railroad Station; from Hammond Station 1500 feet West of Railroad Station at High Water mark, and from Bottom of Columbia River at Pillar Rock.

In the report, sands from each of these eight locations is taken up separately, and the different metals contained in each is shown. It is printed in full below. The figures represent the number of pounds per ton of sand except in the case of gold and platinum, where the figures denote the value in cents per ton.

From Moore's Hotel, Seaside.

Magnetic iron ore	63.44
Chrome iron ore and ilmenite	47.72
Garnet	12.16
Monazite	.108
Zircon	.15
Gold and platinum	9.1

From Gearhart Park Beach

Magnetic iron ore	1.213
Chrome iron ore and ilmenite	.558
Garnet	29.749
Monazite	.105
Zircon	.098
Gold and platinum	43.4

From West Station.

Magnetic iron ore	3.08
Chrome Iron ore and ilmenite	.701
Garnet	3.74
Monazite	.012
Zircon	.501
Gold and platinum	.3

From Carnahan's Station.

Magnetic iron ore	.92
Chrome iron ore and ilmenite	.8389
Garnet	118.9351
Monazite	1.3601
Zircon	.188
Gold and platinum	.06

From Warrenton Station.

Magnetic iron ore	14.525
Chrome iron ore and ilmenite	2.581
Garnet	3.658
Monazite	.096
Zircon	.130
Gold and platinum	1.3

From Hammond Station 150 feet North of Railroad Station.

Magnetic iron ore	62.911
Chrome iron ore and ilmenite	24.543
Garnet	30.458
Monazite	.954
Zircon	.789
Gold and platinum	6.09

From Hammond Station 1500 feet West of Railroad Station at High Water Mar.

Magnetic iron ore	643.559
Chrome iron ore and ilmenite	171.362
Garnet	174.478
Monazite	.800
Zircon	5.019
Gold and Platinum	53.00

From Bottom of Columbia River at Pillar Rock

Magnetic iron ore	13.59
Chrome iron ore and ilmenite	3.367
Garnet	131.306
Monazite	.100
Zircon	.24
Gold and platinum	.24

PROFITIOUS OPENING.

Fishers' Opera House was literally jammed last night for the initial performance given by the Roach Dramatic and Comedy Company. The play, "My Sweetheart," proved a happy vehicle for the clever abilities of the strong troupe, especially in the case of Johnnie Pringle and Miss Florence Pringle, who were ably supported on all sides by their colleagues of the cast. A double bill is programmed for tonight, entitled "The Littlest Girl" and "Wanted a Wife." Mr. John Berry of Uppertown was the fortunate winner of the first gift, a forty-piece dinner set of China.

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MESSAGE OF MOMENT

Interview With Senator Fulton on Local Subjects.

BROAD MINDED STATEMENT

Astoria's Distinguished Citizen Talks Plainly Upon Home Matters—The Bar—The City—The Election—The Party—All Are Discussed.

The Astorian is in position this morning to offer its readers the benefit of a comprehensive and interesting interview with United States Senator Charles W. Fulton, upon subjects that lie very close to the welfare of every man, woman and child in the city. It behooves every one to carefully weigh every word the Senator has uttered, for there is wisdom and the best of purpose in it all, for Astoria, the county and the state. The Senator leaves at once on his way to the seat of National Government and his views were sought for the express purpose of making them known before it was too late. Among other things Senator Fulton said:

"Yes, I will leave next Sunday evening for Portland where I shall remain two days, starting for Washington on the morning of Wednesday the 15th instant. I have much to do in the way of preparing matters to be brought to the attention of Congress this winter and the work is largely of such a character that I can do it more advantageously in Washington."

"Do you expect to secure any appropriations for Oregon rivers and harbors at the coming session?" asked the reporter. "I certainly hope to do so. The prospect is, however, that there will be no river and harbor bill enacted at this session. In that event it will be practically impossible to secure any appropriations. Possibly an exception may be made of the improvement at the mouth of the Columbia, as much of the work already done there by the Government will be lost and the com-



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- 35c Dress Goods 21c
- 15c Flannelette 10c
- 7c Gingham 5c
- 5c Print 3c
- 10c Outing Flannel 4c

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pletion of the improvement retarded many years, if a sufficient sum to prosecute the work energetically shall not be appropriated at the coming session."

"Have you anything to say concerning the city election that is to occur next month?" was the next question propounded by the inquisitive reporter.

"Well," said Mr. Fulton, "I have only this to say; I have not lost interest in local matters pertaining to Astoria and Clatsop County. I hope to see the Republicans name a good city ticket and elect it. This is a Republican city and should have a Republican Government. It is a serious mistake to assume that it is immaterial what the political complexion of local officials is. Success in local elections is very important and almost a prerequisite to success in state elections. No party can maintain an organization that ignores or underestimates the importance of success in local elections and organization is necessary to success. But there is, to my mind, a far greater reason why the Republicans should make an earnest and united effort for success at the coming city election. Public gambling rooms and dance halls have been closed in Astoria by Republican officials. I approve absolutely that step. They should be kept closed. No backward step should be taken, no retreat should be sounded in a matter of such grave importance to the good name and the moral atmosphere of our city. It should be well understood that a defeat of the Republican ticket will be accepted as condemning the action of closing such institutions. This movement against public gambling and dance halls is no crusade against the regularly licensed saloons nor is there any disposition to interfere with them. It is simply a demand that the laws shall be enforced and that these foul dens shall be obliterated from our midst. It is a demand that these snares set to entrap the youth of our city, to deprive the family of the earnings of the husband and father shall be wiped out and not permitted to be set up again. For this, it seems to me, every right thinking citizen will stand. For this every respectable saloon man (and there are many) should stand.

is not taken the unsightly condition of the court house block will continue to disgrace the city and the county will suffer the loss of the large sum already invested in the foundation for the new building.

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