## THE SUMPTER MINER

Wednesday, April 1, 1903

## HOW ORE IS SAMPLED, for 1901 was a little less than 14

10

for Determining Values.

A brief description of how ores are sampled at smelters in order to arrive of Robbins & Robbins was at the at their values, may prove of intreest to the general reader. In purchasing ore shipments it is necessary to arrive to be forwarded at once to the at some basis of settlement between Tacoma smelter. The shipment conthe smelter people and the owners. This is done by means of a process known as sampling, the object of which is to obtain average samples representing an equitable value of the ore. The Sumpter smelter company employs the same method which at the office of the company in usually obtains among all smelting Sumpter April 17, 1903. companies.

Here the ore is first crushed in a 20x10 Blake crusher. It is then elevated sixty feet and spouted into a Snyder sampler which cuts out twenty per cent. This is done by means of passing the crushed ore against a revolving oval disc with appertures in it so arranged that twenty per cent of the ore passes through into spouts which convey it to a Blake crusher where it is still further reduced. The ore next passes by means of spouts into a second sampler like the first in pattern where ten per cent is cut out, the reject passing into the reject eleavtor as above. After leaving the second sampler the ore passes through a set of rolls grinding it down still finer and preparing it for a third and smaller sampler which cuts out an additional ten per cent, and passes the sample on to a small Gates crusher which still further reduces it. This is the last step in the From the Gates crusher process, the sample goes to the sampling floor, where it may receive any farther preparations needed if not ground to a sufficient fineness, and quartered as desired.

When this process of averaging and reducing the ore has been completed, the sample, after it has been quartered down as fine as desired, is then ready for the laboratory where it is assayed and its value determined.

MONEY IN LOW GRADE ORE.

Governor Brady, of Alaska, Writes of the Treadwell in His Annual Report.

The average person associates almost any gold mining proposition with marvelous finds and speedy wealth, without stopping to consider that many of the big paying mines of the country produce low grade ores and are not only steady dividend payers through a long period of years, but employ large forces of men thereby making them good distributors of wealth from this point of view. Speaking of the Treadwell mine in Alaska, a low grade proposition, Governor Brady, in his annual report, says: "The Treadwell mine gets better as it goes deeper. The more we can increase such plants on low grade ores the better it is for the general communities. Most of the product is paid out for labor and material. The total yield of the Alaska Mexican mine to December, 1901, is given as \$2,389,546.27. Out of this sum only \$465,381 was paid as dividends. Low grade properties of this kind are about as good distributors of earnings as are sawmills. The net profit for each ton of ore treated in the Mexican

cents. The yield per ton was about \$1.90, and the operating cost per ton was \$1.76. This is a wonderful Process Employed at Smelters showing in economical and efficient mining and milling, and it is something that every Alaskan feels proud

### Shipment of High Grade Ore.

Assayer W. W. Robbins of the firm Golconda Friday for the purpose of sampling a shipment of ore which is sists of a car load lot which it is understood carries very high values.

#### Notice.

The annual meeting of St. Patrick Gold Mining Company will be held F. W. NORTHUP, Pres.

M. M. FLYNN, Sec.

#### The Mormon Temple.

The Mormon temple at Salt Lake City is no doubt the most substantial and well constructed religious edifice in the United States, if not in the world. Corner stone laid April 6, 1853, cap stone over forty years of constant labor being consumed in its construction. This magnificen structure 200 feet long, 100 feet wide is built entirely of Utab. granite, beautifully carved, symbolic of the Mormon faith, surmounted by six towers, the highest being 230 feet from the ground, supporting a bronze statue of the angel Maroni. The cost of this building is about \$6,000,000. There are many other attractions at Salt Lake City of interest to the traveler or tourist where a day can be well spent. The Rio Grande is the only Trans-continental route passing directly through Salt Lake. City, where a stopover is allowed on all classes of tickets. The service of the Rio Grande lines is unexcelled. Three trains daily between Ogden and Denver, carrying all classes of modern equipment. If you are contemplating a trip to the east, write the undersigned for information regarding rates via the "scenic line of the world :" W. C. McBride, General Agent, M. J. Roche, Traveling Passenger Agent, 124 Third St., Portland. Oregon.

## SPECIAL NOTICE

If you want to read a free and independent paper, devoted to the interest of mining and current events, which is not controlled by any promoting concern, such as most of the papers in the east are, send for a free sample copy of

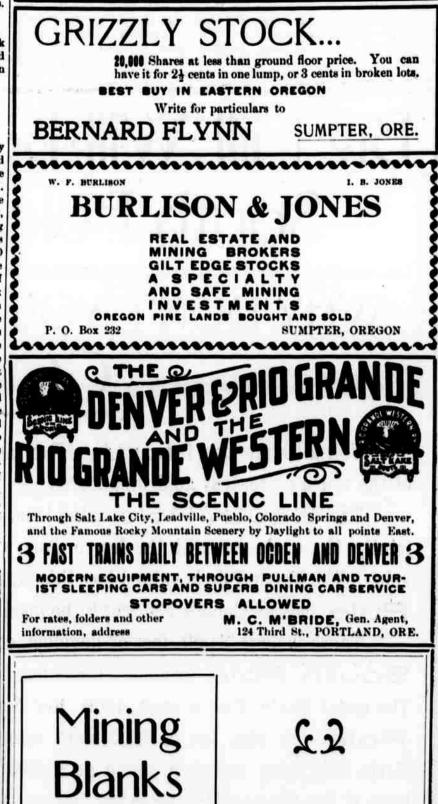
NEW YORK BANKER 32 BROADWAY, NEW YORK

# GOLD AND SILVER ASSAYS FREE

Every Subscriber to THE MINER who pays \$2.00 for One Year in advance will be given an assay for gold and silver free. These assays will be made by .....



Whose reputation as Assayers, Mineralogists and Mining Engineers stands second to none in the Northwest.



Rimbol. Restaurant FOR SALE BY Quartz and Placer Locaand THE tions, Tunnel Claim and Lodging Water Right Locations, SUMPTER house. Proof of Labor, Affidavit of Discovery Work ..... MINER OPEN ALL NIGHT Mining Deed, Option to THE BEST SERVICE IN TOWN Purchase, Quit Claim Deed, Lease # # # # Bowe & Grant, Proprietors Sumpter, Oregon Mear Depot