

# LARGEST MINE IN THE WORLD

## Famed Group of Properties at Treadwell, Alaska, Employing 1400 Men, Social and Educational Life of the Great Camp

BY MINNIE M. RAYNE.

**M**y first impression as I steamed into the Douglas port on a bright June evening last summer was that I had at last reached the country of the midnight sun, as the sky was bright and clear, and the horizon still glistening with the rosy reflection of departing day. It was nearing the midnight hour, yet the wharf was crowded with people to greet those who arrived on the beautiful steamer Jefferson, and others anxious to see tourists, who were visiting Alaska to view the scenic wonders of this grand country.

The following day a visit was made to the famous Treadwell gold mines and mills, which was a trip long to be remembered. These mines—the most extensive in the world—are nestled at the foot of a range of mountains, which rise to a height of 2900 feet, with evergreen forests lowering high toward their craggy summit, and within a stone's throw of the salt water of Gastineau Channel, giving it the most delightful view and picturesque location for one of the richest properties on the globe—the Treadwell group, composed of four distinct mines, owned by different companies, but under the same management, and known for the immense bodies of low-grade ore which are mined and milled by scientific methods, to a splendid profit.

First, visiting the Glory Hole, the watchtower for all tourists coming to Southeastern Alaska, we found a large pit 500 feet wide and 1400 feet long. Many people think this is the mine property, but it was devoted to other activities. We were informed, however, that in the future a large force of men will be engaged to remove the blocks of ore which are lying in this immense field.

A hurried trip was taken underground, which gave me a vague idea of what a mine was like. We boarded a cage and with a signal from the foreman, found ourselves dropping, as it were, through a dark space. Now and then we flitted hurriedly through lighted passageways, which were the stations of the various levels. Finally the 1050-foot level was reached, where we followed the foreman, walking through brilliantly lighted archways, the light of our candles casting a gleam on the quartz ceilings and side walls, sparkling and glittering, as we walked hurriedly onward, through still broader passageway and arches, climbing ladders and visiting the different levels, now into large hallways or drifts, then out again into huge stopes, at times lingering long enough to pat the gentle horse which was drawing ore trains from the chutes to the ore bins.

After three hours of travel in this underground world, we again boarded the cage and were once more above the surface, all declaring it was the most interesting trip they had ever taken. Pausing after visiting the Glory Hole, underground mine and outside workings, we caught a glimpse in the distance of many beautiful red-painted cottages, which were situated above the level of the town, commanding a magnificent view of Gastineau Channel, and in constant sight of steamers, rowboats, launches and sailboats playing back and forth. The homes are steam-heated, electric-lighted, and the occupants enjoy the comforts of life. A number of the Treadwell employees live at Douglas, which is one-half mile distant from Treadwell.

The open pit, or glory hole, was the first workings of the Treadwell mine. The ore was broken by machine drills operated by compressed air, loaded into the cars and taken to the stamp mill.

The pits grew deeper and deeper on account of the extraction of large ore bodies, and in order to extend further development more systematically a shaft was sunk on the property which reached a depth of 100 feet.

Later on, about 1887, another shaft was started, which at present has reached a depth of 1000 feet. Heavier hoisting machinery was installed, and a few years later the famous "Big" Treadwell mill was constructed, which is the largest stamp mill in the world. Four minor mills assist in this great ore-crushing process, with a capacity of 800 stamps, crushing 2000 tons of ore daily.

The greatest we received on entering the 200 mill was a deafening roar from the 200 stamps, and a reverberating sound is carried a long distance. It was an interesting sight to see the heavy-weighted stamps pounding the ore to a pulp, then carried by water over the inclined copper-plated table charged with quicksilver, where the free gold is caught, the refractory gold passing on through launders to the vanners, or concentrators, the heavy material or concentrates adhering to the vanners, the waste material, which carries practically no value, passing in the tail race and into Gastineau channel.

The quicksilver and gold, which is

WORKINGMAN'S HOME, TREADWELL.

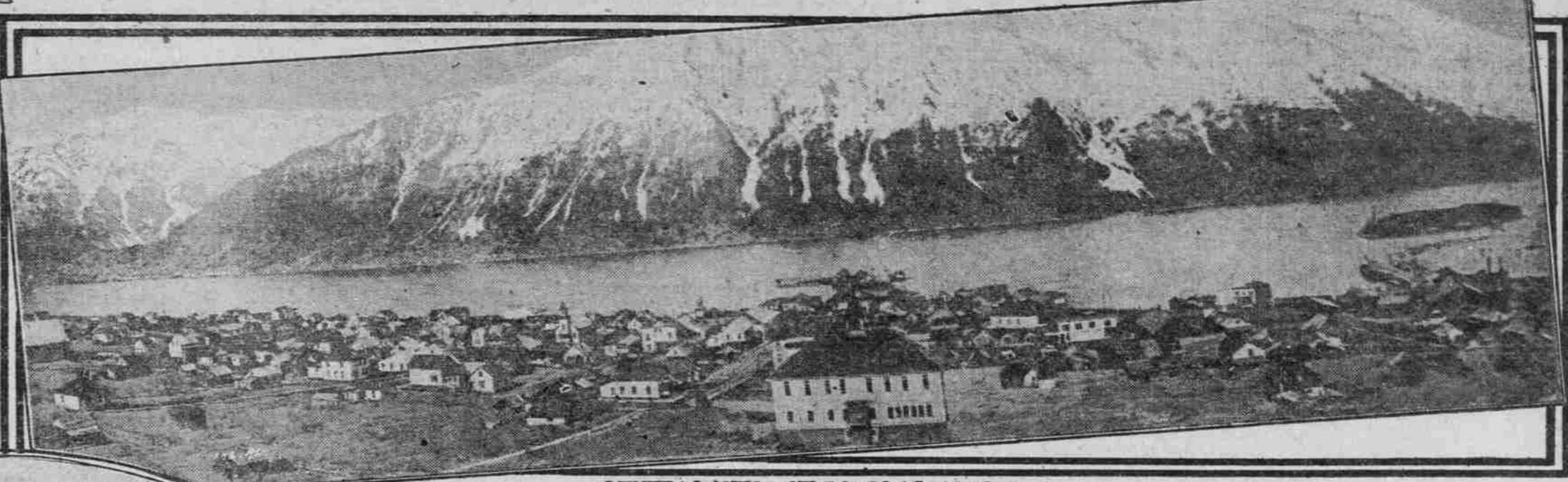
scraped off the copper plates when the mill is cleaned, is called amalgam. The amalgam undergoes another process, by which the gold is separated from the quicksilver. The returned gold is then melted, all foreign matter removed, and the molten mass is poured into a mold of the size of a brick.

When cooled and its value determined by assaying, the solid gold bricks are shipped to the home office of the company, which is in San Francisco.

Under the present free-milling process in Treadwell it is impossible to treat the concentrates, so about 25,000 tons are shipped to the Tacoma smelters annually, which is estimated to produce \$1,250,000 in gold. The Treadwell group employs 1400 men.

A large machine shop where mining repairs are being done and new machinery constructed is in continuous operation. A foundry for making castings required for mining and milling purposes has been in operation for many years. A new foundry is just completed which is the best equipped and most extensive foundry of any Western mining camp.

A feature which makes the life of the Treadwell miner more attractive is a club, which five years ago was organized for the benefit of the working men and their families. As we entered the main entrance we were immediately ushered into a large room furnished with eight billiard tables, and billiard tables. Adjoining this room is the reading and writing-room, containing the leading periodicals and newspapers. There are several writing desks, all being occupied with busy miners writing to friends. Almost every magazine was in use, and in one corner were a num-



GENERAL VIEW OF DOUGLAS, ALASKA.



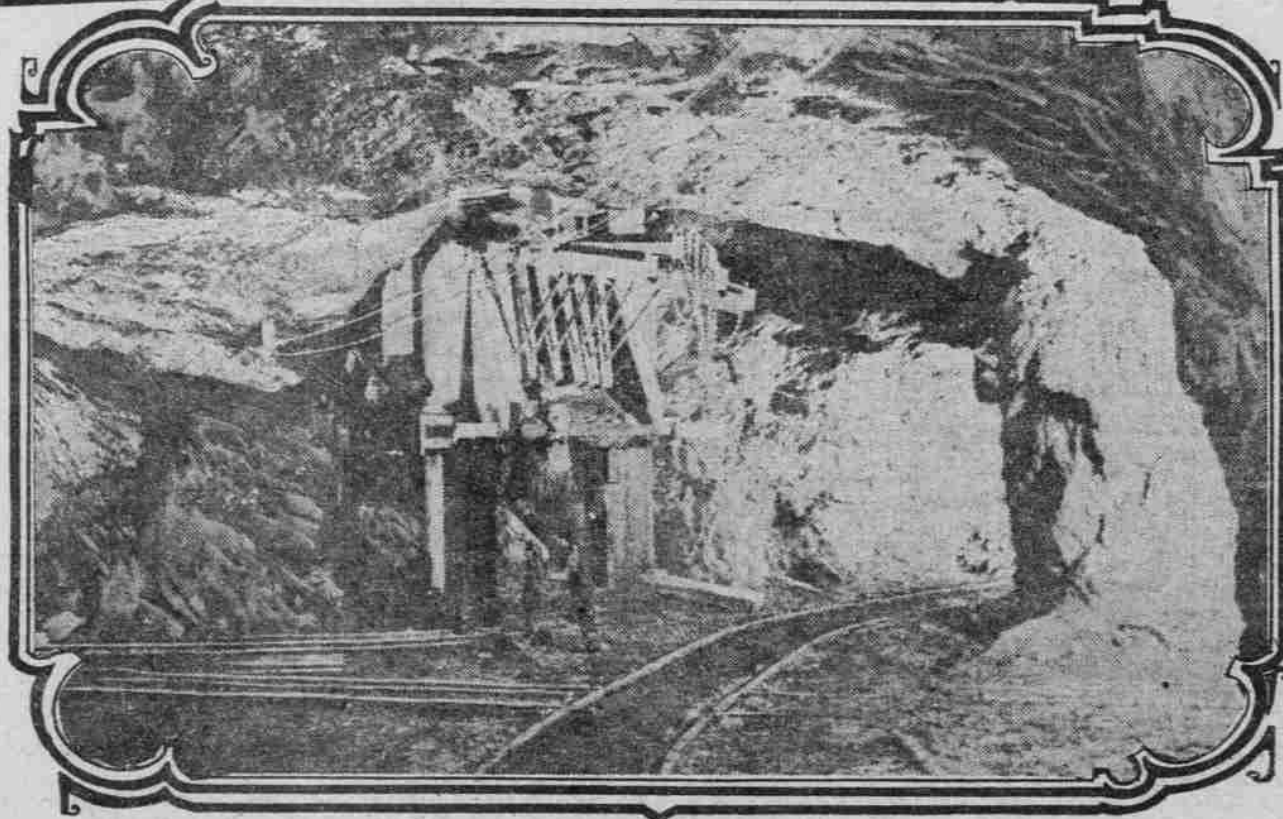
LADIES OF THE CLUB IN DOUGLAS, ALASKA, ENJOYING A SOCIAL GATHERING.



BASKET BALL TEAM, TREADWELL.



WORKINGMAN'S HOME, TREADWELL.



AT THE 1050 FOOT LEVEL.

sides of this pompous mountain. Shady Bend, the coolest spot on the road, with its dense shade trees of pine and spruce and the luxuriant growth of alder and Treadwell mills and the wreaths of smoke issuing from the different works give one the impression that three miles in the distance is located the busiest town in Alaska.

The reverberating sound of the berry bushes, was next reached. Scarcely had we passed Shady Bend until we found ourselves winding around the solitary Cape Horn, the most precipitous part of the road, this turn of two road being hewn out of solid rock, commanding a view of Gold Creek, coasting swiftly by, at a distance 300 feet below us. In the distance we could see the road winding around the mountains, each curve taking us higher and higher. Soon we were beyond the Eber mine, and in our tireless ascent we finally reached the Red Mill. Here a narrow pebbly trail took us one mile distant to the Basin Mine, situated 1800 feet above sea level. Although it was July 6, snow-capped mountains stood about us, and 200 feet below we caught a glimpse of the Perseverance Mine and mill. The sound from that 100-stamp mill could be distinctly heard as we stood enjoying the cool breeze wafted from the mountains surrounding us on all sides.

We were here given an opportunity of seeing the basin miners in actual work, his mine being worked from an open cut. At the bottom of the cut large blocks of snow are visible which were as solid as in the coldest day in January. Many miners prefer the open cut mines, so they may enjoy working in the fresh air. After an inspection of the mines and its workings we started our gradual descent. As we neared the base of the mountain, the sun was high over the most peaks, flooding the narrow winding road with a dazzling glow, spreading warmth and brilliancy which was enjoyed by the merry pleasure-seekers.

An air of peace and contentment is evidenced among the people here and to the casual observer this is difficult to understand, but after living in this country a short time one finds the climatic conditions are such that in many cases improve the weakest constitution.

One notable fact here are the numbers of people who have lived here year after year and seem to be perfectly satisfied. Many informed me they left several times to remain away, but always returned, a reason for which they could not give, but invariably added: "If you live in Alaska one year, you will want to remain longer."

A feature which the people of this mining town should feel proud of is the spirit of educational training which prevails here generally. The fact is proven from the large number of children attending school and the effort made by many people to contribute to this educational training and send the young men and women to higher institutions of learning, giving them the fundamental training to enable them to carry on the tasks in life. Many of the young men who entered school last Fall have returned and are already actively engaged in some practical work around the mines which will give them a keener insight into the studies they will pursue the ensuing years. Owing to this education spirit there are two schools employing seven teachers. The Douglas school is a full 12-graded school and the rapid advancement of this Alaskan school is due to the effort of a woman, Mrs. Adelle Pickle, who used every available means to raise the school to a level with any first-class school in the Northwest.

To the women of Alaska is due much credit for assisting to establish comfortable homes and educational facilities and to the pioneer women does Alaska owe a debt of gratitude, especially to those who braved the hardships and privations of the early days.

In Southeastern Alaska is a class of men and women who are willing to forge ahead, energetic and ambitious in all they undertake. This spirit prevails generally and consequently gives us a country of which we are all proud, the majority of the inhabitants being typical of the best brain, bone and sinew of the northwest. The rugged, frozen north, stories which are told and retold of Alaska are tales of the past. Substantial homes, churches and schools of the most modern type are established, converting this grand country into a land suited for persons with stamina and energy who are willing to mingle with an enterprising and congenial class of people whose every aim and ambition is progression.

## River Tunnel Project Most Desirable, Says T. T. Geer

### Would Give Ample Means of Passing From One Side of the Harbor to the Other Without Hindering Navigation.

**P**ORTLAND, Dec. 25.—(To the Editor.)—If the present tangle concerning the building of more bridges across the Willamette river cannot be unraveled by the construction of a tunnel under its channel, then it is to be regretted that such is the case. The reasons are plentiful and obvious.

Of course, it is of the utmost importance that the people of either side of the river should be provided with means for easy transit to the other, but it should be remembered that unless a good harbor is provided and secured there will not be many people here who will care which side of the river they are on. Beyond all other considerations Portland does now and will to a greater extent

in the future depend upon its harbor facilities for not only its growth but its very existence as a city of any pretensions. In other words, if there were no river here at all, Portland would probably be no larger than Hillsboro—likely smaller. The question of the greatest importance, therefore, to Portland today is the improvement of its harbor and the creation of conditions which will to the very smallest extent interfere with the movement of the largest sea-going vessels. It must be admitted that every additional bridge stretched across the river is an additional menace to shipping and, therefore, to the very condition upon which the growth of Portland depends.

The sums of money to be expended in

the construction of the Madison and Broadway bridges would go far toward providing a tunnel under the river which would easily accommodate twice the traffic which can be possibly taken care of by the bridges and the river freed of a large per cent of its handicap in the rivalry with the Sound ports.

To be sure, the expense of such undertaking would be very great, but if we are to have a million people here within the next 15 or 20 years it is time now that an inventory of Portland's future necessities be carefully taken. We are proceeding as if we would not this population without laying the groundwork for its realization. This is the difficulty which confronts every modern city—the shortsightedness of those who originally located it and had charge of the first few years of its development. It may be admitted that when Mr. Corbett, Mr. Ladd, Mr. Felling and Mr. Lewis came here more than 50 years ago and settled among the big firs along the banks of the river, sleeping in blankets in their primitive store houses, could not be expected during the next half-century, but no man in Portland today fails to see that it is to be the largest city on the coast during the next 20 years—provided its harbor is maintained and enlarged in a

manner commensurate with the demands of a great seaport metropolis.

It will cost less to construct a subway now than at any future time—much less—and no other possible enterprise or expenditure of public money would so quickly contribute to the city's speedy growth. To do so would be looking to the future with the eye of unquestioned wisdom. Some of our enterprising citizens are now pledging a large sum of money for the purpose of making the city more beautiful, principally in an endeavor to correct some of the earlier mistakes of the fathers who were inclined to build for the day only—as we are so inclined now with a larger light pointing the way with unerring directness and infallible prophecy. Our principal streets are far too narrow for the transaction of the city's daily business, even now. When the skyscraper on the corner of Washington and Third streets is completed and a similar one follows on the opposite side, these popular thoroughfares will look like shrunken alley-ways and the sun will rarely strike the pavement save during the luncheon hour. But this mistake cannot be remedied now. It is but one of several which are firmly established and must be endured to the end, but the harbor facilities can be arranged for now, for it is

a vital necessity which calls vigorously for recognition and action.

Not many years ago Hamburg, which was the largest shipping port of the world and situated on a river like the Willamette, was obliged to condemn several blocks of its business district, destroy the immense buildings it contained, and by a vast system of excavation and dredging provide additional room for the vessels which were coming to it from every country on earth. Other cities have been compelled to expend fabulous sums to secure that which the exercise of forethought would have largely saved, and certainly Portland should at this stage in its development be taking substantial cognizance of its actual requirements when it reaches a population of half or three-quarters of a million.

I desire again to suggest that Goddard's Lake, directly within the city limits, presents a most admirable location for a splendid harbor which may be transformed into such with a minimum of cost when compared with its actual value and the inevitable expense of securing it in the years to come. At least, it might be acquired now and preserved for its future use instead of permitting private parties to fill it up and put it on the market to be exploited as a resident

or business district. It is quite as important that a suitable place be provided for the proper handling of ships which will in Portland, as there to secure and maintain a channel for them to get here. This should not be forgotten, and everybody must realize how inadequate the Willamette River, with five bridges spanning it within a mile, will be for the shipping which will come here when our population is even 500,000—say three years hence. With so small a harbor, especially when we will always be in competition with Puget Sound cities, it seems like commercial bankruptcy to make a gridiron of the area we have.

It is a big problem and it is likely we have gone too far to expect any of the bridge propositions to be abandoned, but all of Portland's future greatness and growth must rest first upon its harbor facilities—much more than upon Rose Festivals and Civic Associations, admirable as these comedically are, and it is time more serious consideration were given to the certain requirements of the future. If the bridges have come to stay then it is the more incumbent upon us to have a harbor which will demand undelayed accommodation—for Portland can't grow to be a city

with a million inhabitants on a foundation laid out for a mere 250,000.

T. T. GEER.

## A Real Hero.

His's just fine, so big and handsome—  
One eye being terribly hurt, blue;  
Geer! he must have had a scrimmage,  
Wish I'd seen it, deed I do.  
Mother says the game is horrid,  
Says I'm never to play ball  
Women aren't sporty over  
But just you wait till I get tall.

He's too brave to mind bein' beaten,  
And he walked along just like a blue;  
He wasn't out, 'n' say, he saw me  
And said, "Son, you'd better hike  
It back to school." The fellows  
You'd believe he spoke at all.  
They say I made it up to bluff that  
I know a guy who plays football.

—Baltimore American.