

CURIOUS COPPER DEPOSITS IN CHILE

Perfect Preservation of a Human Body Through Action of The Salts.

The following account, from a paper read before the Institute of Mining and Metallurgy of London by J. A. W. Murdoch, offers two features of special interest—one of a very low grade ore being worked at a handsome profit by persons without capital, in a district where supplies and labor are comparatively dear, and which is absolutely sterile and waterless, water having to be brought in barrels from a distant oasis called Calama. The other is of the perfect preservation of a human body by impregnation of the tissues by copper salts as well as by antiseptic action of the exceedingly dry climate.

The first is not an uncommon experience in the copper deposits of the arid, waterless regions of America, as in Arizona and New Mexico.

As regards the latter, we have numerous examples of organic substances being fossilized or replaced by copper solutions and ores such as plants, trees, bones and the like, but this is the first time we have heard of a corpse so preserved.

The deposit is in the district of Chuqui Camata, in the desert of Atacama, Chile, 7,400 feet above sea level, twelve miles from the oasis of Calama, which is connected by mail with the seaport of Antofagasta, 140 miles distant.

The ore occurs in a range of small hills, and is worked at present over an area a mile long by 300 yards wide. It consists of decomposed granite disintegrated into irregular fragments, giving it a soft, shaley appearance. Each joint and crevice between the rock fragments is filled with copper ore in the form of oxychloride of copper, or atacamite. The average grade of the deposit is about 2 per cent copper.

A workman knocks down with his hammer about one cubic yard of material per day, and during the quarrying the soft atacamite falls to powder and is saved by sifting through hand riddles, the coarse rock fragments remaining in the riddles are thrown over the dump. The fine stuff, containing 15 per cent copper, is sacked and sold to smelters or exporters in Antofagasta.

At a depth of 300 feet ore is still found.

The workings by Chilians are quiet superficial, the deepest being fifty feet. They are in the forms of irregular caves, the surface soil, which is hard, being left as a roof, supported by occasional pillars. The men work on tribute, giving 10 to 20 per cent of what they extract to the owners.

The average output per day per man is about 220 pounds of atacamite, containing 15 per cent copper. The average day's wage is about four dollars Chilean currency, or a little over an American dollar.

The deposit has long been known and worked by the Indians, whose stone implements are often found in the old workings. The proper treatment would be lixiviation by weak sulphuric acid.

A short time ago the body of an

Indian was found in one of the workings. He had been killed by a fall from the roof while engaged in collecting atacamite in a small basket, which was still in his hand, his stone implements being found alongside.

The body is in a perfect state of preservation, due to impregnation of the tissues by copper salts as well as to the antiseptic action of the exceedingly dry climate.

As these mines were unknown to the early Spanish colonists, it is to be inferred that the body is of considerable antiquity. This is corroborated by the style of dress (a waist cloth and two anklets) and by the stone tools used. It is probably as old as 1600 A. D.

Old gold washings adjoin the copper formation of the north. Indians worked on a thin strata of auriferous gravel, scooped out and washed in "bateas." The remains of the pools in which the washing was carried on are so distinctive as to admit of no doubt about the system employed.

A remarkable feature is that the nearest water supply adequate for such a purpose is at least twelve miles distant and 2,000 feet below the level of the gravel. Either the Indians carried the water by hand or on the backs of llamas, or the climate of this part of South America has become rainless only within the human epoch as suggested by Darwin.—Abstracted for Mining Reporter by Arthur Lakes.

WILL STRAIGHTEN OUT

KINKS IN COMPANY

The stockholders meeting at the American Development and Mining company, owning the Blue Placer diggings near Auburn, which was scheduled to occur in March, was not held for some unknown reason, and consequently no plans for this year's operation have been made. The company controls a large acreage of rich gravel and excellent water rights. General Manager L. C. Jacquish, who recently returned from Colorado, is authority for the statement that the legal entanglements in which the company is involved, will shortly be straightened out.

Mining Litigation.

The famous Iron Dyke case, which is for the foreclosure of a \$166,000 mortgage on the Iron Dyke mine on Snake river and upon the Northwest railway grande, was completed last night before the circuit court. Judge Eakin took the matter under advisement. An early decision is expected and hoped for, as upon the outcome of this litigation will depend whether or not the mine will be reopened, the railway completed and the Ladd smelter at Homestead built.

Balliet Is Out.

The annual meeting of the stockholders of the White Swan mine will be held tomorrow in San Francisco. It is learned that Letson Balliet, deposed general manager, is making a supreme effort to secure a sufficient number of proxies to bring him back into control. Stuller, of Baker City, representing the Lykke faction, against Balliet, is said to be armed with enough voting power to forever keep Bealliet in the background.

"NOTICE OF PUBLICATION OF SUMMONS."

In Justice Court for Sumpter Precinct, Baker County, State of Oregon.

George E. Allen, Justice of the Peace.

H. D. Griffin, Plaintiff, vs Pat Murry, Defendant.

To Pat Murry, the above named Defendant in the above entitled action. In the name of the State of Oregon; you are hereby notified and required to appear and answer or plead to the Complaint filed in the above entitled Cause and Court.

On or before the expiration of the publication of this summons, to-wit: on or before the expiration of six weeks (42 days) from and after the date of first publication of this summons, which is the 18th day of May, A. D., 1904. And you are further hereby notified that if you fail to so appear, answer or plead to said complaint, the Plaintiff will for want of answer on plea thereto take default and judgment against said debt for the sum of Eighty-Eight and 25 100 dollars with interest on said sum from the 18th day of August, 1903, and costs of this action and as prayed for in plaintiff's complaint.

That this summons is published pursuant to the order of the above entitled Court, George H. Allen, justice of the peace, made and entered this 11th day of May A. D., 1904, directing that this summons be published in the "Sumpter Weekly Miner," (a weekly newspaper published in Sumpter, Baker county, Oregon, of general circulation in county and state) once each week for six consecutive weeks (being 7 publications covering 42 days).

Date of order May, 11, 1904.

Date of first publication, May 18, 1904. GEO. E. ALLEN, Justice of the Peace.

NOTICE OF FORFEITURE.

To Ole Linquist, Peter Soderberg and to you and each of your heirs, executors, administrators, and assigns are hereby notified that I the undersigned, your co-owner of the following named quartz mining claims, to-wit: The "Center Star" the location notice of which is recorded in the Quartz Records of Baker county, Oregon, in Volume "M" at page 197 thereof and the "Center Star Extension" the location notice of which is recorded in the Quartz Records of Baker County, Oregon, in Volume "M" at page 198 thereof which notices were so recorded on the 16th day of March, 1899, have expended the sum of \$100 per claim and upon each thereof for the years of 1900, 1901, 1902, and 1903, that said sums so expended each year was for the benefit, improvement and development of each thereof and as the annual work, labor, and improvements as required by the laws of the United States of America and of the state of Oregon.

And you and each of you are further notified that should you fail, or neglect to contribute and pay to me, your co-owner of said claims your proportionate shares of such yearly expenditures, which is the sum of \$66.66 2-3 each, for each of said years above mentioned, amounting to the sum of \$266.66 2-3 for each of you to so contribute or pay, within ninety days from the date of the first publication of this notice, and in case of you and each of you failing to so pay to me the said sum, your

respective interest in said quartz claims will become the property of the undersigned as by law provided.

First date of publication of this notice being the 5th day of May, 1904. H. B. GRIFFIN.

SUMMONS.

In the Circuit Court of the State of Oregon for Baker County.

Jodie Wallick, plaintiff vs. Henry C. Walick, Defendant.

To Henry C. Wallick, the above named Defendant.

In the name of the State of Oregon you are hereby required to appear and answer the complaint filed against you in the above entitled cause on or before the 29th day of June, 1904, which is the last day of the publication of the summons as prescribed by the order duly made and filed by the Hon. W. W. Travillion, county judge of Baker County, Oregon, on the 16th day of May, 1904, and if you fail so to appear and answer said complaint the plaintiff will apply to the court for the relief prayed for in the complaint filed herein. And you are further notified by said order so made and filed on the 16th day of May, 1904, ordered that service of summons in this suit be made upon you by publication thereof in the Sumpter Miner, a weekly newspaper of Sumpter, Baker County, Oregon, and that the date of first publication thereof is May the 18th, 1904, and the date of the last publication thereof June the 29th, 1904.

C. H. McCOLLUOH, Attorney for plaintiff.

PETITION.

To the Hon. County Court of Baker County State of Oregon: We the undersigned actual majority of the whole number of legal voters of Unity precinct, hereby petition your honorable body to grant a license to C. H. Schepster and E. H. Hayes to sell spirituous, malt, vinous liquors, and hard Cider in said precinct, at their place of business in less quantities than one gallon for the period of twelve months, said place of business being on the county road and near the Post-office which is known as Unity. And we further show that the said place of business is not within one mile of any working mine. Louis Tift, E. Tift, P. T. Tathrop J. B. Hanohman, L. L. King, J. B. Shaw, Alfred Whited, W. G. Yeager, Joseph Wham, Otto Paus-tian, Willsam Haskin, G. C. Whited, Geo. Grenger, G. M. Laporte, Minor Covin, Riley Hardman, Peter Yoakman, Sam Perault, Geo. G. Nelson, N. N. Elliot, Wm. Wendt, Thos. J. Elms, Geo. W. Elms, W. B. Mills.

Notice is hereby given that the undersigned will apply to the Honorable County Court of Baker county on the 1st day of July, 1904, or as soon thereafter as may suit the convenience of the court, for a license in accordance with the terms of the above petition.

SCHEPSTER & HAYES.

Don't Go to St. Louis

Till you call at or write to the Chicago, Milwaukee and St. Paul railroad. Office 134 Third Street, Portland, Oregon. Low rates to all points East, in connection with all transcontinentals.

W. S. ROWE, General Agent, Portland, Oregon.