

importance of the eruptive rocks, and does not convince us that the waters feeding the springs of the earth are the same which have deposited the millions of tons of ore in the great mining districts.

That the waters in the vadose region above the ground water level should be able to collect any respectable quantity of metal seems improbable, in spite of their greater activity in the more open rocks near the surface. These waters, reinforced by every rain and melting snow, do not search the rocks nor leach much value from them, because they naturally choose the more open space, enlarge them, and create their own channels, in which they remain permanently. When these waters reach the groundwater-level, they naturally spread out upon its surface, run off laterally (there being less impediment to their course above this level), and reach daylight again at a lower level.

That an underground sea of water, continuous and saturating the rocks throughout, really does exist, seems a corollary of the fact that the water, once held entirely at the earth's surface and above it, has gradually worked its way into the cooling earth; the only argument against it consists in the fact that a number of shafts have been sunk in wet ground for many feet, and at greater depth encountered a region free from water. Cannot this be explained by the probable existence of an impervious stratum at the point where the water ceased? I take it that such occurrence simply illustrates the very irregular contour of the groundwater surface. These shafts, if sunk still deeper, must encounter water again, if the underground sea of water does exist.

If then, the existence of an extensive belt of hydro-thermal fusion be admitted, and if it is true that this belt is constantly supplied with water by a permanent underground sea, it will not be difficult to explain the mineralization of our veins and their localization. An extensive movement in the crust creates a profound and complicated set of fissures at certain points. These fissures reach the belt of fused rock. The blocks of solid rock above sink into the fused mass, and squeeze it in the fissures toward the surface. This makes the dikes and sheets of eruptive rock as we find them near the veins. Simultaneously or later, other fissures, not sufficiently open or in proper position to admit the fused mass, start up the circulation of the waters and begin the making of a vein.

I have attempted to show that the waters in the zone of open fracture do not search or leach the masses of rock, but that they flow through them in permanent and open channels; that the waters in the middle and lower zones of the underground sea are stagnant and not sufficiently effective; and that we must look still deeper for the source that could supply the immense masses of ore found in the veins.

The invariable existence and evident genetic relation of the eruptive rocks with our ore-deposits suggest the source. It is the true one. I refer the matter to geological specialists for further consideration.

The celebrated Gund's—"the beer of good cheer"—always on draught at Dunphy's The Club.

Giant Powder is the best by test in the world. T. G. Harrison agent.

Shoes of all kinds at Neill Mercantile company's.

MINING DIVIDENDS.

June Output One of the Best for the Year.

June's big showing in the Spokane group of mines, when \$165,000 was disbursed in dividends, being followed with figures that indicate equal progress in the precious metal mining industry all over the country. A group of 83 mines and metallurgical works paid dividends of \$15,665,994, which is equivalent to about 19 per cent of the total for the whole mineral industry. Foremost this year are the gold, silver and lead properties, situated chiefly in Colorado and Utah, of which 62 have paid \$7,387,771. The American Smelting & Refining Co. reported the largest dividends, \$1,750,000 or 3.5 per cent on its preferred stock, but nothing on the common. Silver King of Utah leads the precious metal mines, disbursing \$600,000, or 20 per cent for the half year, which its neighbor, Daly West, has come forward with \$540,000, or 18 per cent on its capitalization.

Of the stocks in which foreign investors are mostly interested the Camp Bird gold mine of Colorado yielded dividends of \$233,700, or at the rate of 12 per cent per annum. Alaska-Treadwell, probably the best paying low grade gold mine in the world, reported \$230,000, or 4.6 per cent, for the half year. There were numerous smaller payers that divided monthly, but the tendency is to change to a quarterly basis for convenience in bookkeeping.

The copper mines are gradually recovering from the demoralized metal market of last year, and judging from the increased dividend paid in the second quarter by the Calumet & Hecla company, earnings are improving. This mine paid \$1,005,000 in dividends for the half year, which is equivalent to 60 per cent on a capitalization of \$2,500,000. Amalgamated, which is essentially a holding company, paid only 1 per cent, or \$1,538,860, on its issued capital of \$153,887,900. Two of Amalgamated subsidiary companies paid \$1,200,000, half being credited to Boston and Montana at the rate of 16 per cent for the six months, and half to Anaconda at 5 per cent. These dividends formed the basis of the Amalgamated payments. Ten other copper mines, situated principally in Michigan and Arizona, gave out \$2,964,564 dividends, equivalent to an annual rate varying from 4 to 24 per cent on the capitalization.

Four zinc mines, headed by the New Jersey Zinc company, declared dividends amounting to \$643,639. Two California quicksilver properties paid \$81,500, and one nickel company, \$349,660.

In addition to the above, 23 Mexican gold, silver and copper properties reported \$1,362,489, principally in monthly dividends; four Central and South American mines, in which Americans are interested, \$213,402, and three Canadian concerns, \$416,600.—Spokane-Review.

Ice Cream! Ice Cream!

On, and each day after May 1st the renowned Hazelwood Ice Cream and Ice Cream Soda will be had at Sturgill's. 10 cents a dish, 25 cents per pint.

TIMBER LAND, ACT JUNE 3, 1878.—NOTICE FOR PUBLICATION.

United States Land Office,
La Grande, Oregon, July 7, 1903.
Notice is hereby given that in compliance with the provisions of the act of congress of June 3, 1878, en-

titled "An act for the sale of timber lands in the states of California, Oregon, Nevada and Washington Territory," as extended to all the Public Land States by act of August 4, 1894.

NEAL B. GARVER.

of Farmington, county of Van Buren, state of Iowa, has this day filed in this office his sworn statement No. 260, for the purchase of the w 1/2 n 1/2 of section No. 14 in township No. 11 south, range No. 37 E W M, and will offer proof to show that the land sought is more valuable for its timber or stone than for agricultural purposes, and to establish his claim to said land before Charles H. Chance, U. S. commissioner at Sumpter, Oregon, on Friday, the 18th day of September, 1903.

He names as witnesses: Ole T. Stradness, Fred Molt, Mark C. Garver and Peter J. Soards, all of Sumpter, Oregon.
Any and all persons claiming adversely the above-described lands are requested to file their claims in this office on or before said 18th day of Sept., 1903.
E. W. BARTLETT, Register.

TIMBER LAND, ACT JUNE 3, 1878.—NOTICE FOR PUBLICATION.

United States Land Office,
La Grande, Oregon, June 10, 1903.
Notice is hereby given that in compliance with the provisions of the act of congress of June 3, 1878, entitled "An act for the sale of timber lands in the states of California, Oregon, Nevada, and Washington Territory," as extended to all the Public Land states by act of August 4, 1894.

LEWIS A. ALBEE.

of Whitney, county of Baker, state of Oregon, has this day filed in this office his sworn statement No. 2504, for the purchase of the w 1/2 n 1/2 of section No. 7, in township No. 10 south, range No. 36 E W M, and will offer proof to show that the land sought is more valuable for its timber or stone than for agricultural purposes, and to establish his claim to said land before Chas. H. Chance, U. S. commissioner at Sumpter, Oregon, on Monday, the 24th day of August, 1903.

He names as witnesses: William H. Mead, of Spokane, Washington; Alfred H. Huntington, of Baker City, Oregon; Leonard Sims and James Warren, of Whitney, Oregon.
Any and all persons claiming adversely the above-described lands are requested to file their claims in this office on or before said 24th day of August, 1903.
E. W. BARTLETT, Register.

NOTICE FOR PUBLICATION

Department of the Interior,
Land Office at La Grande, Oregon, June 27, 1903.
Notice is hereby given that the following-named settler has filed notice of his intention to make final proof in support of his claim, and that said proof will be made before the Register and Receiver at La Grande, Oregon, on August 9, 1903, viz: H. E. No. 10,945, by

CHARLES M. HINDMAN.

Whitney, Oregon, for the w 1/2 n 1/2 Sec. 22 Tp. 10 S. R. 36 E W M.
He names the following witnesses to prove his continuous residence upon and cultivation of said land, viz: Emory Proebstel, Freeman Scott, Wendell N. Proebstel, of Whitney, Oregon; and J. E. Stephenson, of Haines, Oregon.
E. W. BARTLETT, Register.

NOTICE FOR PUBLICATION.

Department of the Interior,
Land Office at La Grande, Ore., June 27, 1903.
Notice is hereby given that the following-named settler has filed notice of his intention to make final proof in support of his claim, and that said proof will be made before the Register and Receiver at La Grande, Oregon, on August 9, 1903, viz: H. E. No. 11,009, by

EMORY E. PROEBSTEL.

of Whitney, Oregon, for the e 1/2 n 1/2 Sec. 15, e 1/2 s 1/2 Sec. 10 Tp. 10 S. R. 36 E. W. M.
He names the following witnesses to prove his continuous residence upon and cultivation of said land, viz: Charles M. Hindman, Wendell N. Proebstel and Freeman Scott, all of Whitney, Oregon; and J. E. Stephenson, of Haines, Oregon.
E. W. BARTLETT, Register.

TIMBER LAND, ACT JUNE 3, 1878.—NOTICE FOR PUBLICATION.

United States Land Office,
La Grande, Oregon, June 6, 1903.
Notice is hereby given that in compliance with the provisions of the act of congress of June 3, 1878, entitled "An act for the sale of timber lands in the states of California, Oregon, Nevada and Washington Territory," as extended to all the Public Land states by act of August 4, 1894.

WILLIAM H. MEAD.

of Spokane, county of Spokane, state of Washington, has this day filed in this office his sworn statement No. 2590 for the purchase of the lot 1 and e 1/2 n 1/2 of section No. 18, in township No. 10 south, range No. 36 E W M, and will offer proof to show that the land sought is more valuable for its timber or stone than for agricultural purposes, and to establish his claim to said land before Chas. H. Chance, U. S. Commissioner, at Sumpter, Oregon, on Friday, the 21st day of August, 1903.

He names as witnesses: Calvin Koontz, of Spokane, Washington; Samuel H. Risel, Harry T. Campbell, James Warren, of Whitney, Oregon.
Any and all persons claiming adversely the above-described lands are requested to file their claims in this office on or before said 21st day of August, 1903.
E. W. BARTLETT, Register.

TIMBER LAND, ACT JUNE 3, 1878.—NOTICE FOR PUBLICATION.

United States Land Office,
La Grande, Oregon, June 8, 1903.
Notice is hereby given that in compliance with the provisions of the act of congress of June 3, 1878, entitled "An act for the sale of timber lands in the states of California, Oregon, Nevada and Washington Territory," as extended to all the Public Land states by act of August 4, 1894.

CALVIN KOONTZ.

of Spokane, county of Spokane, state of Washington, has this day filed in this office his sworn statement No. 2578, for the purchase of lot 1 and e 1/2 n 1/2 of section No. 7 in township No. 10 south, range No. 36 E W M, and will offer proof to show that the land sought is more valuable for its timber or stone than for agricultural purposes, and to establish his claim to said land before Chas. H. Chance, U. S. Commissioner, at Sumpter, Oregon, on Fri-

day, the 21st day of August, 1903.

He names as witnesses: William H. Mead, of Spokane, Washington; Samuel H. Risel, Henry T. Campbell, James Warren, of Whitney, Oregon.
Any and all persons claiming adversely the above-described lands are requested to file their claims in this office on or before said 21st day of August, 1903.
E. W. BARTLETT, Register.

TIMBER LAND, ACT JUNE 3, 1878.—NOTICE FOR PUBLICATION.

United States Land Office,
La Grande, Oregon, July 1, 1903.
Notice is hereby given that in compliance with the provisions of the act of Congress of June 3, 1878, entitled "An act for the sale of timber lands in the states of California, Oregon, Nevada and Washington Territory," as extended to all the Public Land states by act of August 4, 1894.

HARRY O. McCULLOUGH.

of Sumpter, county of Baker, state of Oregon, has this day filed in this office his sworn statement No. 2600, for the purchase of the nw 1/4 of section No. 15 in township No. 11 south, range No. 38 E W M, and will offer proof to show that the land sought is more valuable for its timber or stone than for agricultural purposes, and to establish his claim to said land before Chas. H. Chance, U. S. commissioner at Sumpter, Oregon, on Monday, the 14th day of September, 1903.

He names as witnesses: Van Rensselaer Mead, Ralph Mead, William A. Green and Samuel F. Hunt, all of Sumpter, Oregon.
Any and all persons claiming adversely the above-described lands are requested to file their claims in this office on or before said 14th day of Sept., 1903.
E. W. BARTLETT, Register.

TIMBER LAND, ACT JUNE 3, 1878.—NOTICE FOR PUBLICATION.

United States Land Office,
La Grande, Oregon, June 11, 1903.
Notice is hereby given that in compliance with the provisions of the act of congress of June 3, 1878, entitled "An act for the sale of timber lands in the states of California, Oregon, Nevada and Washington Territory," as extended to all the Public Land states by act of August 4, 1894.

JAMES TIBBS.

of McEwen, county of Baker, state of Oregon, has this day filed in this office his sworn statement No. 2606, for the purchase of the lot 4 s w 1/4 n 1/4 Sec. 10, and lot 1 of section No. 5 in township No. 10 south, range No. 38 E W M, and will offer proof to show that the land sought is more valuable for its timber or stone than for agricultural purposes, and to establish his claim to said land before Chas. H. Chance, U. S. Commissioner, at Sumpter, Oregon, on Friday, the 28th day of August, 1903.

He names as witnesses: Frank Warren, Charles Earley, William A. Green, and Sidney Tibbs, Jr., all of McEwen, Oregon.
Any and all persons claiming adversely the above-described lands are requested to file their claims in this office on or before said 28th day of August, 1903.
E. W. BARTLETT, Register.

TIMBER LAND, ACT JUNE 3, 1878.—NOTICE FOR PUBLICATION.

United States Land Office,
La Grande, Oregon, June 2, 1903.
Notice is hereby given that in compliance with the provisions of the act of congress of June 3, 1878, entitled "An act for the sale of timber lands in the states of California, Oregon, Nevada and Washington Territory," as extended to all the Public Land states by act of August 4, 1894.

CHAS. W. WILBOURN.

of Baker City, county of Baker, state of Oregon, has this day filed in this office his sworn statement No. 2504 for the purchase of the s 1/2 s e 1/4 Sec. 10, n e 1/4 of section No. 5 in township No. 10 south, range No. 38 E W M, and will offer proof to show that the land sought is more valuable for its timber or stone than for agricultural purposes, and to establish his claim to said land before A. B. Combs, Jr., County Clerk, at Baker City, Oregon, on Tuesday, the 28th day of August, 1903.

He names as witnesses: Jas. Mitchell, of Baker City, Oregon; Orin Paine, Joe. Henner, and John O'Brian, of Haines, Oregon.
Any and all persons claiming adversely the above-described lands are requested to file their claims in this office on or before said 28th day of August, 1903.
E. W. BARTLETT, Register.

TIMBER LAND, ACT JUNE 3, 1878.—NOTICE FOR PUBLICATION.

United States Land Office,
La Grande, May 27th, 1903.
Notice is hereby given that in compliance with the provisions of the act of congress of June 3, 1878, entitled "An act for the sale of timber lands in the states of California, Oregon, Nevada and Washington Territory," as extended to all the Public Land States by act of August 4, 1894.

WILLIAM F. LONGWELL.

of Sumpter, county of Baker, state of Oregon, has this day filed in this office his sworn statement No. 2534, for the purchase of the nw 1/4 nw 1/4, Sec. 28 and n 1/2 n e 1/4 of section No. 20, in township No. 9 S., range No. 37, E W M, and will offer proof to show that the land sought is more valuable for its timber or stone than for agricultural purposes, and to establish his claim to said land before Chas. H. Chance, U. S. commissioner, at Sumpter, Oregon, on Saturday, the 15th day of August, 1903.

He names as witnesses: Thomas B. Taylor, Elmer Taylor, Charles Reichstein, Myrtle Reichstein, all of Sumpter, Oregon.
Any and all persons claiming adversely the above-described lands are requested to file their claims in this office on or before said 15th day of August, 1903.
E. W. BARTLETT, Register.

NOTICE FOR PUBLICATION.

Department of the Interior,
United States Land Office,
La Grande, Oregon, June 11, 1903.
Notice is hereby given that the following-named settler has filed notice of his intention to make final proof in support of his claim, and that said proof will be made before A. B. Combs, Jr., County Clerk, at Baker City, Oregon, on August 6, 1903, viz: H. E. No. 11,135.

WILLIAM Y. STODDARD.

of Perry, Oregon, for the e 1/2 n 1/2 and lots 1 and 2, section 7, township 11 S. R. 38 E W M.
He names the following witnesses to prove his continuous residence upon and cultivation of said land, viz: James Worley and Joe Adams, of McEwen, Oregon; Peter Hognesen and Louis J. Lewis, of Baker City, Oregon.
E. W. BARTLETT, Register.