

GREAT MINING INTERESTS

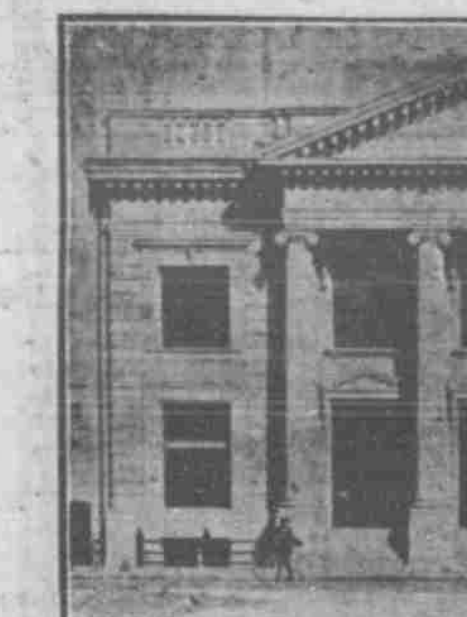
Utah Lays Claim to Being a Leading Mineral State.

SECOND IN LEAD PRODUCTION

Two Deposits Attract Eastern Capital and Western State is Rapidly Improving Method of Getting Products from Ground.

BY HORACE DUNBAR. SALT LAKE CITY, Feb. 24.—(Special Correspondence to The Bee.)—The state of Utah, long looked upon by the world as one of the curiosity shops of the nation, as a commonwealth whose sole right to distinction was based upon her Mormon temple and great Salt Lake, stands among the states of the union second in lead production, fourth in copper, third in silver and sixth in gold. Its metal output in 1909 was as follows:

Table with 2 columns: Metal, Quantity, Value. Includes Gold, Silver, Lead, Copper, Zinc, and Total value.



SALT LAKE MINING EXCHANGE.

\$8,754,772 in dividends, exclusive of the coal mining and quarry interests. In Bingham, Utah has the greatest individual copper producing company in the world in the Utah copper, its 1906 output lacking a few pounds of reaching 24,430,327 pounds of metal in the first 10 months. Utah has one of the greatest all-lead camps of the west, a camp containing under normal metal conditions, the greatest number of dividend paying silver-lead companies of any mining district in the United States.

Just Being Developed. Mining in Utah is just being developed. The camps with the greatest records of output indicate unmistakably future usefulness far in excess of past performances, while distributed throughout her richly mineralized mountain ranges are new

annually from Utah and conducted into the channels of commerce via Colorado. In San Juan county in the San Juan oil field, just now, and for the first time, being developed through the application of willing eastern capital. This oil is the finest quality to be found in the world, having a paraffine base and a quality of which the world will never have too great a supply. There are fourteen producing wells now at San Juan and thirty wells showing oil at depths not yet considered sufficient to bring them into the producing list. From a mining standpoint these are a few assets of Utah needing only the Aladdin lamp of capital to add still more to the wealth of the west.

Copper Interests Growing. During the last four years the copper mining industry of the world has undergone its most marvelous transformation of history. Copper miners had been educated from the earliest times to vein mining where the ore occurred in limited bodies of commercial grade.

When the consumption of copper began to increase the world over by leaps and bounds these old-time mines were unable to supply the demand, one result being artificial prices of unwise height, which, if continued, promised to place a prohibitive value on a metal so extensively used. The so-called porphyry copper propositions have solved this difficulty, the propositions being nothing more than immense deposits of copper ore of a metal content so small that no successful method of handling the same was devised until metallurgists of



W. H. CHILD.

now being increased from 1,000 to 5,000 tons daily capacity, and within a few months these mills will be handling 30,000 tons of ore a day at a cost of not to exceed 8 cents per pound of copper produced. Utah mines and mining men, therefore, have revolutionized red metal mining, being among the few copper companies able to operate under low-priced copper conditions on account of the low cost of production. Many of the old-time producers could not produce their copper for less than 10 to 12 cents per pound. With copper selling at 12.75 cents per pound, the average price during 1909, their margin of profit was prohibitive, but the Utah Copper company could operate and paid \$4,897,537 in dividends to shareholders in 1909.

Due to Rich Mines. Salt Lake City was largely brought to its existing beauty and wealth through profits from Utah mines. The dividends from Park City camp more than from any other section of the state have been paid Utah stockholders and thus remained within the state. Park City has produced over \$20,000,000 worth of ore, paying between \$2,000,000 and \$3,000,000 in dividends, clean money, the cleanest earned anywhere. Yet in spite of this magnificent record the Park City camp today contains a tonnage of rich silver, lead and gold ore as large as at any time of its existence, while only a portion of the known mineral area has been developed to any extent. The famous Ontario, Silver King Coalition, Daily Judge, Daily West and Daily mines are located in this district.

Mining was first done in Utah by soldiers, these prospectors being given the opportunity to search for minerals that they might at once help in the development of the then territory and at the same time keep out of mischief. Since that time the industry has been given increased attention each year, until men of capital of every civilized spot of the universe have inspected or invested in Utah properties. Engineers from all over the globe have journeyed to Salt Lake to see the milling and smelting works surrounding the city, and all came confessing that the object of their visit was to learn.

Cause of Present Condition. The remarkable development of mining properties has been due to several things, mainly to the richness and extent of the ore bodies, to the ever increasing railroad lines into mountain and desert, to the great abundance of food and water provided by nature for the animals of the prospector's outfit and to the market afforded all sorts and conditions of ore at Salt Lake City. Salt Lake City is known as the smelter center of the country. At Garfield, as al-



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ready mentioned, is the American Smelting and Refining Copper works; near by stands the Tooele smelter, a custom copper plant of the International Smelting and Refining company, the Amalgamated Copper interests, which at Bingham, is the copper smelter of the Tampa company. Five miles south of Salt Lake City stand the silver and lead smelter of the American Smelting interests, and at Midvale, Utah, within eight of Salt Lake City, is the silver and lead smelter of the United States Smelting, Refining and Mining company. This latter company recently has installed a concentrating plant to reduce low grade zinc ore to a smelting condition, thus throwing open a market for an enormous tonnage of zinc ore which have been extracted during the past many years along with more desirable ore, but for which no market existed.

Methods Are Improved. While the smelting companies of the country are fighting either the government

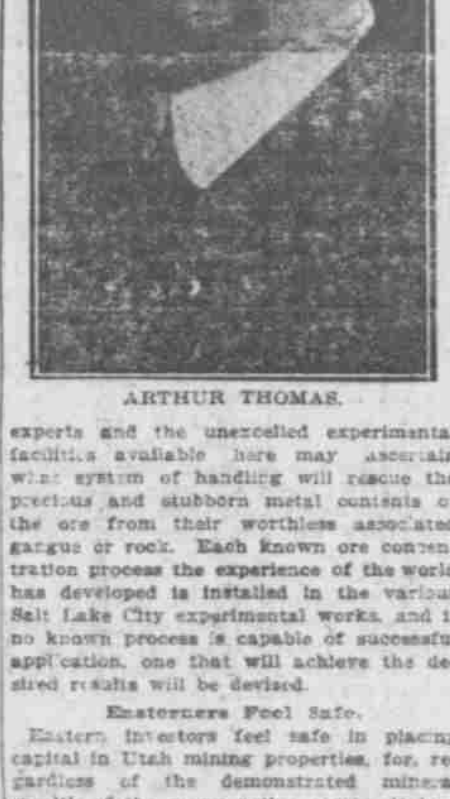


C. M. JAMIESON.

or surrounding farmers on account of the poisonous fumes and solids emitted by smelter stacks, Utah smelting experts went to work and installed improved methods of preventing this waste, thereby securing not only permission from the courts and farmers to continue operations, but reaping still greater earnings by simply rescuing and saving minute solids and gases heretofore lost, the product being briquetted and resmelted.

The many railroad lines entering Salt Lake City from all points of the compass bring in not only from Utah camps ore of all grades and descriptions, but ores from Idaho, Montana, Nevada, California, Arizona and Colorado to be acid and smelted.

One from each and every nook and corner of the world, for the commercial treatment of which no metallurgical process exists, is shipped to Salt Lake City that the mill



ARTHUR THOMAS.

experts and the unexcelled experimental facilities available here may ascertain what system of handling will reduce the precious and stubborn metal contents of the ore from their worthless associated gangue or rock. Each known ore concentration process the experience of the world has developed is installed in the various Salt Lake City experimental works, and it is no known process is capable of successful application, one that will achieve the desired results will be devised.

Easterners Feel Safe. Eastern investors feel safe in placing capital in Utah mining properties, for, regardless of the demonstrated mineral richness of the many active camps, it is a matter of universal comment that the



JAMES A. POLLOCK.

money is placed in honest underground development work. The majority of companies pay very small salaries to managers, as these usually are large stockholders who intend to be satisfied with ultimate dividends. Mining stocks with but few exceptions are accessible in Utah, and no other character of stocks should be contemplated for the development prospect. While a few assessments may be levied to carry on operations, it is better to pay these than to close down a property and lose what money already has been placed in work on account of inability to raise more funds.

Little Labor Trouble. Utah also has been remarkably free from labor troubles and strikes. In the majority of cases the mine labor is American, made up of miners who frequently prefer to take part stock instead of all cash for their labor. Utah has been absolutely free from the wildcat, the stamp of the state on a proposition being considered a guaranty of good faith.

These are one or two of the theories which govern mining in the Utah camps. One of the most satisfactory usages is the annual, and in many cases monthly or quarterly, reports of companies, by which shareholders are kept in honest and continual touch with financial and mine conditions. The year 1910 gives promise of being the most prosperous year in the history of the state, that it will exceed 1909, the banner season, just as 1909 gained importance in advance of 1908. There is not a more lucrative field in the west than Utah mining properties for capital. There is a vast and rich field among our mountains awaiting development.

No Rest. "Are you in favor of woman suffrage?" she asked. "Oh, yes! Enthusiastically," he replied. "Now, I wish you would tell me why you think women ought to forest their children and their household duties and get out into the world to mix up in political affairs. If you know of any good reason—"

"Good heavens! I beg your pardon. I merely said I was in favor of it to avoid arguing with you. Can't a man be safe on any side any more?"—The Housekeeper.

Modern War. "Your soldiers look fat and happy. You must have a war chest!" "Not exactly, but things are on a higher plane than they used to be. This revolution is being financed by a moving picture concern."—Louisville Courier-Journal.



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the United States land office in Salt Lake City, has started in earnest. Thousands of acres of this fertile land are being filed upon daily. The formation of this company, however, makes it possible to secure full, complete and accurate information concerning the 100-acre homesteads capable of being taken up under the enlarged homestead act throughout Utah.

Reflections of a Bachelor. If an article temperament can't make a living it has no doubts about itself. A man who can't walk off with fun without feeling tired will faint if it is only those for business. A woman who believes her husband has brains where she knows he hasn't. A man has an incurable idea that his wife ought to prefer to sit around and see him smother an old pipe to his taking her to the opera.—New York Press.

Two Progressive Young Men from East Go to Front

C. M. Jamieson and D. R. Thompson Make Good in Salt Lake City in Very Short Time.

SALT LAKE CITY, Feb. 24.—(Special Correspondence to The Bee.)—C. M. Jamieson and D. R. Thompson, two young men of the east, have opened in the Newhouse building, this city, elegant offices, the sole business of which will be locating homesteads upon free government land in Utah. Mr. Jamieson is a young Canadian from the province of Alberta and came to Salt Lake City one year ago, in charge of the Canadian Pacific railway irrigation colonization department office to the intermountain west. During the time that he has been here he has sold to people of this section thousands of acres of Canadian lands. Impressed with the opportunities to be found in Utah, and sure that when the great colonization movement of this country would find its focus in Utah and the intermountain west, he has added to his business the locating of eastern homesteaders upon the free government land of Utah. Mr. D. R. Thompson was formally special



MINERS AT WORK 1,200 FEET BELOW SURFACE.

agent of the field service with the United States land office in Utah and under the government employ has located and traveled over and knows by sight practically every foot of free government land in the intermountain west. Mr. Thompson is originally a Wisconsin man, but came out here and entered the government employ and has lived in Utah sixteen years; thus he adds to his knowledge of the east and western conditions a full, complete and official cognizance of the land situation and the government free lands throughout all the intermountain west.

This is but another example of the opportunities for any man in this section of the country. Thousands upon thousands of acres of government lands, some of them close to transportation and others capable of being irrigated, have been lying out here in Utah ever since the state was settled. The opportunity of locating these lands and of settling them through homesteaders from the east has been wholly overlooked until now. Utah's exhibit at the recent Land show at Omaha, which has just closed, has been another means of bringing Utah agriculture possibilities before the people throughout the central states, and the rush for Utah's enlarged homesteads, as shown by

LOOKING AHEAD 1,000 YEARS

French Astronomer Lifts the Curtain of the Future and Tells What He Sees

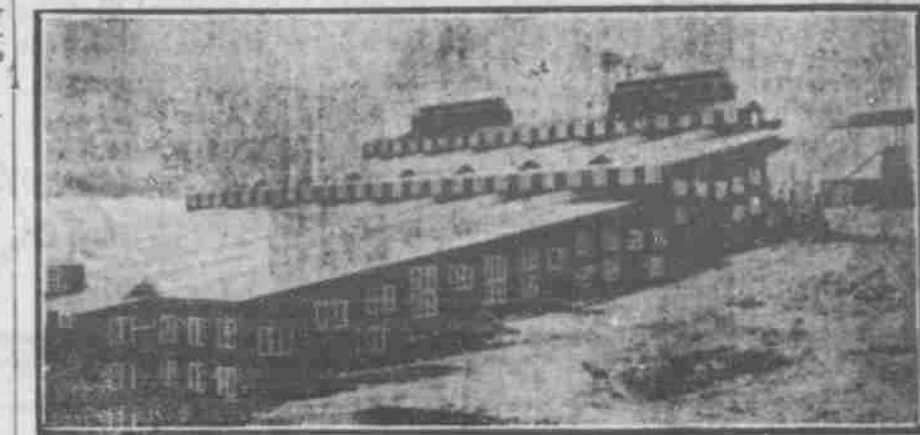
Within the next 1,000 years, say Camille Flammarion, the population of Europe will have increased from 275,000,000 to 765,000,000, that of Asia from 475,000,000 to 1,000,000,000, that of North and South America from 125,000,000 to 1,000,000,000, that of Africa from 75,000,000 to 300,000,000, that of Australia from 5,000,000 to 10,000,000, the whole population thus rising from 1,000,000,000 to 2,860,000,000. Languages will be almost unknown. The ceaseless progress of science and industry will have almost altered the face of the English language, which in its new form will be spoken as a quasi-universal tongue throughout the globe. War will disappear soon after we have reached the year 3000.

The republican form of government will come to prevail universally. A single-money currency will prevail throughout the globe. There will be one universal meridian—that of Greenwich—and the hours will be calculated from one to twenty-four. Meteorology will become as exact a science as astronomy, and the exact parts of 2011 A. D. will be able to forecast the weather almost to a raindrop, a snowflake or a ray of sunshine. Electricity will, of course, have taken th-

place of steam, but the most popular mode of transportation from one point to another will be by dirigible balloon. The sea will be brought to Paris by means of a vast canal, and electric ships will arrive at the French capital from the Atlantic and from the Pacific by way of Panama. London will be connected with Paris by a rapid transit underground railroad. The Mediterranean will be joined to the Atlantic by a canal issuing at Bordeaux, an compressed air tubular trains will connect Spain and Portugal with northern Africa.

There will be telephone communication between all the inhabitants of the earth and telephonography will enable the fire citizen of Chicago to listen to the Carus or Tetrastini of the day in Paris or London or see the great operas or dramas enacted.

Human slavery or domestic service will be unknown, and trained orang-outangs and chimpanzees will do all man's housework for him. Chemical synthesis will have done away with all the trouble of cooking salt orate dishes. Gluttony will be unknown and men and women will entertain each other in conservatories, the banquet consisting of compressed viands or delicate



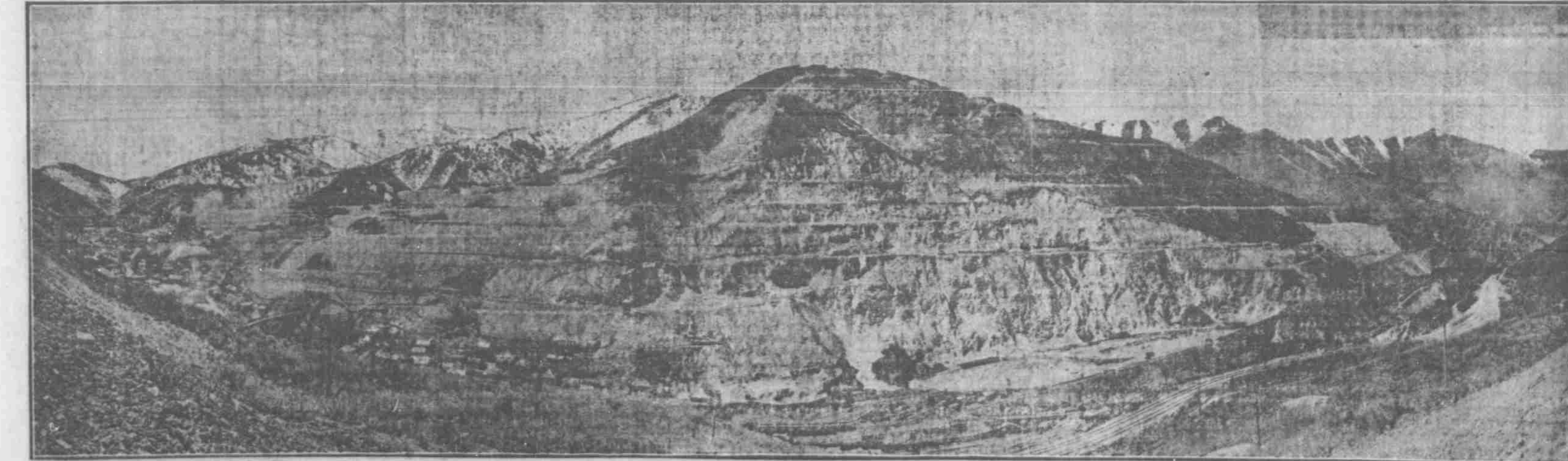
OHIO COPPER CONCENTRATING MILL, LARK, UTAH DAILY CAPACITY, 1,500 TONS OF ORE.

served on silver trays, the tabloid melting in one's mouth and doing away with the vulgar necessity of mastication, but giving nevertheless, the same results, if not more superior, as far as digestion is concerned. The human body will also undergo strange enough transformations. The head, for example, will be larger, the body smaller as a result of the decrease in manual labor; the increase in intellectuality, the nature of the dietary and the greater intelligence shown in the selection of life partners.

Going still further into the future, for the world has still at least 10,000,000 of year to run, it is certain that the human body of the year 10,000 A. D. will be an individual of small stature and a peculiar whiff skin texture. Once the notions of brute force and injustice disappear man will be, come ideal.—New York American.

mines and new districts responding with generous hand to the efforts of the miner. Utah, says the United States geological survey, has the greatest undeveloped iron deposits now known to the world. Railroads in time will make these available, for there is no reason to doubt that the manufacturing trend of the country will be steadily westward. Close at hand are the coal deposits, experts testify to the existence of sufficient coal to provide the Pacific coast for four to five centuries. In the eastern and southeastern parts of Utah, where access is yet restricted largely to freight trains, exist extensive and valuable bituminous deposits, a large tonnage of asphaltum being mined

At Garfield, Utah, the company has two concentrating plants where the porphyry ore is taken and where the copper content is taken by the wet concentration process from the worthless gangue. Near at hand is the Garfield copper smelter where six reverberatory furnaces reduce these concentrates to copper matte, which in turn is refined to blister copper. These two mills are the largest of their kind in the world. Being the pioneers in their line they have naturally presented problems which only experience can furnish a clue. The experts of the company have made many improvements, and plant at its stands today is capable of treating 30,000 tons of porphyry ore daily, the second is



GENERAL VIEW OF THE UTAH COPPER COMPANY'S MINES ON THE WEST SIDE OF BINGHAM CANTON, SHOWING THE EXTENT OF STEAM SHOVEL OPERATIONS AS THEY EXISTED IN MARCH, 1909. IN THE UPPER PORTION OF THE PHOTOGRAPH IS SHOWN THE SHOVEL WORKINGS ON THE GROUND RECENTLY ACQUIRED FROM THE BOSTON CONSOLIDATED MINING COMPANY.