THE MINING AND METALLURGICAL JOURNAL

FORMERLY THE PACIFIC COAST BULLION.

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CONSISTENT TO THE LAST

Grover Cleveland’s administration, from start to finish, was favorable to foreign rather than American interests. A few hours before he retired from office, he vetoed the immigration bill. The mass of the American people favor enlarged restrictions of foreign immigration much greater than those embraced in the bill he just vetoed. But he defied public sentiment on this subject, the same as he has done on nearly all other subjects. The country is overrun with idle men, but Mr. Cleveland would allow the number to increase through the importation of ignorant pauper laborers. He yielded to the demands of the steamship companies, the great majority of which are foreign. If consistency is a jewel, then Cleveland’s administration is a jewel, as it has been consistently hostile to the best interests of America.

THE FUTURE POLITICAL ISSUE.

In the late presidential campaign there were two main questions at issue—one was the tariff and the other silver coinage. McKinley, by the convention which nominated him, was committed to the doctrine of a protective tariff, to the gold standard and against silver coinage, except of subsidiary pieces.

Bryan was nominated by a convention which did not favor a protective tariff, and as he was a member of the committee which framed the Wilson Bill and spoke and voted for it, the country understood that he and his supporters were opposed to the protective policy, but he was a representative of free and unlimited silver coinage in its own person, and the convention which nominated or endorsed him declared for it.

The protective tariff policy carried with it the aid of the gold democrats, and also the gold standard.

Thousands of men who believe in silver coinage and are opposed to goldism voted for McKinley because they were protectionists, and believed that a tariff policy, such as the republicans and McKinley declared for, was the first that should be disposed of, as both could not be enacted at the same time. If there had been a candidate committed to protection and free silver coinage there is little doubt that he would have swept the country.

A large majority of the American people on a direct issue is in favor of the protective principle in tariff legislation.

In his message to Congress at the beginning of the present session the President confined himself to the tariff question. As the republicans have a large majority in the House of Representatives no legislation is likely to be enacted except upon that subject, certainly none of great importance. There seems to be no determined purpose on the part of the opposition to prevent or even embarrass the passage of a reasonable tariff law. Therefore we may assume that some law on that subject will be enacted before the present session comes to an end, and it is probable that it will be of such a character that there will be no attempt to disturb it for several years to any material extent.

Every change of duties affects values and disturbs business. The country has become tired of the continued agitation of the tariff question, and desires that the laws that may be passed shall be in force long enough for business to become adjusted to it, and to make a thorough test of its merits.

We may therefore look for a clearing of the decks for a battle question as a single and certain issue. On that issue party lines will go to pieces, and men will take sides according to their convictions.

It will be well if for all great questions should be passed upon without the intervention of other and inferior issues. Let us have the money question by itself, and let it be wisely and finally settled. We have no doubt that in such case free silver coinage will be one of the features of whatever system may be adopted. The question of silver coinage cannot be removed from politics except through an agreement with leading countries in Europe to the effect that silver shall be made an international measure of value as well as gold and on a satisfactory ratio, or by passing a free coinage law independently of foreign nations.

THE INTERNATIONAL CONFERENCE.

Cleveland has gone out of office without appointing the commissioners to the International Bimetallic Conference. It is perhaps fortunate for the country that he did not make the appointments, for it is certain that he would have appointed his decided friends of the single gold standard. Perhaps President McKinley will do the same thing.

Such appointments would be farcical and absurd and would be the appointment of a mixed commission, part goldite and part for the double standard. If it is desired that a conference shall produce that shall produce a square coinage, it should be of the metal which is earnestly in favor of the bimetallic standard.

When the United States presents a solid front in favor of the free coinage of the two metals, she may have the last, but none whatever when divided in opinions and demands. It is very doubtful whether McKinley will have the stamina, in the face and even to the extreme of all these developments, to carry out and out free silver coinage. To send a mixed commission will produce a result not different from those of the efforts of the three previous conferences. Such a commission will not be better than none at all.

When this be the attitude of demanding, instead of begging, something may be accomplished with foreign nations; but the best thing to do is for this country to hold in the coinage of silver, and make use of the coin in our own affairs.

We are comparatively isolated and independent, while commercial affairs in Europe are involved and complex.

MONEY FOR THE FEW.

Gold is not democratic, it is too scarce for the many, and is sufficient to supply a few from the earliest time it has been possessed by kings, sultans and the nabobs. Crosses gathered it to himself in all his dominions, and it was controlled by the Roman triumvirates and by the Caesars. In these modern days, it is in the hands of the Rothschilds, and the wealthy bankers of Europe and America. It will always be concentrated in the hands of the opulent classes, so long as it is gold. It is not probable that there will be no other medium of exchange is deemed good unless exchangeable in gold. Under the prevailing financial policy, and in consequence of its scarcity, gold can never become the means by which the people meet the few, and be made the instrument of oppression to the many.

In everything useful, except money, abundance is desired by all people, and in regard to it the masses favor a plentiful quantity, while comparatively a small percentage favors paucity, and it is a curious fact that if in an intelligent country like this the few are made a body of small wealth by a large body of wealth, they are able to control the many who are plundered by it.

MR. MCKINLEY’S SUGGESTION.

Mr. McKinley’s suggestion of a commission to devise a monetary system is novel and not complimentary to Congress. It is equivalent to saying the senators and representatives in aggregation are incompetent to deal with that question intelligently. A commission to be composed of business men, for it is fair to suppose that it will be composed of none others, is about the worst thing that can be done. Indeed, it is nothing short of a proposition to take the money question out of the hands of the people and place it under control of an oligarchy. Business men know less of the necessities of the people than any other class, and any system devised by such a commission in all probability would be narrow and in the interest of capital. The partialities and interests of business men generally are in that direction.

It will hardly be denied that the people are in the habit of sending to Congress incompetents, not only upon the money question, but upon many others, and they must not expect wise legislation until they make better selection of agents. It is a snub to the people, however, to submit the question as to what money system the country shall have to the control of men in whose selection they have not part nor lot.

Some of Mr. McKinley’s expressions on the money question are at best ambiguous, and, worse than that, for, by giving them the signification justified by the language, they are positively dangerous. He says, until the country is made to pitch the parity between gold and silver springs from, and is supported by the relative values of the two metals, the value of silver already coined,
and of that which may hereafter be coined, must be kept constantly at par with gold by every resource at our command."

We submit that the language is broad enough to justify the statement that it means the possessor of the silver dollar may go to the treasury and exchange his gold for the dollar. The goldies denote the silver dollar coin as a fifty cent dollar, and, on Mr. McKinley's theory, it can only be made a hundred cent dollar by the government; and if light were exchanged for it, pocket the loss. Such a view is not more extravagant than the construction that has been given to the Sherman law of 1890, by which the certificates or notes issued on the bullion purchased shall be redeemed with gold.

CORRESPONDENCE

CALIFORNIA

Banning, Cal., March 29, 1897.

EDITOR JOURNAL:—Messrs. Ryan Bros., of Los Horse mine, have the mortars of their new ro-stamp mill on the ground. It is their intention to pump water to the mine and have the stamp right on the mine.

The Desert Queen mill is running regularly on good ore.

Eagle Cliff mine is down 80 feet. They have 15 tons of sorted ore, going $125 a ton, ready to ship to mill. They are working the ore in stages from two to twelve feet, carrying gold, silver, copper and galena, from 50 to 900.

Further up the desert, on the west slope of the Chucawallsa, near Mill Camp or Hendrick's Springs, Sterling Company have twenty or more locations, on veins ranging from eighteen inches and three feet to an une developed width, so large that they merge into immense deposits instead of lodes, some as low as $50 or $12, others over $150.

Two miles to the right, Messrs. Davis, Temple & Dr. Keller are developing the "Surprise," another stringer, from three to fourteen feet, from which 50 and 50 assays have been made.

Farther on, Frank Coffey, Ritchie & Meale have a three-foot stringer, showing over $50 rock, at the bottom of the mill, and strange for the desert, water has driven them out, but a pump will overcome it.

From over Corn Springs way, I have no reports save that Frank Wells and Matt Whalen have been shipping $250 ore.

"Around the point of the mountain, on the east slope of the Chucawallsa, Messrs. Corbett and Ritchie have three or stringers," in a 55-foot shaft on the Rattlesnake and have taken 60 or 80.

One mile south, Messrs. L. Crose and A. Jacobs are driving a 100-foot shaft down on the Boulder mine, and have taken out $50 ore from a three-foot vein.

Then comes the Granite and San Diego groups on the Camino Alto road. The Granite group is owned by Mrs. Ella Hendrich, A. S. White, Mr. Masters, John E. Hall and Jacob Berg of Riverside. There is more work in the town of San Diego in this part of the desert, about 700 feet in shaft and drifts. On the 100-foot level, they have cross cut the lode, and found it 40 feet wide. From 800 feet from the north drift, they ran into a face of copper stained ore across the entire face of the drift.

Then, they started to drift west, and cut into another, but found it was an ore pocket, and that they drift strike ore. They put down a winze 86 feet in one of the drifts, and had assays of $159 from ore from the bottom. Although they have not stopped a pound of copper ore, they have some of that which is shipping rock, and when the statement is made that it costs $40 per ton to take ore from the dump here and get it into bullion, we think our ideas of the cost may be estimated. Its milling value is estimated at that or more. They shipped one carload to a smelter, and the returns are reported as $139.10 per ton. Assays have run away up to $400 per ton, and the hundreds of dollars from this property.

Next on the south is the San Diego group, owned by J. S. Crawford and E. E. Bowles, the original location on this lode. As the Granite, the San Diego shows a ledge formation on the surface of immense width, and the lode can be traced by rich cappings for nearly 1200 feet. A mill test made of this ore by L. W. Craig, of San Diego, assayed 512.5 per ton. About 250 feet of work has been done on this property. The foot wall shows about three feet of rich ore, and the hanging wall, mostly amethyst and quartzite, from the latter assayed $162 per ton. A tunnel is now being driven in along the hanging wall. It is 140 feet, and they have a depth of about 200 feet. They will soon have a pretty width of the lode, cutting several stratas of high grade quartz that crop on the surface. Oh yes, great country for stringers this!

Two miles farther south is the Gold King, from which a carload of ore has been shipped to Denver, yielding handsome returns. Some of the ore has been milled at the Boulder Company's mill, eight miles east. Some assays were nearly $400. E. C. Sweitzer has this mine bonded of the owner, John Johnson.

Farther south, there are other promising locations on which but little work has been done, but show high grade ore, principally the Backtung and N. C. Davis, of Los Angeles, is the principal owner. He is also interested in the Tiger's Foot, Burro Bob and Burro Tom, with other interests in the Eagles mentioned later.

On a split near Tank Springs, Col. C. C. Lane and Sons have locations that merits considerable development. They have a shaft down about 35 feet, and have taken out ore that assayed over $150, nearly a carload of which has been shipped.

Over in the Eagles they don't say much, and haven't much time for visiting, but are going down at a satisfactory rate. There are the Blackbird and Kangaroo, in which P. W. McGrath is a large owner, associated with Justice Tallant and John Whitppenn, of Indio. Under the superintendence of Mr. Whitppen a 100 foot shaft is being sunk on this property, and it shows up well, two feet or more of a solid hematite and pyrite stained ore, with fine gold. Parties stand ready to take this property, but, like many others, the owners are not selling prospects. They prefer to sell the known workings of the mines.

In the same vicinity, Mike Conway, Jack Barnhizer and Charley Robertson have a group of promising claims, including the Superintend and Mrs. Hall and Mrs. Crane. They are now driving a tunnel to cut a five foot ledge, from which they have shipped ore to San Francisco, netting very handsome returns. Mrs. Martin, Robert- son a Colorado and Arizona miner, and Jack has grown up with the district. They are
thorough miners, and their property must show up well to hold them.

In the same range, Messrs. Converse and Jordan have a group of claims near Buzzard Spring. Work on these claims is being done by a large force of laborers, and the lode of over eight feet, with some ore paying over $100.

Up in the west side of the Eagles, Henry and Giss Adamson are mining ore from a large well defined lode that is improving rapidly.

Then there is the Beech & Moore property. It is said by the owner that there is an incline of about 30 degrees, 80 feet deep, is reported to be all in the ledge, and a cross cut back, at last report, was 4 feet in solid ore all the way. Much of this is being shipped to San Francisco. It is said the owners refused to bond it for $250,000.

Prominence must also be given to the find of Mr. Angus Brown. He has lately brought in some magnificent specimens of native copper, running high in gold and black oxide of copper. He will not give its exact locality, but is over northeast, and is from one to eight feet—a bonanza. P. W. McGrath is associated with him in the find, but everybody hopes Hank will make a million out of it, for he drove stage across this desert, with a rifle between his knees, when most of us were learning to read.

The Boulder Mining Company has dug a well on the flat between the Eagles and Chuckawallas, and at 70 feet have an abundance of water for all purposes. The company has purchased and moved to the site the Bryan mill, formerly near Twenty-nine Palms, but as yet but little work has been done, owing to the company having no concentrates.

There are many other strong lodes being developed farther north in the Eagles, including the camp of Mo. Coon, of Riverside, but that is in your Cottonwood correspondent's territory.

CHUCKAWALLA MINER

The Picacho Gold Mines.

SAN DIEGO COUNTY.

(Special Correspondent)

March 23, '97.

EDITOR JOURNAL—The Picacho mining district, lying on the Colorado River, 20 miles north of Yuma, has been for the last 36 years noted for its production of gold, during which time it has produced and sent out more than $10,000,000. It is also true that more than two-thirds of this was taken from the placers alone. It is also true that even this was taken from and along the veins of ore which produce it, as the gold was in its rough state, just as it left the quartz. In this mineral belt, the veins range from 20 to 200 feet in width, with an average value of $5 per ton, as shown and verified by examinations made by such men as William A. Parish and Thomas Bell, two of the most noted mining engineers and experts in the world. Parish, upon his first visit to Picacho, after most careful work for 22 days, assisted by 12 men, found that in a thousand samples which he took from different mines at Picacho, the average was $7.20 per ton. Upon his return with Mr. Bell, they were in over the ground, and much that was new, taking his samples with the same care, he found that the average was $8 per ton. Mr. Bell's samples ran still higher. The average taken from the Janes group of four mines ran better than $8 per ton. These mines have been prospected to a depth of 30 feet, and for more than 600 feet in length. Along the level of that depth, the testimony taken from many men who spent more or less time in the Janes mill in milling the ore from the different mines at Picacho states that their experience convinces them that the average of the ore in this mine is about $8 per ton. In the White Gold Basin in the same district, the average holds nearly as good, in fact if not better. The Placitas group of 5 mines has a body of ore about 1,000 feet in length that averages $5; adjoining this is a belt 20 feet wide that runs $6, next to this another 20 feet that runs $7, and next to this another 12 feet that averages $8, and adjoining this another 10 feet in average about $6. These bands adjoining in the same vein have been prospected for 1,000 feet in length.

In the Cantua canyon, these bodies of ore have a face of from 30 to 50 feet in height and going back the 2,000 feet, they rise to over 400 feet, showing simply an immense quarrying proposition, with ore in sight for at least a hundred feet, all milling in a 100-stamp mill. The White Gold Basin group, on the same vein, shows a body of ore 100 feet wide and 1,000 feet in length that averages $8. The Placitas group, still farther east, on the same vein, shows a body of ore 100 feet wide, which averages $6.25 per ton, of this, 22 feet averages $7.82, 12 feet $8, 36 feet $12.65, 16 feet $16.62, and 12 feet $16.57. In the $12.65 area, no sample was included that showed a value of more than $10 per ton. The Alfonso group, adjoining the Placitas, shows a body of ore 100 feet wide, that averages better than $5 per ton. What this vein interest centered on the great veins of free milling gold ore that now is so common, but no one can tell, but so far as it has been prospected, it is second to none in the White Gold Basin.

The Golden Dream Company's mines in the same basin show a width of 50 to 100 feet, with an average in more than 10,000 tests made of over $6 per ton. The company at present is taking ore from nine different places from 40 to 60 feet in length, the average of which is better than $10 per ton.

The Gold Cup, lying to the west of these, shows an average in three tests, taken for 600 feet in width, of more than $20 per ton.

Thus far reference has been made to only six of the thirty or more groups in the Picacho district. That the others of those not yet tested are as good is clear from the fact that upon the surface the indications and prospects thus far taken have been better. What further developments may show no one can tell. Thus far in the opening up of the mines during the past years, not a failure has been made. The Golden Dream mill is running on ore that averages $10 per ton.

The Placitas mill, of 30 tons daily capacity, is nearing ready to run, and two of our mills of the same capacity are arranged for and will soon be constructed. Arrangements have also been made for the putting up of two 100-stamp mills, one of these on the Dorsey property, and the other on the Placitas. There is no section in the state where much work has been done with as fine prospects as that at Picacho, and the results are far better than the most sanguine expectations of those interested.

There never has been a time in the history of mining upon the Colorado River when so much money has been invested in free milling gold ore as that which now characterizes the movements being made in the Picacho and other districts along this "Nile of the West." With its warm, dry climate, and its great river navigable the entire year, Picacho is the front as of one of the best and most flourishing mining centers upon the Pacific Coast. The best mining men in the west have become interested, after having visited the mines and most carefully investigating the value of the ore, and all the conditions of mining and milling, and they agree in the one opinion that Picacho has no equal in the west, even if has in the world—something of the large, rich, and value-exceeding that of any other section now known.

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SAN BERNARDINO COUNTY.

Macedonia.

EDITOR JOURNAL—We are still pushing development work on the Columbia mine. We have one shaft down 75 feet, where we are finding veins for the past six years, stimulating another shaft, 30 feet deep, and a cross-cut tunnel, 130 feet, with 35 feet of drift on the ledge. This tunnel taps the ledge somewhat over 1,000 feet, and as far as we were able to see had not had a break in the ledge. We have now over 200 tons of ore on the dump, averaging $45 per ton, and 10 tons of first class ore. Comparing this ore with the lot we shipped some time since, we think it would go for $50 or more. We have now on the Columbia mine over $50,000 worth of ore in sight, and if we had a mill here, we could make some money every month. The Occidental, Golden West and Good Hope are showing bodies of ore. We have not done any development work on these claims, only assessment work.

COLORADO.

BOULDER, Colo., March 30th, 1897.

EDITOR JOURNAL—The following is a few notes on mining in this county that may be of interest to you readers: At the foot of the town, an ore body 14 feet wide or thick has been opened in the 700 foot level and in the main shaft. The ore is a sulphide of much better quality than that heretofore found in the upper levels, eight tons of solid smelting ore, that runs $100 per ton and six feet of good milling dirt. This mine is undoubtedly the best paying proposition in Boulder county, and has paid big dividends for the past six years, stimulating mining in the great camp of Ward, and giving an impetus to the industry that no other property has ever done.

Charley Davis owns the Victoria mine at Summerville, which furnishes employment to 40 miners. The property is a silver mine, and has been fearfully gophered by those working it before Charley got hold of it, and after spending thousands of dollars in putting the mine in a safe condition to work it, he has begun to realize dividends of considerable amount, and expects these monthly returns to be three times as much as the summer months. It must be a pretty good silver mine to pay for working at the present price of silver, and still more strange that this rich silver mine should be found in the center of magnificent gold telluride properties; yet, such is the fact.
The Inter-Ocean mine at Sunshine produces superb ore. Some of the choice pieces are over half pure gold, that would make elegant cabinet specimens, and are often sold for such purposes. This mine is also operated by lessees, who are making good money when they reach the ore chute; but dead work has to be done before reaching the magnificent ore streak which contains so much pure gold.

The American mine at Sunshine has opened out wonderfully, and all the levels are full of good stopping.

Five tons of mineral were brought down from the Buena mine, Jamestown, last week, which yielded 56 ounces gold to the ton, while a small quantity of first class was sold for $5 per pound.

REGULAR.

NEVADA.

TUSCARORA, NEV., March 15, 97.

Editor Journal:—They have made a rich strike in the Dexter in this camp, and are now milling ore that goes from $1.50 to $5.00 per ton. They ran 43 sacks, March 14th, of 70 lbs. each, and it took 80 lbs. of quicksilver to amalgamate the gold.

W. A. KELLY.

Miscellaneous Mining News.

ARIZONA.

The Mars Mining company has recorded a mill site in the Silver Belt district, near Tucson.

H. M. Abbott is rushing things on his X Y Z copper claim which adjoins the United Verde mine.

Messrs. Cook & Fisher have let a contract to sink a 100 foot shaft on the Discovery mine below Yuma.

Numerous copper locations have been made in the Eagle Tail mountains southwest of Prescott about 100 miles.

According to Prof. Blandy, the copper production in Arizona up to the present time numbers 63,323,708 pounds.

C. D. Lane, the well known millionaire mining man, has an expert investigating a number of properties in the Dragoons in Cochise county, the agent of the Sapai Indians at the Wallapa reservation who says that precious ore is running up rich and expensive gold mines in Sapai canon.

Twenty stamps are now running in the Boom mill south of Casa Grande, a large body of ore was found in the lower workings in this mine which averages $10 per ton.

Cochise county is rapidly forging to the front as the great gold producing county in the large territory of the Pearce mines alone are taking out $450,000 every month.

The Fortuna, located about sixteen miles from Yuma in a southwesterly direction, continues to show up well. Shipments of bullion aggregating $400,000 are made almost every month.

The Maudi mining claims owned by James F. Faust have been purchased by the proprietors of the United Dixie company who have also purchased of W. T. McNelly his interest in the Mcgnty claim for $125,000. The sheild group is being worked by M. Mendenhall and Howard Bues, who at the depth of ten feet found a body of sulphide ore, and indications point to a large deposit of this ore in a body. An attempt will be made to open it up soon. The proprietors sent several tons of ore to the smelter and were much encouraged by the results.

ONYX has been brought in from Phoenix in the big gold mines worth of the three. The 24th Street eight-hour team with two big wagons came in. B. H. Horsey has been busy for three days placing machinery for cutting and polishing, and a big full-fledged oxen factory will be running on a large scale.

The Mohawk Mining Co., whose property is located near Mammoth, are putting in an addition of ten stamps to the twenty stamp mill they now have in operation. They are now crushing about forty tons of rock per day, and when they get the ten additional stamps in working order, the capacity of the mill will be about 125 tons per day greater.

The five stamp mill of the Gold King mine near Ely has been kept on a good rate of work. There are three shafts on the property, one 140 feet, one 160 feet and another 100 feet deep, showing out on the surface. M. E. Grover and others filed notice March 25th of the location of the Cumberland, Defender, Surplus, Mountain View, Transit and Surprise mining claims in the same property. In crossing out the ore at Oro Blanco, a ledge of free-milling gold rock was run into. The lowest assay taken thereon was $12 and the highest $32. The feeling seems to be that men are going to be in a bonanza in this. It is strong, well defined, high grade and free milling. To what extent the discovery is made, is naturally quite inoubiant over the results. Aside from this, however, the Oro and Julia camp was under the superintendence of Mr. Gould, on a paying basis and the discovery of the ledge in question makes it doubly so.

Three shafts are working in the Black Warrior, near Globe, and have the main shaft down 300 feet in solid ore. A double steam hoist has lately been put in on Mears, James A. Fleming, Dr. Ford and others of Phoenix.

Both the Old Dominion Copper Mining and Smelting Company and the United Globe Mines are making their regular output of copper and are pushing work in the mines. The mine stock is selling at 45 cents.

In large hoisting works at the Hoosier shaft, which will greatly increase the number of stamps next year, the raising of ore, present facilities being inadequate.

PIMA COUNTY NEWS.

A carload of machinery for the Mohawk mines is on the road.

The copper jacket for the Rosemont is nearing completion at the shops of Gardiner, Worthen & Goss, in Globe.

The better mines have paid for large shipments of high grade copper ore to the smelter, which averages 27 per cent.

Sears has sold a number of a tons of ore from his Twin Peak mines, which averages over 25 per cent, copper.

Luberty Clark is working his lead mines for all they are worth. The last carload shipped brought him over $4,000.

Gardiner, Worthen & Goss have just shipped a 200 horse and pumping plant to the Campagna mining company.

It is reported that the recent rich strike made in the Mohawk mine is near the line and on the same level as the Mammouth Plat. Capitalists and experts are there examining the gold property belonging to Ignacio Campbell, the commissary and other property owners.

Ben Sweninger, who recently purchased the Centerville copper mine, left Wickenburg last week, fully equipped, and with men and machinery to start the work of development on the mine. He proposes to sink to the depth of two hundred feet or more, and ship the ore taken from the shaft to the Phelps or El Paso smelters. A carload of this rich copper ore will draw more than $10 for the sinking of the two hundred feet.

The Gold Bug mine in the Black Rock district still maintains its output of rich ore, and further prove it, the ledge will be cross cut in one or more places this week.

The Gem, a new gold discovery near the famous Silver King mine, has recently been found by Thos. B. Phelps, from J. W. Woolf, for one week, from Jan. 1, 1897.

The Bullard mine, 30 miles west of Congress junction, is working up to capacity, and Chicago parties will probably purchase the property.

CALIFORNIA.

BUTTE COUNTY.

A rich deposit of gold-bearing rock was developed a few days ago on the introduction of the new section of the Butte mine, on property owned by Mr. Pomerat of Coastale Steamer. Mr. Pomerat was present in appearance that has ever been found in this section. The specimen broken from the rock look as if they were half gold. Mr. G. O. Van Deusen is sampling of the rock to assay, and, although it was by no means a
The White Star company has a tunnel 1300 feet in length, which is over 600 feet below the surface, running through a two and a half foot ledge of ore that is very rich.

The Little Pet, owned by Hurley, Bryan & McKeth, is being developed as fast as pick and powder can do it. Among the above parties with Col. G. W. Swyze, assayed $4,028 per ton.

Colonel Swyze and W. H. Harle have sold the Noble Grant and are taking a 50-foot shaft on it. At present writing the ledge is looking magnificent.

The Kappahack company is sinking a 50-foot shaft on the Ranger, on ore that runs $110 to the ton. The Ranger is an extension of the Leotl, and that is all that anybody knows without saying it.

The "Little Jack," owned by Pendegraat, Kimme and Kelly, is in present workings a three-foot ledge which carries $50 to the ton.

The owners of the town site at Lyen's Well met and decided to name the town "Dale City." The postoffice, store, saloon, restaurant, feed stable, and blacksmith shop will be in operation in two weeks. In fact, a mining town, wide open, is on its feet for the Virginia Dale district.

SAN BERNARDINO COUNTY.

Great Green Lead Strikes.

One of the old-time miners, when Holcomb Valley was a populous mining camp that polled several hundred dollars a day in gold, producing a ledge that was run by Montijo and other Mexican, with results that they kept as far as possible to themselves, in 1888, reported its value at $10 an ounce. J. J. Stephens came in Tuesday from the mine, bringing in a sample on which he placed an exhibit on the Chamber of Commerce, as a sample of what the lesseres of the mine, Messrs. Dickey & Simmons are now taking out.

The mine is now owned by Dick Garvey of Los Angeles, and the efforts of the present lessees have been distinctly favorable. On a run of $100,000 per week out of the mine is not unlikely. It is estimated that the mine has run $300,000 worth of ore since the start of operations, and the amount of ore raised was over 8000 tons in the first month of operations. The mine is now producing 300 tons per day, and it is expected to increase its production to 600 tons per day within the next month.

The mine is now in the hands of a large company, and the prospect is bright for a profitable and sustained production.

The mine is located in the Santa Ana Mountains, about 10 miles south of the town of San Bernardino, and is accessible by a narrow-gauge railroad. The mine is owned by the San Bernardo Mining Company, which was incorporated in 1889 with an authorized capital of $100,000.

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number to a car a day inside of a month. There has been a new shipment from the Bel-Champion for more than a year past, pending the completion of a crosscut tunnel through which to handle the product and save the expense of hoisting it up an incline shaft, and there are indications that this work is blocked out for a year. A new gravity tramway was recently put into operation, and the last 246 feet of the shaft, driven on an incline, and it is now ready for use. Each vein of this property from four to five feet in thickness and runs from $40 to $100 per ton in gold and silver, the values being about equally divided in the two metals. The manager estimates that there are 20,000 tons of ore in sight, ready to break down for shipment. —Daily Mining Record.

Cripple Creek Notes

The Gold Coin company shipped last week 820 tons of ore, which is expected to return an average value of $35 per ton. This makes an income for the week of $13,000.

The Witherspoon lease on a block of the Lindsay ground made its first shipment Monday, the 22nd of March, consisting of two cars. Of this one lot, 10 tons will run about $75 per ton and the remainder about $26 per ton. The second grade was sent to the mill.

A 100-ton shipment went out from the Dolly Varden of the Enterprise company during last week. All of the returned ore received, but 14 percent of which contain gross values of $85, and net values after paying freight and treatment charges of $70.74 per ton. During the week the company shipped two cars of ore from the workings on the Morning Glory. One of the cars contained high grade ore which averaged about $180 per ton and the other consisted of 30 tons of 20 ore. Other shipments were made during the week.

Between 25 and 30 tons of smelting ore were shipped by the Moon Anchorage company last week. Of late grade of ore has had a value of about four ounces in which case it is a by-product of the quartz, and the ore is said to be worth about the same. Besides the smelting ore some 57 tons of tailings are sold, and an average value of about 85 per ton were also sent out from the mine.

Properties.

Returns have been received on the last shipments sent out from the Dante. The 21 tons which were sent to the Metallic Extraction company returned 27 per cent and 19 per cent which the leases sent to the Taylor and Brunton sampler returned $43.50 per ton.

Three carsloads of ore shipped from the Phoca Mill have been found to contain valuable deposits. The best grade is expected to average six or seven ounces to the ton and the balance will run from 40 to 60 per ton. This is one of the best shipments that has ever come out from the company, and will break all previous records. —Mail.

Dorola County

The shipment of freightons of ore made last week by Parshall and Winter company to the Enterprise, and then to the Omaha and Grant smelter at Durango, gave each 1,800 ounces of gold and nearly 500 ounces silver per ton.

Gupi County

Last week the following returns from one sold to the State Sampling Works were received from the Golden Wreath mine:

<table>
<thead>
<tr>
<th>Gold</th>
<th>Silver</th>
<th>Copper</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.50</td>
<td>0.25</td>
<td>0.00</td>
<td>$0.75</td>
</tr>
</tbody>
</table>

Alamos Note

It is understood that Mr. Joe Peterson, who has been in the employ of Messrs. Davis and Hartwell as bookkeeper for a number of years, has resigned, and will be succeeded by Mr. Church. The Vangue company intend putting some twenty men to work in the Centipede mine.

The Montecanna still continues to furnish some good ore. It is the general opinion that Messrs. Howard and Griffin should try the claims on the Never Give Up soon, and Tom Churchill is hard at work on the X I.

On the Aurora mine some twenty men are employed at present, and it will start up in a few days on good ore.

Place mining has revived somewhat since the rain and snow storms of the past week.

MEXICO

Sonora

Pedro Negro has sold to the European capitalists for $20,000 the Roncador mine. He is also negotiating with representatives of the La Patria and La Republica mines, two very promising properties about three miles east from La Colo road to the State of Sonora. The price set is $50,000.

A company of French capitalists have organized under the name of Compañia Minera de San Pedro de Altar," with headquarters at Cabo de, Sonora. They are now constructing buildings for offices at their smelter and are running a railroad to their mines which are located eighteen miles from Cabo de. They will also erect a smelter and foundry. A bond has been taken on the Bastilla mine, adorning the Frietas mine at Minas Frietas, Sonora, which mine has a value already estimated in millions of gold since 1890. There is said to be every reason to expect that in sinking the bastilla shaft a few hundred feet the same rich ore will be encountered as has been found in the Colorado and Frietas, owing to the regular dip of the vein, and the average width of the veins which are visible upon the Bastilla. The development of an ample water supply, to which the lessee has been granted, makes it possible to open to new these mines and others which could not be worked heretofore on account of the unreliability of the water supplies and the want of prospeet to this already wonderful camp.

LOWER CALIFORNIA.

(Fractures from Lower California.)

Punta Banda Lead Mine

Directly across the bay from Buscanza, will under the present, a lead mine was discovered some years ago, which has been the subject of much attention. It is the property of Mr. T. L. McCarty, and recent developments work has led the owner to apply for a mining claim. The ore is a grayish silvery lead with gold and silver, the ore contains over 90 per cent lead and about 1 per cent gold. The mine of galena varies in width anywhere from eight to thirty feet and is well defined. The ore assays on a average 68 percent; lead, 22 ounces in silver and $6.00 in gold, with a trace of copper. Mr. W. W. Ferrel recently came from Colorado and has been making an examination of the mine and is satisfied that there is a very extensive body of this ore. Its value is to the by of the valuable, as the ore is easy of access and the cost of loading and it on vessels would be almost insignificant.

Activity at the Agua Dulce

Seventy men are now employed by the Fortuna Mining Company at the Agua Dulce, and 800 men are working on the 130 shafts, which are working in the Abandonada and Tesoro shafts. The middle of last month Manager Lombard returned from San Diego for the purpose of examining the mines, and was accompanied by Mr. B. L. Harding and Colonel Bloyton of New York, both of whom are interested in the company. Nearly a year has passed since Mr. Harding last visited the property, which he recently surveyed, and during which the development work has been carried on vigorously.

Chihuahua Notes

Mr. E. L. Stillson of the Santo Domingo mine has bought out the interest of Mr. Garner in the new mining claims which Thomas Williams adjoins the veta "Conception," and has shipped out about 1,700 ounces of silver of high grade reduced in a Mexican "casa" and everything indicates that the property will be of immense value. The last conductor from Batopilas brought in the fabulous proofs of Mr. Williams' working.

Mr. Arthur Shepherd, who is managing the property at the "Minas de La Bufo" near Batopilas, in which he is the half owner, secured a letter from the Batopilas mail that Mr. S. Derrick, who is exploring the property for himself and partners, Mr. James Taylor, from the property of the company, which collected shows magnificent results, gold being found in quantity, and the presence of native and visible to the eye at a number of points, in addition to development. Mr. Shepherd is to be congratulated on the fulfillment of all his expectations, and being in a position to refine the property which he discovered, and for two years went without any claims before it was brought before the mining world. He is expected to leave the first of the week to complete in detail the work which was commenced by Mr. W. E. Will accompany him for the purpose of surveying several mining claims to be taken up after exploration.

Cochialua

(Extracts from the Tribune.)

The Carmen mine, located near the Rio Grande, is shipping large amounts of smelting ore to El Paso in wagons, and has been busy for several weeks, putting a cable across the river, and in the near future expects to secure a railway to the property.
Col. Sutherland was in Hawthorne last week and proceeded to Candelaria. It is said that if the Bailey process is a success Candelaria ore, work will be resumed in the mines.

Silver Peak Notes.

A new strike has recently been made in the Mary tunnel. There is a large body of quartz at the point where the tunnel cuts the ledge both ways, are in about thirty feet on the south side and about five feet on the south. The quartz boats well throughout. Some of it shows free gold, and everything looks favorable. John Chisholm deserves success for his pluck and perseverance, and has undoubtedly got a mine.

Sam Case is getting out some very rich ore from the Homestake mine. The Mary tunnel is being worked on the ledge both ways. It is going strong and must be very near it now. The tunnel will top the ledge about October 1st.

News from Alba and Tule Canyon is encouraging.

It has been learned that eastern capitalists have bonded the immense copper mines a short distance from Yerrington, some fifty miles from Carson, and are to build a mill and smelter at once. The opening up of the copper industry in Nevada promises to extend further, as there are several fine mines in the state.

NEW MEXICO.

Hillbars Mines and Mills.

Twenty-seven leasers are at work on the Snake group and all doing well.

The “North Homestake” mine at White Oak has put a few more men to work.

The Charter Oak mill has finished a very satisfactory run on ore from Mr. Hirsch's Prosper mine.

Crews and Fanning shipped a car load of high grade ore from the Opportunity south back washing this week.

The appropriation made for the school of mines at Socorro by the state legislature is the same as that of two years ago.

William Wayland has gone to work on the “Yellow Copper” mine at Hillbars, owned by Mrs. Col. Dinsanter and himself.

The sale of the ‘Heum Kne’ group of mines near Nogal, Lincoln county, has been consummated and development work on the property will begin at once.

The final expert examination of the placers by Wm. R. Farnak will be finished tonight. About fifty men have been employed digging, sampling and washing the gravel.

Joe Camper and some others have taken a lease above the opportunity first level. They have a large block of ground to operate upon and will be considerable shippers.

R. A. Nickle is making regular shipments of sorts from the old smelter dump and is producing material that will sell from $100 to $150 per ton.

Some of the new leases made on the Snake last month call for important development work. Among others Lindner and Crumrine undertake to from the old 350 level.

W. S. Hopewell has ordered a new hoisting wind for the Catherine mine and will resume work there as soon as it arrives.

Articles of incorporation of the Hillbars Smelting and Refining Co. were filed last week in the office of County Clerk Hall.

The 500-foot level south of the Snake mine is in rich ore with a vein varying from six to eighteen inches in width.

At the Richmond mine seven more men have been employed at wages and the number of leasers is in creasing.

W. W. Williams has secured a bond and lease on the Coronado mine of valuable silver lead property in the Tanaka district.

David Sitzell is developing his very promising Summit mine.

The smelter at Copper Bluff in Mhd. 10th and is running full blast. Large ore reserves are in sight in the mine and the efficient practical management of N. S. Berry, who is an experienced metallurgist and mine operator, there is every reason to predict a grand success for this new company.

The Confidence mill has its fall stamps at work producing bullion at Mogollon.

A company of local merchants and mining men at Mogollon are making arrangements to start the Last Chance mine. The ore will either be worked at the Mule Station or the Last Chance mill will be remodelled the ore reduced at the mine.

The new gasoline hoist is at work at the C. and C. mine at San Rafael.

Superintendent Wood, of the Vanderbilt company, at Nogal, was in White Oak Moh. 6th, and reports work going on in that camp so far as his company is concerned in the business is being rapidly adjusted and a full force will soon be engaged for development. The shaft on the Black Copper had reached a depth of 340 feet. The work of drilling at the 135 foot level is to commence immediately. The tunnel on the Jesse claim is in 335 feet and a cross cut is to be started.

Output of Hillbars gold mines for the week ending today, March 24th, 1897, as reported for the Advocate.

<table>
<thead>
<tr>
<th>Total</th>
<th>150</th>
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</thead>
<tbody>
<tr>
<td>Total output since Jan 1, 1897</td>
<td>2,100</td>
</tr>
</tbody>
</table>

Chloride Notes.

Those Scales is having assessment work done on the Bullion group of mines on Wild Horse. Mr. Gordon is doing the work for him.

Mr. Scales and Jas. Taylor have completed assessment work on the Confidence, the property of the former, located in the Culchilos. Ore recently tested from Mr. Scales’ Daisy Bell, near Grafton, gave return of 628 ounces silver and 4 3100 ounces gold on the ten-ton.

Phil Harris and John Caldwell are working the Pannie property situated on Monument creek. They are getting out of some good grade shipping ore. The one has good values in silver and copper carrying some gold. This property was formerly known as the Daisy Mill.

The Dictator claim, on the east side of the Culchilos, which is being worked under lease and bond by the Cliff Mining & Smelting company, is improving with each development. Ore from this claim gives returns of 45-100 in gold, eight ounces silver, eight cent copper and 25 per cent lead. Black Range.

Bland Notes.

The Washington mine is shipping a quantity of its valuable ore to the Pueblo smelters.

Jake Lazzere is doing the assessment work on the Bldinger, a valuable property lying between the Good Hope and Ellen L., and belonging to E. F. Peters and Mr. Larrabee.

The Lone Star has resumed work in the second level to continue the upraise that is to connect with the upper level, and are working in a large body of the present ore yet discovered, in the lower 400 foot level.

Messrs. Philpot, Rhodes and Bass are constantly doing assessment work on the Luna, an extremely valuable claim in the neighborhood of the Alterameque group. They are driving a tunnel to cross cut the five feet lead at a depth of 110 feet.

Harry Wood was recently over from Peralta, where he and W. F. Read are working the Henry M. Tellez, and at the Blue Bell, and reported everything in that part to be flourishing and says that it is the coming camp.

Henry and Jesse Brown will resume work on the Sheridan tomorrow. This claim is the adjoining one north of the Ontario, which adjoins the Alberameque claim. They are in the same line of business that of that of.

Henry Brown, who is one of the owners, intends to do considerable work on his valuable property from now on.
Gold Mountain Activity.

A New York syndicate has recently offered Messrs. Moore and Snyder $30,000 for a one-half interest in the Advocate mine, at Riescheid, stipulating that the company must be in a position to get gold ores in opening up the mine and purchasing a plant. Moore and Snyder believe in the mine and that several other good things, would prefer to either hold on to the Advocate or sell it for straight cash; but nevertheless they are considering the New York people's proposition. The Advocate mine is just across a little gulch 800 feet to the east of the Mill from the Mill, which proves its vein the same as the Miller's in size and value.

Work on the Miller is going on merrily. Ten men are employed there, and the first of these few days have been drifting.

At least 900 more mill tons of Monarch mines will have forces of men actively engaged in getting gold after gold this season. A low estimate places the number of tons mined on Gold Mountain by the first of August at 250.

Reports from the property of the Summit Mining company, on Donner crest, near Park City, are to the effect that the strike in the incline is looking better as development work proceeds. At a depth of 200 feet the vein measures only 7 feet wide, but some promising values, has just been encountered.

The North Golden Gate company has let a contract for 50 feet more development work.

Another 100-foot contract has been let on the Sunlight property, at Sunshine, which takes the shaft down to the 800-foot level.

It is reported that the Summerville company, being desirous of joining in the Gold Belt line, a distance of 2200 feet. A steam hoist has been ordered and plenty of water will be necessary. The mine is being operated by three eight-hour shifts.

The Wonder is still drifting for the vein. The drift is started about fifteen feet below the vein and will intercept it in a few feet further on its dip.

The Geyser-Mercury made a shipment of cyanides during the week and expects a big dividend this 1st April—Mercury Mercury.

The net earnings of the New Silver Mining Company in Utah for the fiscal year just closed was $276,000, including a dividend of $50,000 disbursed to shareholders.

The prospect of having a railroad built into Deep Creek district Utah this summer has caused renewed activity.

From reliable sources it is learned that the Mercury mine is looking exceedingly well—better than ever before in its history, and it is believed that when the company has completed the addition to its milling capacity that the monthly dividends of wealth will be materially increased.

The Ballou-Beck has already paid $120,000 this year, and it is expected that by the addition of a second stamp mill it will make a grand total of $700,000 for the first three months 1897.

At the meeting of the directors of the Ballou-Beck Mining company, held for the purpose of determining the date at which the transfer books will be closed on the first of the month, and will remain closed until the last of the year.

Good reports continue to come in from the fleeta, at Mercury, and it is said that from the reorganization of the company and the taking up of the bond, there has been an active demand of the stock of the company and the stockholders are demanding more. The corporation stock March 11th, 2000 shares of the treasury stock of the incorporated shares hounds of 50 cents a share.

Superintendent Green, of the Buckeye, at Silver City, stated that work was being pushed in the sinking of the shaft, and that the new steam pumph was in working in a satisfactory manner.

The shaft is now being run in country rock, but it is expected that in a short time it will encounter the vein on its dip. The drift work for the lower levels of the mine the showing is most encouraging.

At the west dip of Camp Floyd district, work is being carried on for the new mill to 250 tons daily as soon as the road becomes less difficult to travel. The new mill would not take Lake long to do this, as everything was ready for the addition. It is believed that the mill will be started up Friday, April 2, for a test run, and the management has the utmost confidence in the outcome.

C. L. Dignowity, of Salt Lake City, who is largely interested in the Camp Floyd district, in which is popularly known as the West Dip, has just consummated a deal whereby he has sold a group of ten claims in Rush Valley to Herbert Nash and D. W. Kimball, of Boston, for a cash consideration. These claims include 2000 acres of land in the locality, and Mr. Dignowity states that he is the intention to do much more development there than has been done heretofore in the coming season. This is the first transfer that has been recorded in Rush Valley for some time, but it is believed is the first of a great deal of activity there, and it is the prevailing opinion among those who are acquainted with this section that some claim will eventually be made in addition to that made last fall by two Italians.

GENERAL NEWS.

When a mine is to be worked, there are several things to be considered before the plant for reducing the ore is erected. The first thing is to discover the true value of the ore; the next, the best process to work it by; and right here it can be said that the success of all mining operations depends upon the ability to save everything in the ore. The country is full of mills, smelters and different reduction plants, erected without any regard to the character of the ore itself. F. M. Johnson & Co., 23 Stevenson street, San Francisco, are making practical working tests, and advising as to best methods of ore treatment, and can prevent errors from making mistakes. The prospector knows more by looking at the ore (that is, he thinks he does) than can be ascertained by taking samples and proving how it should be worked. In fact, expensive mills have been erected, and after the money has been spent, it has been discovered (when too late) that some other process should have been adopted to obtain the best results.

All this annoyance and expense can be avoided by taking your samples to people who have had years of experience, and have to the mechanical intelligence trained to do accurate work. The firm of F. M. Johnson & Co. have started in to the mine, and will undertake to treat ores of every description. They will give all information desired about working them free. They also give courses in mining, assaying, amalgamation, chlorination and free milling tests at very reasonable terms. They will cheerfully answer all inquiries about their business, rates for doing work, and give any information desired. Their experience of over twenty years on the Pacific Coast enables them to very competently advise all who seek their services.

Failures in mining operations are, like in any other business, due to many causes, but the principal one is ignorance of the best pro-
cess to economically save the values. In the old days of mining in California, nothing was considered worth saving which left the plates; but since mining has become a science, and low grade mines produce a large percentage of the precious metals, it has been found necessary to concentrate with a device that will extract every color, so to speak. Inventors of different concentrators have all claimed to have discovered the desired panacea to work the concentrates successfully, and a large number of machines have been put on the market. The McGlew ore concentrator, which was patented in 1893, has, through its simplicity and cheapness, become the favorite among miners.

The concentrator is made of iron or steel, and is mounted on a strong wooden frame, and will handle ten tons in twenty-four hours, saving 95 per cent. It can be so adjusted that a side, end, or side and end shake combined can be obtained. The speed of the belt can easily be regulated whilst running, as well as the incline of the table. The cost of repairs on one machine, from April, 1893, to October, 1895, was $410, only one tenth horse power is required to operate the concentrator, as it is ball bearing, and is so simple in construction that a number of machines can be handled by one man. The McGlew firm, of California, Nevada, Washington and Oregon, also in Central America, Australia, Mexico and many other parts of the world, and is giving universal satisfaction. John J. McGlew, of Ashland, Oregon, reported finding only 40c. per ton in the tailings, after being worked by a McGlew. This concentrator has received the highest endorsements from many well known mill men and miners.

C. A. Luckhardt & Co.

A short description of this old and well-known establishment will be of interest to the mining public.

The increasing demand for practical and accurate knowledge, of the latest and more scientific treatment and working of ores, made it necessary for Messrs. C. A. Luckhardt & Co. (Nevada Metallurgical Works) to remove from the place where the business had been conducted, for the past twenty-five years to quarters more suitable for the additional heavy machinery.

The works are located at 71 and 73 Stevenson street, a block east from the Palace hotel, in San Francisco, Cal.

The plant was built by the Union Iron Works, and is most complete in all details. It consists principally of a three stamp iron frame battery and improved Union concentrator which are in constant operation, amalgamation pans, tanks, pulverizers, crushers, samplers, a two-hearth reverberatory furnace, smelting an assay furnace, and a thoroughly equipped laboratory for analytical and assaying work.

Practical working tests of ore made by any process is a specialty.

CAPT. A. H. WARD, Proprietor. W. G. LUCKHARDT, Manager.

DANIEL CRAULIUS, Mgr. of Laborator.

71 and 73 Stevenson st., San Francisco, Cal.

A special New York says: A New York syndicate has purchased the Aurora and Herald gold mining claims in the Siskiyou mining district of Colorado, Jacob Alexander, Anson, Cola. Transfer papers were signed last week, and the property transferred to the Golden San Juan Mining company, incorporated under the laws of West Virginia with a capitalization of one million dollars. The members of the syndicate are all eastern people.

Hercules Gas Engine.

As gasoline engines, especially for mining purposes, are coming more and more into general use, it will interest our readers to note the illustration of an 80 h. p. Hercules, self-starting, gasoline engine, which has just been shipped to the Rawhide mine, near Jamestown, Tuolumne County, Cal., where it will be used to drive the Company's new 10-inch Cornish pump.

As will be seen, the engine is of the horizontal, single-cylinder type, very heavy and substantial, of simple design and built to withstand severe and continual service.

The generator will vaporize either gasoline or low-grade distillate oil, the latter being an exceedingly efficient fuel and very cheap.

The governor, instead of being the usual flywheel or shaft type, is a fly ball or pendulum governor, and controls the speed of engine very closely by operating a valve in inlet pipe.

The electrical igniting device is very substantially and easily cared for. The electrodes are heavy pieces of hard steel, located in combustion chamber, the electrode stems passing inlet valve head to permit tension springs being external and away from heat. This obviates the necessity of removing head to renew or adjust electrode springs. The tension springs can be adjusted while engine is running. A self-starting device does away with either a small starting engine, or the labor of turning engine over by hand. The point of ignition is adjustable, permitting the highest possible efficiency at minimum consumption of fuel.

Every precaution was taken by the builders, the Hercules Gas Engine Works, to guard against mistakes, and under exceedingly sure tests, the engine made a splendid show of economy, efficiency and general excellence.

The firm of Endlich & Davis, mining engineers and metallurgists, doing business at the Bullard Block, in Los Angeles, Cal., has been dissolved. Mr. Evan Davis retiring, Dr. F. M. Endlich has associated with him Geo. F. Hoyt, a young mining engineer, who comes to Los Angeles with the highest testimonials. The new firm will continue business at the old stand, and are prepared to attend promptly to all work entrusted to them.

The Hammond Manufacturing Co. of Portland, Oregon, have closed a contract with the Portland, Alaska, Gold Mining Co., for a wire rope tramway over the last two feet between terminals, for their mine at Berners Bay, Alaska. The indications are that there will be a larger amount of mining machinery sold this season than ever before in Alaska. The prospects for Eastern Oregon, especially Baker county, are also exceedingly bright.

The Hammond Manufacturing Co. are building a machine that extends all over the North-west, Pacific Coast and to Alaska.

W. A. Frithling, of Los Angeles, has just sold a 20 H. P. Zenith gasoline engine, to be used by E. S. Blasdel, for his boat, that will ply upon the Colorado River from Yuma. The boat is over 40 feet long and draws 18 inches of water. The main business will be in towing barges up the river to carry ore. It is a new twin-screw boat, designed by Chas. H. Wedgwood, who built the Defender Jr. last year in Los Angeles.

Within two years past, between 2500 and 3000 Anaconda axles have been put in use in Montana and other Western States and British Columbia. Users find them cheap, simple and easy to care for, and repeat orders are numerous. A catalogue describing this axle is published by Fraser & Chalmers, Chicago.

PERSONAL—NEWS ITEMS

F. M. Bradshaw, of the Aurora mine in the Alamosa district, Colorado, Mexico, has returned to Los Angeles for a few days.

E. B. Sage of Congress, Arizona, was one of the visitors at the Phoenix the 24th at.

Col. Greggson, who returned to Monterey, N. L. Mexico, the middle of last month from the City of Mexico.

C. L. Hall, superintendent of the Mammoth and Bull Dog mines at Goldfield, Arizona, was circulating amongst his friends in Phoenix last week.

Wm. Parrett, the mining man of northern Mexico, returned to his home at Tuttlo, Mexico.

T. Bryant Comstock, E. M. of Prescott, Arizona, was in Los Angeles March 25th and was among the callers at the Journal office.

L. L. Girod, the noted mining man of Jerome, Arizona, was in Phoenix, the 26th of March, on his way home from an extended business trip to Europe. He spent several days in Paris.

John Lawler of Prescott, Arizona, spent several days in Los Angeles last week.
Theo. B. Comstock, ex-president of the University of Arizona, returned to Mohave Co., Arizona, last week after an extended trip through the east.

Russell E. Durm, E. M., is in London. He went from Paris there after his return from Siberia.

United States Debris Commissioner Captain Gillette has been in Plumas county, Cal., inspecting dams.

H. C. Herrick, a prominent mine owner of Dos Cabezas, Ariz., was a visitor in Tombstone the fore part of the month.

H. M. Abbott arrived in Jerome, Arizona, the fore part of the month, and will begin operations on his X. V. Z. properties adjoining the United Verde mine.

C. B. Strong, a mining man of prominence from New York, was in Tombstone, Arizona, negotiating a mining deal of considerable importance the fore part of this month.

Charles F. Hoffman, accompanied by his son, Ross, reached St. Petersburg, Russia, January 1st, on his way to Siberia. The mines he goes to are on the Amur river.

David Allen, of Washington camp, Arizona, was in Tucson, Arizona, last week. He has owned the Pool group of mines for many years, and has shipped a great deal of ore from his properties.

W. W. Hill, superintendent of the Black Warrior mine, near Globe, Arizona, was in Phoenix, the 20th ult., and reports development work on the Black Warrior going on rapidly.

Messrs. Bennett, Simon and Bennett of Phoenix, Arizona, have just returned home from a visit to the Fortuna mine in Yavapai county.

J. J. Reilly of Prescott, Arizona, one of the best known mining men in the territory, has just returned to Prescott from a trip to Chicago.

E. P. S. Andrews of Phoenix, Arizona, left the 26th ult. for Jerome to visit a claim owned by his brother.

Col. S. F. Sykes of New York, arrived in Tucson March 25th, on route for Californias, Arizona, where he has a brother interested in mining.

W. L. Breitherton, a mining man of Montana, was in Tucson, Arizona, the 22nd ult.

Ed Richardson of Ensenada, Lower California, Mexico, is now in the West Indies at Kingston, Jamaica, following his profession, that of Civil Engineer.

J. R. Cleveland, a mining man of Minneapolis, was in Phoenix, Arizona, the 24th ult.

Joe Peterson, former superintendent of the Vinnaga mine at Alamo, Lower California, Mexico, is now in California on an extended visit.

Dr. F. D. Hendrick a mining man of Minneapolis, Minn., has been in the Santa Maria mining district near Prescott, Arizona, examining some mining properties with Hon. Nick Galles of Prescott.

E. B. Wiegler, a well known mining man of Santa Rosa, Arizona, has gone to Baltimore, Md., for a few weeks' vacation.

Chas. Legge of Pasadena, Cal., has gone to Tucson, Arizona, where he is interested in the mining business.

C. W. Lyke E. M., was among the Journal callers March 11st.

W. E. Cotton of Seattle, Wash., is in Tucson, Arizona, looking for some good mining properties.

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Hoisting Engines 1 to 50 H.P. Stationary Engines 1 to 100 H.P. Marine Engines 2 to 200 H.P.

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MORRIS ROCK CRUSHER

MORRIS ROCK CRUSHER
E. O'Neill of Elmhurst, Cal., was in Tucson, Arizona, March 27th, on mining business.

Prof. P. D. Barnhart of Prescott, Arizona, has recently returned home from Kingman where he has been engaged in placer mining.

W. C. Rollins, the prominent mining man of Chihuahua, Mexico, will take a few days' recuperation in the Santa Rosalia district, in the State of Chihuahua.

Prof. J. L. Harmon is operating some mines in the mountains near San Jacinto, Riverside county, Cal.

A. J. Swarth is in Riverside, Cal., from the Hemet mines, the forest of last resort.

G. G. Grenfell, of Denver, Colo., a mining man of prominence, was in Phoenix, Ariz., late, looking into the mining possibilities of that territory.

L. P. Hoofer, of Phoenix, Ariz., went to San Francisco last week, to look over further, who is returning from South Africa, where for nine years he has been engaged in mining.

L. E. Porter, of Los Angeles, has gone to the Slate range, in San Bernardino county, Cal., to take charge of a cyanide plant.

H. L. Nelson, the real estate and mining broker of Randsburg, Cal., was in visiting in the city for a few days the last of March.

Col. T. W. Brooks of Pomona, Cal., is about to make his departure for Honduras, where he will engage in the mining industry.

A. F. Holden, the manager of the Old Jordan and Galena mines at Bingham, Utah, has just returned from his trip through this state.

B. D. Haskins of Salt Lake City, Utah, has recently returned home from Montana.

E. O. Broyden, who is interested in mining in Salt Lake City, Utah, returned to the above place from Chicago the 29th of March.

W. P. Mitchell, the inventor and patentee of the Mitchell Acme Flour gold amalgamator accompanied by his friend and partner, Captain William Howe, returned last of March from Salt Lake City, Utah, from a three months' visit in the canyons of the Colorado river.

G. M. Hyams of Boston, manager of the Butte and Boston and Boston and Montana mining companies of Butte was in Butte the 26th ult., on important business.

P. J. McLane, secretary of the Senator Mining Co., in the Ranas Vista district, near Phoenix, Ariz., is visiting Cleveland, Ohio, New York and other eastern cities.

R. W. Keeler of Eagle Cliff camp in Riverside County, Calif., was in Los Angeles last week.

S. A. Harsh, manager of the Revenue Cyanide Works at Norris, Montana, was in Hillsboro, N. M., last week, making an examination of some mineral properties.

W. T. Hodges of the Ficano district, San Diego County, Calif., is now in Phoenix, Ariz., and is very enthusiastic of the Ficano country.

C. A. Dressel, who has been in Macdonaldia, near Penner, called at the Journal office last week.

B. Salazar E. M. of Chihuahua, Mexico, now a resident of Los Angeles, Cal., left the latter place March 28th for Sonora, Mexico, where he will investigate mining properties.

Joe Ward and Omer Ramey of Williams, Arizona, have gone to the copper mines near the Grand Canyon.

B. F. Thomas of Victor, has been in Los Angeles for some time past. He intends to resume his mining operations, now the Rose mine, soon.

Wm. E. Jacobs, a prominent mining engineer of Salt Lake City, was among the callers at the Journal office, March 24th.

John Crompton, of Crompton & Graves, Magdalena, went up March 20th, to Golden, W. M., to look after his mining prospects.

Thos. M. Park, who is interested in the Alice mine in the Perris district, called at the Journal office March 22nd.

Charles J. Dole, one of Helium's pioneers and a gentleman largely interested in the Helium and Black Copper districts of New Mexico, arrived in the former place from Kansas City last month.

J. S. Hathaway of Randsburg, Cal., called at the Journal office March 31st.

Obituary.

R. K. Eastburn, manager of the Lake Valley Silver Mining Co., at Lake Valley, New Mexico, died in Philadelphia, Pa., last week, of pneumonia.
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Manufacturers of
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This Gold Saver is Easily the Strangest. No Water Required for Cleaning up. We have 100 on hand. Come and witness a live dry ground gun. Capacity of Standard Machines to 20 tons. Weights 162 lbs. Price $27.00. First-class Material Used. Throughout. Capacity of Small Machines to 5 tons. Weight 56 pounds. Price, $12.50.
Machines are easily Taken Apart to be shipped or carried anywhere.

Denver Public Sample Works
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The Best Manufacturing Co.
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Metal Market
New York Quotations:

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<th>600g</th>
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Note: Above Mexican stocks are figured on the basis of Mexican silver

Mineral Stock Quotations

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Colorado Stock Exchange

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This machine is guaranteed to do the work represented and will save coarse or fine gold equally well. The weight of the standard size for mill is 600 lbs. and for placer use 1000 lbs. The machine can be shipped in sections, no piece weighing over 100 lbs., this makes it by far the cheapest for use in mountainous districts where it is necessary to use pack animals for transportation. The standard size machine has seventy square feet of amalgamating surface constructed in such a manner as to give the greatest contact without scouring the plates.

This machine can be opened and the process of amalgamation be seen at any time while in operation.

Send for further particulars to The Pacific Mining Machinery Company

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Assay Office and Chemical Laboratory
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Foundry and Machine Shops.
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E. G. DENNISTON.
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FRUE ORE CONCENTRATOR
Over 3,000 in Actual Use
Manufactured under Patents of April 27, 1884.
September 15, 1884, and March 31, 1885.

It can be satisfactorily, without going into a description of several new and varied concentrators that have lately come into the market, where sulphurates are of such value as to make close saving necessary. The Frue Vanner is always used. It is the only real centrifugal concentrator in the market that can be relied on to handle all classes of ores, and give universal satisfaction. (In all competitive tests of concentrators the Frue Vanner is taken at the standard machine of the world, and all others are compared with it.) The Frue Vanner is the only machine on the market that will handle all classes of ore; and in these respects the Frue Vanner is superior to all others. The Frue Vanner is the only machine that will handle all classes of ore; and in these respects the Frue Vanner is superior to all others.

Price of 4-foot wide Plain Belt Frue Vanner $500 f.o.b.
Improved Belt Frue Vanner $600 f.o.b.

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112 Market Street - San Francisco.

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Correspondence Solicited.

Office: 201 Bullard Block, Los Angeles, Cal.
### Incorporated Mines Paying Dividends

#### Names of Mines

<table>
<thead>
<tr>
<th>Massachusetts</th>
<th>Maine</th>
<th>New Hampshire</th>
<th>New York</th>
<th>New Jersey</th>
<th>Pennsylvania</th>
<th>Virginia</th>
<th>West Virginia</th>
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<tr>
<td>Adams</td>
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#### Location

- California
- Colorado
- Idaho
- Montana
- Nevada
- Arizona
- Utah
- Virginia
- Pennsylvania
- New York
- New Jersey
- Massachusetts
- West Virginia
- Wisconsin
- Minnesota

#### Number of Shares

- 10,000
- 20,000
- 30,000
- 40,000
- 50,000
- 60,000
- 80,000
- 100,000
- 150,000
- 200,000
- 250,000
- 300,000
- 350,000
- 400,000
- 450,000
- 500,000
- 550,000
- 600,000
- 650,000
- 700,000
- 750,000
- 800,000
- 850,000

#### Par Value

- $5.00
- $6.00
- $7.00
- $8.00
- $9.00
- $10.00
- $11.00
- $12.00
- $13.00
- $14.00
- $15.00
- $16.00
- $17.00
- $18.00
- $19.00
- $20.00
- $21.00
- $22.00
- $23.00
- $24.00
- $25.00

#### Amount of last dividend

- $5.00
- $6.00
- $7.00
- $8.00
- $9.00
- $10.00
- $11.00
- $12.00
- $13.00
- $14.00
- $15.00
- $16.00
- $17.00
- $18.00
- $19.00
- $20.00
- $21.00
- $22.00
- $23.00
- $24.00
- $25.00

#### Date of last dividend

- Jan. 1897
- Jan. 1896
- Jan. 1896
- Jan. 1897
- Jan. 1896
- Jan. 1897
- Jan. 1896
- Jan. 1897
- Jan. 1896
- Jan. 1897
- Jan. 1896
- Jan. 1897
- Jan. 1896
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- Jan. 1896
- Jan. 1897

#### Kind of Mine

- Silver
- Gold
- Lead
- Copper
- Quicksilver
- Iron
- Borax

#### Total Amount Paid in Dividends

- $50,000
- $60,000
- $70,000
- $80,000
- $90,000
- $100,000
- $110,000
- $120,000
- $130,000
- $140,000
- $150,000
- $160,000
- $170,000
- $180,000
- $190,000
- $200,000
- $210,000
- $220,000
- $230,000
- $240,000
- $250,000

#### Kind of Dividend

- Q
- S
- G
- L
- C
- M
- S.L.
- S.G.
- S.C.
- S.B.
- S.T.
- S.L.
- S.C.
- S.B.
- S.T.
- S.L.
- S.C.
- S.B.
- S.T.
- S.L.
- S.C.
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- S.T.
- S.L.
- S.C.
- S.B.
- S.T.
- S.L.
- S.C.
- S.B.
- S.T.
C. DUCOMMUN,
300-302 N. MAIN STREET, LOS ANGELES

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Have a Complete and Accurate Map made from
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and Railways.

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Rope; 15 years’ experience; Send for
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ORE TARIFF.

From Points in New Mexico, Texas and Arizona, to El Paso, Pueblo, Denver and Kansas City.

**ATCHISON, TOPEKA & SANTA FE R. R.**

<table>
<thead>
<tr>
<th>FROM</th>
<th>TO</th>
<th>Car Loads in Dollars and Cents per ton of 2,000 lbs.</th>
<th>Ore Concentrations</th>
</tr>
</thead>
<tbody>
<tr>
<td>El Paso</td>
<td>Pueblo</td>
<td>10.00</td>
<td>8.00</td>
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<td>Pueblo</td>
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**RATES **

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**OMAHA RATES—The Rates to Omaha, Neb., all grades, will be $1.00 per ton higher than the rates to Kansas City.**

**SOUTHERN CALIFORNIA RAILWAY.**

Rate on Ore in car loads, valuation not to exceed $20 per ton, minimum not less than $4,000 per lot. Ore Graz, Cal., to Pueblo, Colo., $10.00 per ton.

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FROM Points in New Mexico, Arizona, and California, to El Paso, San Francisco and Vallejo Junction.

**ORE TARIFF.**

Rates on Copper or Zinc Ore to Ste. Mary, Mont., for shipment to the railroad company, at owner's expense, will govern the value and determine the rate.

Agents must cause shippers to understand the condition upon which these rates are based, and to make their declarations:—

"Rates subject to correction according to value at destination.

These rates only apply on lots of 8,000 tons or over. On lots of 4,000 tons and under, 10 per cent, and on lots of 2,000 tons and less than four, 20 per cent will be added to above rates. Base Metal, Copper Mining and Ore Concentrations, in lots of less than one ton, will take flat-rate charges from all the above points, except when the same at valuation makes it higher, that rates on small lots of high value may be less than the rates when in lots of one ton or over are made.

Charges for Ore in car-loads must be guaranteed, and on lots less than a car-load must be prepaid.

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Agents must cause shippers to understand the condition upon which these rates are based, and to make their declarations:—

"Rates subject to correction according to value at destination.

These rates only apply on lots of 8,000 tons or over. On lots of 4,000 tons and under, 10 per cent, and on lots of 2,000 tons and less than four, 20 per cent will be added to above rates. Base Metal, Copper Mining and Ore Concentrations, in lots of less than one ton, will take flat-rate charges from all the above points, except when the same at valuation makes it higher, that rates on small lots of high value may be less than the rates when in lots of one ton or over are made.

Charges for Ore in car-loads must be guaranteed, and on lots less than a car-load must be prepaid.
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