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ment of the government are those of Alexander Hamilton, Albert Gallatin, William H. Crawford, Robert J. Walker, Salmon P. Chase and John Sherman. A secretary of the treasury has very little to do with the details of the work in his department. There are subordinates who take care of that part. The great duty of the secretary is to study and devise policies that will assure an adequate and take care that, they are such as will promote the welfare of the people. He should be an able economist and statesman. It is not enough that he is what is called a good business man.

The idea is to establish a good central bank, and to make a good central bank, make a good central government. The people are very aware that a good central bank will make a good central government. The Treasury, but the business of banking has no connection with the real business of the financial department. One who has spent his life within the walls of a bank cannot be a broad man, what he is required to do renders him narrow. His thoughts are directed to the achievement of two objects, the one is large and comprehensive ideas; the other is to make the bank earn the largest possible income for the stockholders. A bank president is not required to think about the public interests, for they and that of the bank are in conflict. A banker rarely, if ever, studies economics on broad lines. The money grabbing work to which he is assigned is inconsistent with large and comprehensive ideas touching the common weal. One banker only has been secretary of the Treasury, and he was Hugh McCullough, and he only distinguished himself by commercial enterprises, the greenbacks, not in obedience to legal requirement, but on his own volition. A banker is perpetually afraid that the money volume will expand too fast, and to some extent it will be so plentiful that his bank cannot obtain a satisfactory rate of interest.

The great secretaries which have been named were not bankers but lawyers, men who had had experience on a broader scale than can be gained within counting rooms of money changers. None of them favored a contracted circulation except Sherman, and his reputation rests on this which he managed to bring about specie resumption. In this work it should be said he was immensely aided by fortuitous circumstances, by good crops in the western and short crops in Europe. Sherman is gifted with a talent for close management.

The mints and the national banking system are within the jurisdiction of the treasury department, and while Congress can direct by law as to what kinds and volume our money shall be, still a secretary of the Treasury should be a man divested of prejudices in favor of any special branch of business or any class of people. As he recommends policies to the President, and through him to Congress, he should be a man of large grasp of mind, a larger grasp than one can acquire by confining himself to measuring calicoes, weighing tea and coffee, or watching the coming in and going out of dollars and cents. His judgment must be free from his standpoint, but bad from any other. At this particular time, the greatest wisdom is required to bring the country out of the existing depressed condition, and that no man with a comprehensive mind can fail to see that the meagerness of our volume of money is a cause of the depressed condition, and that as population and trade increase, expansion in business is more needed. It is probable there are broad-minded bankers, but they are exceptional. Let the banks

flourish, but not to the detriment of the masses.

Retirement of the greenbacks, and conferring the power upon banks to supply the country with paper money would create a trust the like of which this country has never seen.

THE SALT LAKE ROAD.

It seems to be pretty well settled that a road will soon be built from Salt Lake City to two or three hundred miles in the direction of the Great Salt Lake. As the projectors of that road propose to construct it further in the way in which our capitalists undertake to build from this end and meet that road? Nothing would be more advantageous to this part of the country. The existing transcontinental lines may object, as such a road will detract from their business, but should that be the case it constitutes no reason why our people should not promote their own welfare by taking up the enterprise. Every day of procrastination depletes this city of a profit which it should receive. A road through the vast and productive country which it would traverse will, in a brief time, add twenty per cent. to the business of Los Angeles.

A FALSE IDEA.

Because the goldites talk so much about the coinage of silver through international agreement, and hold that what has been done by us without such agreement, there is the belief that then it will become international money. There is no such thing as international money, nor is it that will pay a foreign debt by legal compulsion. Our gold coins will not pay such a debt, though they will be taken at regulation weight and fineness.

Money in all countries is for domestic use, for a measure of exchange among people of the same nation. It makes no difference to us, so far as home commerce is concerned, whether it is gold or silver, nor does it make it pay a foreign debt by legal compulsion. Our gold coins will not pay such a debt, though they will be taken at regulation weight and fineness.

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A DIVIDED CABINET.

Mr. Gage, the to be Secretary of the Treasury, has defined his ideas of a financial policy. One of which is that the greenbacks should be retired. Mr. Sherman, who is to be the head of the Cabinet, is opposed to it, unless he has changed his mind. He has said in speech and in writing he is for keeping the greenbacks in circulation. Mr. McKinley will have to settle that controversy. It is uncommon that there is a schism in a Cabinet before the members enter into office.

A company has been organized in Fresno to develop a line of railroad within a certain part of the county. It is proposed to build a pipe line nine miles long to the railroad.
CORRESPONDENCE

CALIFORNIA.


Editor Journal:—Our little city of mills is becoming quite cosmopolitan with mail and express twice per day and eleven 6-horse stages each way. Many buildings are going up, and in all there are now four lumber yards, four general stores, two drug stores, five saloons, six livery and feed stables and many other enterprises. A ledge of copper ore has been found near F. H. Heald's coal mine, which is very rich and is black oxide of copper, and it is said to be as rich as copper can be worked. The excitement at Randolph is increasing daily, and it is said hundreds of the new comers are from Crippe Creek. A meeting has been called to change the by-laws of the district so that a few men cannot hold all the ground in sight simply with monuments and no developments.

Placer miners are now working under ground for the winter, as the rains have been so heavy that all surface dry washing must be abandoned until dry weather.

S. P. R. surveyors are at work between here and Mojave, and many believe they will build from that point to Garlock, but their intention may be much different.

Garlock is of speedy ability, and it is becoming the custom to have a grand ball every week. Much surprise is manifested at the number of women and children present and at the absence of rowdy characters.

Giant powders shakes the Goler ranges from Kane Springs to Goler at all times of day and night, and some splendid properties are being opened on this side.

John Searles, of the Borax lake, is greasing his big Borax wagons and getting his mules and horses in shape to move hundreds of tons of Borax as soon as the tariff is again put on that commodity.

ROBERT OASPER.

MISCELLANEOUS MINING NEWS.

ARIZONA.

The Prescott Courier prints the following relative to mines in the Chaparral district:

The Pratt mill, run by Randal, is in good shape. It consists of five 500 pound stamps and two Triumph vanners. The mill will start up on ore from the Postmaster mine, and there is plenty of ore in sight for a long run.

The Lottie mill is running night and day with its ten stamps and four Triumph vanners. They stopped saving free gold and make concentrates altogether. The concentrates run very high, from $350 to $400 a ton and they make a large amount of concentrates. The water gives trouble in sinking the shaft, but the ore is good.

The Annie is running its ten stamps and three six foot vanners steadily, and they are piling up concentrates in great shape, waiting for the roads to get good. Judging from the looks of the amalgam on the plates the produce ought to be big. A rich strike was made in the bottom of the shaft at a depth of 200 feet. The ore is sulphuric and shows free gold.

The Silver mine has been timbered up in fine shape with square sets, and preparations are being made to mill the ore on the dump. It carries from $12 to $14 in gold. There is a solid ledge of from three to four feet in the face of the dumps. The Henrietta mill started last week, it has twenty stamps and eight Frue vanners. Managers have put on a full force of men, besides letting two of the leases. These lessees will get their ore treated at the company's mill. The ore is richer and the mine looks better than it ever did. A great deal of first class ore is shipped from this mine. Although the mill ing fees here is the heaviest concentrating ore in the camp.

The Jesse mill is running ten stamps and four Frue vanners night and day. Superintendent Doran is having the other ten stamps fixed up and will have them ready soon. The greatest output of value from this mill is free gold, although it is a steady shipper of rich concentrates.

There was a contract let on the Yavapai to drive the drift 150 feet further. This mine is expected to increase the output a great deal.

(Extract from Phoenix Gazette).

It is reported that Joe Dobson and partner have made a rich strike, east a short distance from the Rover, near Phoenix. Those who have been to see the new find say it is one of the biggest gold strikes of the month in the Tucson district ever discovered in Arizona. Samples show heavy, coarse chunks of gold all through the rock, indicating that it will go high in the hundreds.

One of the best developed mines in the vicinity of Phoenix is the Relief, but six miles from that place, owned by Gen. Hamilton. On this 800 feet of work has been done. This claim was located five years ago by Sam. T. Webb, but it was not until he discovered the first mine found with gold in granite.

Lawyer P. B. McCabe, of Tempe, has just consummated the sale of the standard mine and Silver Reef mine and mill to O. L. Lass, the well known mining man, for the consideration of $75,000. He went to Casa Grande from Tempe, February 5th, to make final settlement and deliver the property. The mill was sold to Mr. St. Louis parties last fall. These miners have been working near Casa Grande, and are considered excellent prospectors, on which much development has already been done. The purchasers will begin work immediately.

Pat Sullivan and Mike Kelly were in Phoenix, Arizona, last week, from Fools Gulch, where they have for some time been working, Mr. Kelly being a millwright and Mr. Sullivan a carpenter. The mill is now completed, and for the past two weeks has been running quite satisfactorily on ore that is of good quality. From sixty to seventy tons a day are being milled. About 150 are on the payroll of this company. Fools Gulch is the coming camp, and the Planet Saturn mine is one of the great properties of the territory. The little town is one big store, a good boarding house, six saloons and is growing daily, and many are prospecting or developing in the hills near by, making Fools Gulch headquarters.

Hull & Houston have their ten stamp mill on the Agua Verde property, but the Frue vanners, which have not yet arrived. This mill will be driven by a thirty foot overshot water wheel, and is very complete and well built. It has 1,500 feet of flume, Grizell's rock crushers and five large iron ore bins, and twelve foot copper plates.

The McKinley mine, a new find about one mile below the Silver Belt looks very promising. The ledge is two feet wide and shows some free gold and sulphide ore that looks well for only ten feet deep.

W. N. Staley, who devoted six months of last season to an investigation of the immense fine gold placer bars on the San Juan river, was in Flagstaff last week, awaiting the arrival of twelve tons of bar gold which he will ship to the river to use in operating bars in the old Gable camp section. Mr. Staley represents San Francisco capitalists, who are well pleased with tests thus far made and feel assured of satisfactory results from an economical handling of the ground on a large scale. The company will expend at least $25,000 in the latest improved machinery for fine gold saving and in development. Trials thus far show a range in the value of the gravel of from 50 cents to $4 per yard, a grade that certainly justifies the sanguine expectations of Mr. Staley and his associates.

Alex McLaren is in Prescott from Briggs, where he and Mr. Talbot are doing development work on their Monarch mine, a claim on the celebrated Monarch ledge. The ledge is 1,200 feet to the north of the old shaft. The friends of both parties are at work on the Fortuna; Frank Fenten is doing considerable work on the Monte Christo. Parties are working the old Banta mine for an interest. Some years ago Portuguese Joe took from this mine some remarkable rich gold ore.

At the Bald Butte mine last week the ledge was cut at a depth of 127 feet, at an angle of sixty-five degrees, in the face of the tunnel in 7 feet. The ledge holds its surface value.

CALIFORNIA.

INYO COUNTY.

MINING AT PANAMINT.

While active work is being pushed in the immediate vicinity of Randolph, many men are vigorously prospecting the country east of Randolph in what is known as the Slate Range and Panamint districts.

The Panamint country has long been known as one of the richest mineral sections of California, and while it was worked many years ago, producing very rich ore, the country has been very much neglected on account of its inaccessibility. In the early days when the mines were being worked the Indians were troublesome. They killed many miners, and finally destroyed the mills and drove all the white people from the country.

The quartz ledges are said to be large, well defined and exceedingly rich. Water and timber are more plentiful than at Randolph. Parties just in from the lower Panamint, where they have been working on the old Aragosa mine, owned by Los Angeles people, bring good reports of a rich strike in this mine. They say that they have a six-foot vein, the ore running by mill test, $15 a ton. This mine is one of the old mines and has a wide reputation. It is well known all over California, having been worked in the early fifties.

The first quartz mill ever erected in Southern California was hauled from San Francisco by wagon and placed on the property. The mill was very crude, being built mostly of
wood with iron shoes and dies. The freight cost 25 cents a pound. At this time, fort was built to protect the men from the Indians. The ore produced from the mine at that time was fabulously rich. Much gold was produced up to the time the mill was destroyed by the Indians. Since then the mine has been closed down until the present owners took hold of the property. They intend to build a mill and start up the mine. The vein just opened shows permanency and richness. To the north of the Armagosa mine is the Confidence mine. A large plant of machinery has been placed on this property.

D. C. Lane, of Pomona, signed papers Monday, Feb. 5th, which conveyed his mining interests in Inyo county, consisting of the Last Chance, No. 2, Southwest and Sunshine mines, to a syndicate of Pomona capitalists for $50,000. This group acquires the old Silver mine of Darwin, which were famous in pioneer days. The mines are very rich in gold, silver, and lead. The property was purchased by Mr. Lane two years ago, since which time he has worked it at a profit of about $1,500 per month. The new syndicate will at once put into operation a stamp mill, and will develop on a more extensive scale than before.

J. W. Kelly has taken a force of men to commence development work on two groups of copper claims near Saline Valley. The first group consists of the Copper Well, Timp Top, Copper Star, Copper King, Copper Queen and Clipper. The other mines include: Golden Eagle, Basinark, Bryan, Excelsior, Fairview, Standard, Butte and Summit. As says from the Copper King, Star and Timp Top show respectively 8 to 60 per cent, and 26 per cent commercial copper. All of these claims carry cuprite, or chalcocite, with thousands of tons of ore in sight.

J. W. McNitt is milling thirty tons of rock at the Visalia Company's mill at Garlock.

Thirty placer claims in the neighborhood of the St. Elmo mine have just been sold for $5,000. The claims are said to be good ones. Other mining companies of the same section will be made as soon as the interested parties can reach Randsburg to have the deeds drawn up.

KERN COUNTY.

J. R. Ellis, of Frazier Valley, has sold his interest in the Rademacher to the Downing Mining Company of Visalia. They are working twelve men and a team, and have cut through 20 feet of good ore. They will sink a couple of shafts. The proposition for sinking for water is very encouraging. They are down 12 feet. So far water has not been struck, but the ground is very vamy.

J. W. McNitt is milling thirty tons of rock at the Visalia Company's mill at Garlock.

KERN COUNTY.

Pursuant to call, on Feb. 15, 1897, a miners' meeting was held at O'Brien's camp, in Secret canyon, Kern county, to take action on the formation of a new mining district. The meeting was organized by the election of W. S. O'Brien as chairman and George Aitken secretary, and the appointment of a committee of three to frame by-laws. On motion, voted, that a mining district be formed known as O'Brien Mining district, the boundaries to be as follows: Commencing at the mouth of Jawbone canyon and running in a northeasterly direction to the south boundary line of Red Rock Mining district, hence in a westerly direction to the summit of Flute range, hence southerly along the west line of Flute range to the south boundary line of Mojave Mining district, hence following Lead line to the foothills of Mojave valley, hence running along the base of mountains in a north-easterly direction to place of beginning.

The Committee on by-laws reported the following, which on motion were adopted:

BY-LAWS

1st. In all matters pertaining to the location of mining claims, water rights, as mill sites, with labor and assessment work thereon, this district shall be governed by the mining laws of the United States and the laws of the State of California.

2d. A district recorder shall be elected annually to serve for the term of one year, whose duty it shall be to keep a true and correct record of all notices of locations. We shall call all regular district elections by posting in public notices in such elections in at least three conspicuous places in the district, and also special elections or meetings in the same manner, when petition for the same shall be made, at any time during the fifth month, or less than five claim owners of the district. He shall also keep a record of all regular miners' meetings and may, when necessary for the transaction of business, for whose official acts he shall be held responsible, while in such employ.

3d. The recorder shall procure suitable books of record for the use of his office, and shall receive for each notice filed for recording a fee of one dollar, and for each certified abstract of title one dollar and fifty cents.

4th. All notices of mining locations, water rights, mill sites, or other papers pertaining to the mining interests of the district, shall be filed for record within thirty days after date of location.

5th. None but actual claim owners, having claims on record, shall be qualified to vote at regular miners' meetings on questions concerning individual mining interests.

6th. These by-laws may be amended, or repealed by a two-thirds vote of any miners' meeting duly called for that purpose.

7th. Nominations were made for recorder, and a ballot being taken George Aitken was declared duly elected to that office.

On motion, voted, that a copy of the proceedings of the meeting and the by-laws be sent to the Randsburg Miner and Mining and Metallurgical Journal for publication.

On motion adjourned sine die.

W. S. O'BRIEN, Chairman.

GEORGE AITKEN, Secretary.

Caliente Items.

W. E. Rogers of Amalie returned from San Francisco last week and is making preparations to work the Amalie mine on a large scale.

The recent rains have made the Kernville road very bad and have washed out the Amalie road which makes it impossible for heavy loads.

Ferris' brothers are erecting a house and barn at Amalie and making preparations to work their mines in that district, adjacent to the Amalie mine.

Travel to the Keyesville mines is continually on the increase and good reports are coming in of recent good strikes there.

A carload of lumber from Los Angeles has been shipped in for the placer diggings at French Gulch in the Keyesville district.

There are more men working in the mining country tributary to Caliente than in the Randsburg district.

The Johannesburg Milling and Water company filed articles of incorporation in the Clerk's office Feb. 9th. The objects of corporation are to buy and sell water rights and acquire and own mines. The principal place of business is Los Angeles and the term of existence is 50 years. There is $500,000 of authorized stock of $100 each, the following directors of Los Angeles elected for the first year, have subscribed for the number of shares opposite their names:

Henry A. Darling...... 500 
G. H. Curtis........... 2000 
G. E. Pratt........... 200 
F. P. Flint........... 150 
C. L. Morrill...... 1000 

SAN BERNARDINO COUNTY.

The Work at Randsburg.

W. A. Boren has returned to San Bernardino from Klondike, having been on another accident a few days since by which he dislocated his ankle, and is therefore incapacitated for work. Mr. Boren is superintendent of the supply of mining camps, the stage line operated by the Atlantic and Pacific Company, and in that position he has exceptional facilities for knowing what is being done in the way of transportation into the new camp, and he speaks of this work in glowing terms.

The stage company employs about 20 men in various capacities, and Mr. Boren says they are mostly San Bernardino people. From 15 to 20 teams, six, eight and ten mules each, are constantly worked on the line, and it is still almost impossible to keep the freight from accumulating at Kramar, which is but 26 miles from Randsburg, while it is 51 to Mojave, so that the former is fast becoming the most important shipping point.

Mr. Boren estimates that there are now about 150 men employed in the mines at good wages, and that the output of the mines is in excess of the amount now being spent upon them. It is to more than than paying its way. At the same time, he says The Sun is right in advising people not to go there looking for work, unless they have the money to sustain themselves for some little time. There are more men in the camp now than can find employment.

There is one important difficulty at Randsburg, which Mr. Boren says is delaying the development of the camp, and that is the way in which the men hold claims which they have no money to work, and yet will neither sell for a reasonable price nor bond to other operators. There has been a number of men of means, or representing companies, which want to take prospects and develop them, but the owners of such claims in Randsburg refuse to part with them on any terms.

Weekly Sun.

Meager details have been received of what may be called a heavy robbery at the Rose mine. Superintendent Harrison came down from the mine several days since, going to Riverside, and at that place he received a telegram from the miners that the safe had been robbed and the assay office burned Thursday night, the 11th inst.

Mr. Harrison at once went to San Bernar-
The Mullen mine near Tuttleton will shortly be re-opened by Mr. John Doyle and associates.

The Black Oak mine has not been sold and its owners say it will not be for it is too good a thing.

L. A. Engleke has bonded his mining property at American Camp to San Francisco parties.

The Rawhide made its monthly clean up last Saturday, the result proving most satisfactory.

D. Redding of the Tarantula is in the east trying to interest capital in this fine mother lode property.

The Alabama has been getting through an immense amount of work of late and promises a golden future.

The new 20-stamp mill of the Santa Ysabel is being rapidly pushed, the foundation being well underway.

The Golden Gate mine has its mill again in full operation, the ditch supplying them with water having been repaired.

The Soulsby mine is turning out some exceedingly rich ore, and the stamp mill is very busy milling the same.

The Jumper is sinking and crosscutting and the ore now being taken out is of an exceedingly satisfactory character.

Mr. Linehan, the well-known mining man of San Francisco, is opening up his mine on the Mother Lode near Mormon Creek.

The Bonanza mine has a large force of men at work, and in the near future our people can look for another surprise.

The Star mine is still getting out a magnificent lot of ore and is proving a bonanza to its fortunate owners.

The Miller and Holmes mine has found the lost Knox and Boyle vein. It was crosscut on the 600 foot level. The new 20-stamp mill is well under way.

The Golden Rule is now drifting from the 500 ft. level and expects to cut the east ledge within 60 days. This mine is now equipped with electric lights.

The Confidence mill has been forced to close down on account of scarcity of wood. A few more days of fine weather it is hoped will put the roads in such condition as to enable a supply of wood being received.

The Jerrymander mine has struck a good vein of ore, and recently disposed of 10,000 shares of stock at a dollar per share. Twenty times this amount, however, could have been sold had the owners been willing. — Sanora Independent.

COLORADO.

(Extracts from Mining Industry and Review.)

BOULDER COUNTY.

The Calamnia mine at Ward has a 25-ton lot of ore awaiting a run at the Binford mill.

The Camera reports 40 men working in the Victoria mine at Superior, and that Charlie Davis is taking out $10,000 worth of ore monthly at an expense of $3000.

The recent strike in the crosscut from the 180-foot level of the Morning Star, near Ward, is developing into a veritable bonanza. This week it has grown into a streak of solid smelting 6-ounce ore, 16 inches wide.

Manager Harry Olympus reports 9 men at work sinking and drifting in the Gold King, near Ward. Drifts are being run on the 90-foot level, in which some good ore was uncovered last week. The appearance of the mine improves as development work progresses. The shaft is now 215 feet deep.

The Huckleberry mine is being developed through a crosscut from the Dewdrop tunnel, 50 feet of which has already been run toward the main lead of the Huckleberry. It is expected that in 15 more feet of work this lead will be cut at a depth of about 275 feet. Mill tests of surface ore gave values of $75 to $80 per ton.

SAN JUAN COUNTY.

Papa Probst has two men running the drift on the Louisiana at Silverton. It is now in 150 feet, and showing an inch streak of quartz that is rich in silver. Assays show a value of $500 per ton.

The Strayer Bros. are working the Senator lode, opposite the Indian mill on the Indian mountain, near Silverton. The boys are drifting to get under the ore chute that crops on the surface. The ore assays 1½ ounce gold and 128 ounces silver. They are in 100 feet.

The Butler Bros. are putting in a winter's work on their Boulder mountain claim, and have two cars of 50-ton ore ready to ship in the spring. They report more work going on in the Cement creek district this winter than for many years past.

GILPIN COUNTY.

The Phoenix-Burroughs properties on Quartz hill are shipping between 60 and 70 tons of milling and smelting ore daily, and employment is given to a force of 60 men. Sinking operations were stopped this month, the shaft being now 1000 feet, and the regular work of development consists of running drifts and stoping. The present showing of well-known property is very satisfactory to the operators.

Sinking stopped last week at the Concrete mine in Frosser gulch, the present depth of the shaft being 1,230 feet. Platns are now being put in, after which levels will be driven from the sides of the shaft. Forty men is working steadily on day and night shifts and a large amount of milling and smelting ore is being shipped, with possibilities of an increased output at an early date.

At the Penn mill 35 slow and 10 rapid drop stamps are crushing ore from the Concrete mine, and last week ore was also being hauled to the Iron City rapid drop stamp mill, which will also soon be crushing Concrete ore.

The Alger-Kansas on Quartz hill is being worked by a home pool of six persons, and sinking is being carried on at a present depth of 45 feet, their intention being to reach a depth of 345 feet, when levels will be run. The bottom of the shaft looks favorable, and some fair looking ore is being taken out, which will give average returns when carefully sorted, and 20 tons is shipped to the mills, returned 1½ ounces gold per cord, and the ore was taken clear across the width of the shaft.

OURAY COUNTY.

Marked improvement is being shown on the property owned by Jim Bradley on Gold hill, which at present is in the hands of lessee Nelson.
CLEAR CREEK COUNTY.

The water in the Topkea mine in Russell gulch, near Idaho Springs, is now down below the ninth level, a depth of over 750 feet. Some delay has been occasioned on account of necessary repairs to the boiler, but they have been attended to and the work is going steadily along. Twenty men are engaged, mostly leasers, the main work being drifting and stoping in the upper levels. Some mill ore with an average value of 4 ounces gold per cord is being taken out and smelting ore is being saved for future shipment, which have former years. The company at the Topkea will soon again be classed among the big producers. Henry Lowe manages the property.

SUMMIT COUNTY.

The Sultana is making regular shipments to Denver.

A contract for 500 feet of tunneling has been made by Ferrel, Howe and Blythe with the Jack company to cut the Columbus vein at a depth of 200 feet lower than the present working. This is a good move and will make it easier to get the ore out of the mine.

FITCHEN COUNTY.

Peter Dooney, who is leasing block 3, north 14 on the Ella S., encountered last week a body of ore which runs 14,000 ounces in silver to the ton. The strike was made at a depth of 500 feet. The streak is small, but there is enough to make the lucky leaser rich.

A rich strike has been made by Turley & Fuller, about a half mile west of the El A. M. and S. company’s properties on Aspen mountain. This strike yielded returns of 10,000 ounces to the ton and was made at a depth of 1,800 feet. They are still shipping.

Peter Page, the owner of the Free Silver shaft, is now down to a depth of 1,200 feet, and the lowest workings of the Mollie Gibson have reached 1,025.

LOWER CALIFORNIA.

Work on the Aurora Mine Resumed.

Perhaps the most important mining move on the Peninsula, or at least in the Northern District, is the resumption of work on the Aurora mine at the Alamo. A great deal of interest is attached to this mine, its production in earlier days, which was by far greater than any other property in the district, the mineral formation, and in fact everything that combines to make Alamo a promising gold producing camp, gives the opening of the Aurora great significance, and the resolution of the new owners to demonstrate that the mine can both go down can barely be fruitless of results.

Some three weeks ago the pumps were started on this mine, and Friday, Feb. 5th, F. M. Bradshaw, who together with Caleaga associates, recently purchased the property, arrived in Ensenada. From Mr. Bradshaw it was learned that the shafts of both the Aurora and Princess had been drained to the 500 level, where they are connected by a drift. Exploration work has already begun on the old works, and a number of drifts will be run. The main shaft of the Aurora has been driven 100 feet and others as soon as the remainder of the water is removed, double shifts will commence sinking. Last week a good body of ore was struck in one of the old works, and the same stands on the property will start up immediately. This is most encouraging, and it is not improbable that the Aurora under new ownership may even beat the former record as a gold producer.——Lower Californian.
Victor, Colorado, the Bank of Victor and about six or seven mining companies, among which is the famous Gold Coin, the busts of which will undoubtedly be remunerative to those who are interested in the company. It is understood that no shares will be sold in this country. We are informed by Mr. Charles L. Hoit that the American Companies will be listed on the Paris Bourse early next month.

An American Company has recommended working the old gold mines of Rosario, seven leagues distant from La Paz, with every confidence as to future prospects. New discoveries of copper mines have been made in the municipality of San Antonio.

MEXICO.

In the district of Guanacavi, Durango, La America mine has just started up their new mill consisting of 30 stamps arranged for dry crushing, and two White and Howell roasting furnaces with pans and settlers for amalgamation.

"La Providencia" mine, situated some 140 miles west of the city of Durango, is said to be in bonanza, and "La Trinidad", located in the district of Panuco de Coronado, is being rapidly developed with most satisfactory results.

The Anita Mining Company of Guanacavi, Durango, is about to erect a smelter on their property, the prospects of which are most promising.

Through the energy and perseverance of Mr. D. E. Murphy of Milwaukee, the famous old mines of Ramos located in the district of Ramos, State of San Luis Potosi, have been unwatered at a cost of about $160,000.00 gold. The owner is now engaged in cleaning out the levels and expects soon to start development on ore bodies already known to exist. The property has some 25 shafts on it; one the "Cocinera" having a depth of over 1000 feet. There are some 60 to 70 tons of ore on the dump, the average assay of which is 104 ounces of silver and about 10 per cent. of copper to the ton of 2,000 lbs.

The biggest mining deal of the last month was the sale of the Rescute gold mine situated in the Elia district in the State of Oaxaca, to some Denver capitalists whose names have not, yet, appeared. General Ignacio Alfaro is one of the principal owners of the property, of which the new purchasers will take possession about March 1st. The purchase money cannot be learned at present, but it undoubtedly exceeds $250,000.00, Mexican, as the owners have previously more than once refused that sum for the property.

The well known French engineer, Mr. Maurice du Chatenet, has been commissioned by rich Californian capitalists to examine certain mines in the State of Sonora which they wish to purchase, including the Cibauta mines.

It is reported that the famous Colquaym mine, near San Fernando in the State of Durango is about to be sold to a syndicate headed by Mr. Charles L. Hoit for $500,000, of which $1,000,000 is to be deposited forthwith and the remainder within six months if the owners after working the property during that time, are satisfied with it.

It is probable that the interest now felt in copper mines in the Republic of Mexico is greater than that ever before experienced. The increasing use of copper for electric purposes is, no doubt, responsible for the large demands which are almost daily coming in for copper properties. In this connection it is reported that a well known German of the City of Mexico has negotiations on foot for placing in Europe a huge copper mine and expects to close the deal within a few weeks. If he succeeds in doing so the fortunate owner will be one of the richest men in that Republic.

The secretary of the Treasury of Mexico has declared the following claims forfeited:

- "La Alisana," in Canelas, District Durango.
- "La Trinidad," San Sebastian, Jalisco.
- "El Corazon de Jesus," Topia, Durango.
- "La Vencedora," Guanacavi, Durango.
- "Dolores," Guanacavi, Durango.
- "Ampliacion de Peranducos," Danila, Durango.
- "El Banco," San Esteban, Jalisco.

(Excerpts from the Mexican Tradesman.)

La Florida mill located in the district of Tacso in the State of Guerrero consisting of 10 stamps and 3 Fine Vanner concentrators, has been remodeled.

The El Oro company situated in the district of Tlalpujahua, state of Michoacan is making arrangements to erect a 40 stamp mill on their property. This is the largest gold producing property in Mexico. Mr. Salsburg has just erected a 40 stamp mill on an extension of the El Oro property.

The Santa Ana Company of Huautla, Morelos has just completed the erection of a new concentrating plant for the treatment of their ores.

The Ojuela mine has just completed a railroad from the railroad station of Mapimi, Durango, on the International, to the mine, in order to take in the coke necessary to keep in operation the large furnaces belonging to the Company. This is an old mine, which has been worked to a depth of 1,600 feet.

La Valerdena mine of Durango, owned by Messrs James F. Matthews and Company is continuing its usual heavy output.

NEW MEXICO.

The enterprising and hardworking young miners, Weatherby, Kitt & Banks, are still pushing development on their Florida group of mines, at Cooney. After showing up some fine ore (of which samples show a value of over $2.00 per ton) on both the Neglected and the Christmas mines, while doing the annual assessment, they are again driving ahead the Florida tunnel. Tate have already hundreds of tons of free milling ore exposed in this tunnel.

Black Range Notes.

A number of teams are engaged hauling iron ore from Edwards Camp to the smelter.

Chas Bishop and H. E. Patrick have finished assessment work on the Columbus for 1897.

Prof. W. H. Hackett, of St. Louis, arrived here the early part of this week. Mr. Hackett is here in the interest of the Midnight Mining Company of St. Louis, Mo.

J. D. Bone and Carlos Lewis went up to the Venezuela mine, Wednesday, Feb. 10th, to sack a few tons of ore for treatment at the smelter. They will have a shipment ready in a day or two.

Preliminary arrangements, preparatory to the blowing in of the smelter for its trial run are nearing completion. Fluxing ores are now being hauled to the smelter, and when a sufficiency of these ores have been accumulated to the dry flux oven on hand, the smelter will start up. Feb. 13th, Engineer Robert Coplen put into motion the blower that is to furnish the blast to the 100 ton stack.

Hillsboro Mines Output.

Output of Hillsboro gold mines for the week ending Thursday, Feb. 11th, 1897, as reported for The Advocate.

<table>
<thead>
<tr>
<th>Mine</th>
<th>Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wicks</td>
<td>30</td>
</tr>
<tr>
<td>Butler</td>
<td>5</td>
</tr>
<tr>
<td>Richman</td>
<td>35</td>
</tr>
<tr>
<td>Happy Jack</td>
<td>5</td>
</tr>
<tr>
<td>Snake Group</td>
<td>40</td>
</tr>
<tr>
<td>Opportunity</td>
<td>10</td>
</tr>
<tr>
<td>Sherman</td>
<td>10</td>
</tr>
<tr>
<td>Prosper</td>
<td>5</td>
</tr>
<tr>
<td>Eighty five</td>
<td>10</td>
</tr>
<tr>
<td>Perchis (silver-lead)</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>155</td>
</tr>
</tbody>
</table>

Total output since Jan. 1, 1897, 1,205.

(Silver City Enterprise.)

CHLORIDE FLAT.

Lucas Castrillo is working the two Ikes and shipping ore to the Silver City Reduction Works.

Manuel Taylor employs nine men on the Providence and is making regular daily shipments.

The owners of the property intend sinking the main shaft one hundred feet deeper, to commence at an early date. About fifty men are employed about the mine and smelter.

SANTA RITA.

The Chino mine was pumped out last week, by the new lessees, and a wonderful amount of rich copper ore was found in the workings. The new concern has not taken any decided action yet as to method of development, but it is thought that operations will be started this week. It was rumored that J. P. Whitney would arrive from Boston during the week and would bring with him mining operators who expected to reopen the Romero mine. This is the deepest working at Santa Rita, over 600 ft. The mine produced millions of pounds of copper in days gone by and no doubt has an abundance of...
ore in reserve. Every one of the old Sauta Rita mines which has been reopened thus far has proved a paying property and yet none of the big mines have been tried, but good properties have been made from working over the waste dumps.

GOLD HILL.

E. B. Foster, president of the Silver City Wood & Wool Board of Trade and of the series of extensive and valuable mining interests at Gold Hill, was in Silver City last week. Mr. Foster has been at Gold Hill for a couple of weeks past looking after his properties. Test mill runs were made at Dr. Wood's mill, upon ores from the Standard and Reservation mines, and the results were very satisfactory. The Standard mill has probably started ore this upon ore from the Standard mine. Mr. Foster is highly pleased with the results from the mines and will make arrangements while here for the permanent working of the properties.

PINOS ALTOS.

Bell & Stephens are employing eight men on the Mina Grande. The drift from the south shaft to connect with the north shaft has been driven 275 feet all the distance in ore. The drift from the south north shaft connect is in 60 feet. This leaves 200 feet yet to be driven to connect the two drifts total distance between shafts 544 feet. Sufficient ore is being extracted to leave a handsome profit over expense of development. The Bell and Stephens mill is running steadily on ore from the Pacific. There is no change in Mountain King since report of last week. Twenty men employed on upper levels. The company has not started to pump out lower levels yet but will commence to drain and open the deeper workings before March 1st.

BLOOM NOTES.

The Washington mine continues to ship ore to the smelters.

Messrs. McBrearty and Warlan moved over to Colla canyon during the week to work the Unknown.

W. D. McCoy is doing some extensive work on claim which covers the ground upon which his house stands.

Thomas Benson has gone over to Colla canyon to resume work on the Puzzle, a claim which looks better with development.

The owners of the Little Molly calculate that they will have but 15 feet more to drive before they will encounter the richest lead of the district four on that valuable property. The lower tunnel is in 90 feet to date, and when the main lead is cut it will be about 105 feet which will also be the depth gained.

It is the belief of everyone in the district that Colla canyon is going to soon make a stride toward an unusual amount of mining. The indications are favorable in that direction, and the Colla is a very rich and extensive field for extensive mining operations, and cannot detract from the known value of the many mines of the canyon in which Blasdell is interested.

The Black Girl is showing up immense. The lessees struck the main lead, a six foot vein of high grade gold quartz, the first of the month, and a few days later broke into a pocket from which a fine specimen containing

weir gold was taken. From assays made on the Black Girl some time ago the gold greatly predominated the silver values, and it is an indisputable fact that this mine is likely to become exceedingly valuable one.

J. T. Stewart, the well known mining man of Aspen, and James A. Carlisle, one of the gentleman interested in the Victor group of mines in Colla canyon, arrived last week in Blasdell and spent a few days in examining the properties. It is said that the object of their visit is in connection with the sale of the Victor. If Mr. Stewart's opinion of the mine comes up to what is expected, the property is likely to be bought outright by the latter gentleman.

Henry Woods, one of the firm owning the Lone Star and Albermarle group of mines and other valuable mining property in the Cochiti district, returned to Blasdell from Denver, where he had gone to confer with Thomas F. Lowthian and Judge Charles Toll, other owners of the property mentioned, regarding the sale of the Albermarle group to Howard Mines of Cleveland, Ohio. The deal has not yet been settled, but it is certain to go through as soon as S. P. Mahan, who had been 'expertising' the camp for close upon two months, returns from Los Angeles—Bland Herald-Weekly.

It is rumored that a mining deal of very large proportions is on foot, upon the consumption of which many gold properties within twenty-five miles of Socorro will change hands. The men on the purchasing end of the deal are well pleased with the properties, and are ready to close as soon as certain agreements can be reached.

The Opportunity, Percha and Eighty-five mines paid off at Hillsboro last week; about $2000 were distributed. The Happy Jack, Prosper and Golden Era mines will square their pay rolls on the 15th inst. Some $1,500 will be paid out.

NEVADA.

Another rich strike is reported on the old Constock mine in Nevada, in the Consolidated California and Virginia, of black sulphurites, like the big bonanza deposits. From the report of the superintendent we extract the following:

Opposite the north shaft the north drift has been advanced 20 feet. This drift when advanced 25 feet showed a streak of ore 15 inches wide on the west side of the drift. Ten samples which samples taken across the face of the drift from the streak assayed $77.00, $74.50 and $38.40 per ton. Along the east side of the drift, opposite the south face, there is a width of 18 inches of ore assaying over $200 per ton. We have extracted from this streak of ore 3 tons of ore assaying $317 per ton, which still remains in the drift. Work here has been suspended, as we cannot remove the ore until an upraise connection has been made with the 1,650-foot level, which I estimate will be in four weeks.

1000 level—The south drift started from the west crosscut at a point 124 feet from the top of the upraise from west crosscut No. 2 from the north drift from the Con-Virginia shaft station has been extended 22 feet, passing through porphyry, clay and quartz, assaying $14.00 per ton. The upper level is 1,650 level—On the ninth floor in the stope at a point 100 feet east and 25 feet north of an east line from the Con-Virginia shaft the incline upraise has been carried up 16 feet, passing through porphyry, clay and quartz, and narrow streaks of ore, assaying the top of the opening from $2 to $6 per ton; total height, 32 feet above the 1,550 level. Around the foot of the upraise, and upward 20 feet, we have extracted 18 tons of ore assaying $41.14 per ton.

1,750 level—From the twenty-sixth floor at a point 118 feet in from the mouth of the west drift, a north drift has been started and advanced 30 feet, passing through porphyry showing streaks of quartz of low assay value.

Opposite the south drift the north drift has been advanced 28 feet, passing through vein porphyry streaked with quartz, assaying $2 to $4 per ton.

From the tenth and eleventh floors on the east side—above the sill floor of this level at the north end of the stopes in old ground of former workings and from the sixteenth to the west side of the stope, we have extracted 22 tons of ore assaying $6 per ton. The value per samples taken from the cars in the mine was $30.49 per ton.
From the west drift at a point 190 feet in from its mouth a north drift has been advanced 30 feet, passing through porphyry streaked with quartz of low assay value, total length 80 feet.

No work has been done during the week in the south drift where the streak of good ore was cut last week.

We have completed filling the open space in the stopes between the eighteenth and twenty-sixth floors, and are now putting in stove and cement bulkhead in the west drift from the old stope. — Virginia City Enterprise.

Chinese and white men are working on the Pro Bono Publico placer ground at the mouth of Six Mile canyon, near Virginia City, raising gravel to the surface through shallow shafts sunk in the gravel at several points. So far no bedrock has been found and is not likely to be at the depth that can be sunk by windlass power, as a shaft sent down 113 feet at the placer where they are now operating, eighteen years ago, failed to reach bedrock. The Anadale shaft, five miles east of town for a distance of five miles east of the mouth of the Six Mile canyon, is a gravel bed of unknown depth, the bedrock not cropping out at any point on the plain.

At Cherry Creek V. G. Shephard has leased and bonded one of his mines in Granite district to Colorado parties, who commence operations at once.

Arrangements have been made by the Ben Hur Co., of White Pine, to ship boiler and other machinery for a 10 stamp mill, to be delivered on their mines.

Contracts have been made by the North Mountain company for White Pine for a boiler and other machinery.

A good strike of cinnamon ore has been made in William Burke’s mine near Steamboat Springs.

A great deal of ground has been opened up by the developments this winter in the Logan and Huldy mines, Como district. The owners have made a good body of ore and found out also how to work it.

UTAH.

(The Argus.)

A movement has been started to erect a cement mill at Silver City, in Juab county.

An airdrill has been started in the prospect shaft of the Apex in Mammouth Hollow, also in Juab county.

The Sacramento at Mercur will pay another dividend of half a cent per share, or $5,000, on February 10.

A shipment of thirty-three bars of silver bullion, containing 18,644 fine ounces of silver, was made from the Ontario at Park City last week.

E. H. Buchanan, formerly editor of the Park City Record, is now in charge of operations on the Picnic group in Silver City, Juab county.

A very fine ledge of good carbonate ore has been discovered by John Martin of Park City, about nine miles from Oakley in Summit county on the Weber river.

A second payment of $20,000 has been made to J. S. Lakin for his interest in the Sacramento at Mercur. There is still $45,000 due on the purchase.

At a depth of sixty feet in the incline started from the lower tunnel level in the Frisco at Bingham, a vein of good lead ore, two feet thick, has been encountered.

The Constellation, an old Park City producer, is to be rejuvenated under the management of Henry Sutton, and systematic prospecting and development is being prosecuted.

Recent development in the Charlie Ross claim on the Mercur West Dip, proves the existence of a vein underlaying that on which the Daisy is located, and with a strike and dip parallel to the original vein.

It has been announced that the February dividend of the Bullion Beck will be double, to which there is a probability of $25,000 being added, making a total for the month of $50,000 or fifty cents per share.

The Eureka Hill company has commenced to lay its pipe line from the old Shoebridge mill site, recently purchased, to the Eureka Hill mill. This new supply will furnish sufficient water to run the 100 stamp mills at all times.

The dimensions of the ore body encountered some months ago on the 500 level of Bullion Beck have not yet been defined and every effort to do so have increased its magnitude. It is the biggest ore body in the history of the mine.

In the lower tunnel being driven to intercept the Valco vein in Park City, stringers of ore similar to the ore mined in the upper workings have commenced to seam the formation, and it is believed that the vein is near at hand.

The Anadale shaft in Tintic which lies adjacent to the Emerald and is owned by practically the same people, has encountered some fine looking copper stannum at a depth of sixty-five feet, and it is believed that the workings are close to an ore body.

L. E. Riter of the South Swanssea at Silver City, was in Salt Lake during the week, and reports that the pressure on his ore bins had been reduced by a shipment of five cars. He will store the ore at the sampler until better treatment charges are offered.

R. D. McDonald, who has had charge of operations at the Del Norte mine (the old Dial) in Bingham, reports that the lower tunnel cut the vein and developed such a strong flow of water that work had to be abandoned before the vein could be prospectively.

Manager James McGregor of the Crescent Company in Park City, is in Michigan conferring with the other directors as to the advisability of resuming work at the mines. A number of parties are taking ore out of the Crescent under lease, but the company’s force consists of but four men.

C. W. Thompson of Park City has located some valuable claims in the Kait river mountains in Box Elder county. The district is the location of the Century mines owned by C. M. Matthew and E. W. De Loff, in Salt Lake county, and from which recent assays revealed the presence of seven ounces in gold per ton.

The Geyser-Marion Consolidation.

One of the most gratifying pieces of mining news that has recently been promulgated is the consolidation of interests of the Geyser and Marion companies at Mercur. The two companies have already expended a fortune in litigation that has been fruitless to both parties to the dispute to the development of the district, and this fight was about to be resumed when the Angel of Peace flapped its white wings over the heads of the combatants, and it was all off. Under the terms of the compromise and consolidation the two companies are to be incorporated as the Geyser-Marion Gold Mining company, with 300,000 shares of stock of a par value of $5 per share. Of these, 250,000 will be given to the Geyser interests and 100,000 to the Marion, and both companies will be represented in the directory and on the official roster. The two properties represent some of the choicest ground in Mercur, both are equipped with mills, and now that the war is at an end a splendid production record should be the result.

GENERAL NEWS.

The California State Mining Bureau has issued its thirteenth report of the State Mineralogist for the two years ending September 15th, 1896. It contains a great many excellent maps, diagrams and half-tones of some of our great California mining properties. It also contains a short review of the progress made in the mining and treating ores as practiced in this state. There are over seven hundred pages, and is full of valuable statistics.

It is taken the larger part of two years, and a large staff of competent field assistants, to gather the information for the work, and on the whole, it does the state mineralogist, J. J. Crawford, credit. Any citizens of this state may obtain a copy of the report free, by sending seventeen cents (for postage) with their application to the California State Mining Bureau, at No. 24 Fourth street, San Francisco, California.


The gold production of the United States and Territories, according to figures of Director of the Mint Preston, compares with 1895 and 1894 as follows:

<table>
<thead>
<tr>
<th>State</th>
<th>'94</th>
<th>'95</th>
<th>'96</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alaska</td>
<td>$1,010,000</td>
<td>$1,210,000</td>
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</tr>
<tr>
<td>Arizona</td>
<td>7,750,000</td>
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</tr>
<tr>
<td>California</td>
<td>12,600,000</td>
<td>12,300,000</td>
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</tr>
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<td>Colorado</td>
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</tr>
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<td>Montana</td>
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<td>6,500,000</td>
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<td>Nevada</td>
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<td>New Mexico</td>
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<td>Utah</td>
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<td>1,000,000</td>
</tr>
<tr>
<td>Washington</td>
<td>5,000,000</td>
<td>4,500,000</td>
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<tr>
<td>Total</td>
<td>$54,110,000</td>
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</table>

Mr. Preston believes 1896 world’s gold production will be $52,000,000, an increase of $12,000,000 over 1895. The world’s gold production has more than doubled during the last ten years, as production in 1886 was but $506,163,000.

We are in receipt of Filley & Ogden’s complete and authentic mining laws of British Columbia, United States and the State of Washington. It is a neat little book of about 112 pages, bound in a heavy paper cover, with the title and brief of the contents very artistically arranged therein. It is full of practical information for the prospector, miner and investor, with complete legal forms, definitions of mining terms, etc. The book was compiled by Filley & Ogden, of Grand Forks, B. C., and can be secured by writing to them and sending fifty cents.

The Calumet & Hecla Mining Co. in 1896 yielded a total of 50,000,000 pounds of refined copper, the largest in its history.

The Atlantic Mining Co. hoisted 372,138 tons of rock in 1896 which yielded 4,894,282 pounds of refined copper.
JEFFREY MINING MACHINERY.

The illustrations herewith represent some of the Jeffrey specialties in the line of Mining Machinery. The words "Jeffrey" and "successful power coal mining machinery" are synonymous and while the mining public in general are familiar with their manufacture, we illustrate herewith their latest Coal Cutting Locomotive, which are the culmination of many years of experience. The Chain Coal Cutter in simplicity, efficiency and Design is superior to all other makes and the success it has attained in the States is a marvel. The machine is operated by Electric or air power and the daily work will average anywhere from 100 to 200 feet face, the under cut being either 5, 6 or 7 feet according to the length of machine used.

The Jeffrey Mine Locomotive wherever used effect a great saving in the cost of production and the illustrations here with show the style made by the Jeffrey Company. The one with man in center is preferred in many instances, while the one with controller on end is equally desirable. These Locomotives are used for mine as well as surface work and are designed for various capacities.

The Jeffrey Company issues a complete catalogue descriptive of their machinery which can be had by addressing them at Columbus, New York, Chicago or Denver.

Henry Moissan finds that important alloys can be obtained by taking advantage of the ease with which metallic oxides are reduced by aluminium. His general method appears to be to bring aluminium into a molten condition, and then to throw it into a mixture of aluminium filings and of the oxide of the metal which it is desired to allow. A further economic development of heat takes place, with the result that the most refractory oxides are reduced. By means of this method Moissan has succeeded in preparing alloys of aluminium with nickel, molybdenum, tungsten, uranium, titanium and chromium. The advantage of mixing tungsten, etc., with steel is well known, and Moissan states that not only this substance, but titanium also, can be introduced into Siemens-Martin steel. Many chemical substances when heated in the electric furnace give some very astonishing results, and in some cases they become trans-volts, is raised by means of step-up transformers to 10,000 volts, and at the mines is reduced by step-down transformers to 120 for lighting and 240 to 500 volts for motor work.

Mining and Scientific Press.

PERSONAL NEWS ITEMS

Harry B. Adams, formerly of the Desert Queen mine near Bisbee, has been appointed general superintendent of the Tombstone mine at Telluride, Colo.

Job M. Evans, formerly of Kingston, N. M., is at present in the mining business at Mercur, Utah.

Frederic O. Farrin, of Cedar Rapids, Iowa, has gone to Mexico where he will enter the employ of the San Luis Potosi company at San Luis Potosi, where his brother holds a responsible position.

W. H. Suotherd left Tucson, Arizona, for his home at Driggs Springs the fore part of the month. He is interested in some of the greatest and most promising copper mines in the territory.

John Byrne of Butte, an experienced miner, has been appointed State Mine Inspector of Montana by Governor Smith.

The members of the Wicks mining company are expected at Hillsboro shortly from Chicago.
THE MINING AND METALLURGICAL JOURNAL.

C. R. Stevenson, the well-known mining man of the City of Mexico, has left that place for Queretaro to examine some properties in that district.

J. G. Hardy, assayer for the Mexican Gold and Silver Recovery company of the City of Mexico, was in the City of Chuahuan last week on business for the company.

W. H. Wren, the mining man who has been at Pearce, Ariz., looking at the Gold Cliff properties, returned to Los Angeles the first part of the month.

T. J. Stewart, of Aspen, Colo., was in Bland, N. M., the fore part of the month examining the Victor mine with the intention of purchasing.

Ed. Lineberger was in Eureka, Lower California Mexico, from San Rafael valley, the fore part of the month. Mr. Lineberger says there is an abundance of water to handle the gravel of the Golden Dream placer, some of which are very rich.

Mears, Metcalfe and Kirk, who have lately returned to Tombstone, Ariz., from Minas Piasas, say that that mining camp is developing into a wonder. The gold product for the last two years amounted to $10,000,000.

James A. Carlin returned to Bland, N. M., from Aspen, Colo., where he went to confer with some Colorado capitalists who wish to interest themselves in New Mexico mining properties.

John Fallon, general manager for the Mexican Gold and Silver Recovery company of the City of Mexico, was in Chuahuan the first of last month.

F. E. Weaver has arrived in Jerome, Ariz., from Randsburg, Cal., and speaks well of the latter place.

Henry Woods, one of the firm who own the Lone Star and Albemarle group of mines and other valuable mining properties in the Cochite district, has just returned to Bland, N. M., from Denver, Colo.

Capt. J. S. McHenry went to Chuahuan City from Mexico last week and reports the miners and prospectors in the neighborhood of Chuahuan as doing well.

President J. A. Fleming, of the Black Warrior company, arrived in Globe, Ariz., a few days ago from Phoenix, and was gratified at the showing made in the company's mines.

S. P. Mahan, the mining expert who has been in Bland, N. M., for the last two months experimenting some valuable mines, was in Los Angeles last week on a visit.

Surveyor S. Simpson will leave the City of Chuahuan in a few days for Batopilas to survey mining properties owned there by several Chuahuan people.

John Brockman, a wealthy mining man of St. Louis, Mo., after a visit of several days in Tucson, Ariz., has returned to his home.

H. C. Sandifer was in the City of Mexico from San Francisco the 7th of this month on mining business.

James Shields, the Montana mining man, has been taking in the sights at Randsburg, Kern County, Cal., and is satisfied with the country.

Bilby Gavin, an old time Arizona prospector and discoverer of the Fine Spring on Turquoise creek, which produced $50,000 in mining but a few feet, has returned to Prescott after an absence of two years in Montana and Idaho.

Wm. H. Kruse, of San Francisco, was in Bakersfield February 9th, en route to the Greenhorn mountains in Kern county where he is interested in mining.

MauriceClark, the mining engineer, was in the City of Mexico last week and will probably return to Oaxaca where he has been doing some engineering, the latter part of this week.

Chas. R. Wares, the Tucson, Ariz., assayer and proprietor of the Tucson Sampling Works, paid the journal a pleasant call last week while on his way to Johannesburg, Kern County, Cal.

James H. Kirk left Prescott, Ariz., the first of the month for Mexico where he is engaged in mining.

O. O. Howard, Jr., of San Francisco, Cal., has just arrived in the Greenhorn mountains, in Kern county, from the same place to look after some mining interests he has in the mountains.


A. J. Doren reached Prescott, Ariz., from the Little Jesus mine Feb. 5th.

C. J. Francis, of Sacramento, Cal., arrived in Bakersfield from the north Tuesday, Feb. 9th, en route to the Greenhorn mountains in Kern county, where he has some mines.

C. L. Hall, of the Mammoth mine at Goldfields, Ariz., was in Phoenix Feb. 7th.

E. B. Gage, the large mine operator of Congress, Ariz., has returned to Phoenix, Ariz., the 7th inst.

Alfred Treged, the mining expert, has just returned home to San Francisco from Wickenburg, Ariz., where he went to examine the property owned by Dr. Scott Hdm, of Phoenix and F. J. Kendall of San Francisco.

John Porley, M. E. of San Francisco, has just left Wickenburg, Ariz., for home. He has been doing some professional work near Wickenburg.

R. O. Crewe Rende, son of Col. Offley J. Crewe Rende, left the City of Mexico Feb. 14th for the Central for San Diego, Cal., and thence to Eureka, Lower California, to join his father who is engaged in mining near that city.

Colin McCandly, of San Francisco, Cal., was a caller at the Journal Office last week.

B. W. Hall, a mine operator of Chales, Idaho, was in Phoenix, Ariz., last week visiting his brother Hon. G. W. Hall, whom he has not seen but once before in twenty years.

W. P. Blake, the mining man of Tucson, was in Phoenix, Ariz., the week before last on mining business.

C. L. Harfield, M. E., the contracting agent of the National Ore and Reduction company of St. Louis, Mo., who has just completed the large smelter at Oro Grande in San Bernardino county, was a caller at the Journal office the other day.

James McClurg, one of the best known mine operators of Colorado, was in Phoenix, Ariz., having returned from a trip out in the hills where he has been looking for some investments.

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and claim for it BETTER work than any Concentrator made, with a capacity of from 10 to 25 tons per day of 24 hours. It is simplicity itself. No moving belts or intricate parts. Any one can learn to operate in an hour.

For confirmation of all the above we refer to Henry Lowe, Puzzle Mine, Brockwood, Colo.; Mr. E. Smith, Cameraman, Golden, Colo.; Harry Murphy, Mine, St. Rience, Colo.; W. E. Rachow, Mayflower Mill, Idaho Springs, Colo.; H. E. Woods, Beaver, Colo.; Standard Mill, Wallace, Idaho; Swgger Mill, Argo, Colo.; Stegler Union Mill, Teller City.

We also Handle the Hudson Wire Tramway.

These Tables have displaced belt tables of almost every make, as is shown by letters in our possession.

THOUSANDS Now in Use Over the World

TRAUX PATENT INNOVATED
Automatic Ore Cars.
THE ARE THE BEST AND CHEAPEST.

TRAUX Mfg. Co.
DENVER, COLORADO.
The Only Excluders Ore Car Manufacture in America.

Pat. June 5, '94, Aug. 13, '95. Send for Catalogue. All dealers in Mining Machinery have them.

The "Journal" Office
Los Angeles, Cal.

The Newman Gold-Saving Machine.
(Patent Pending)

The Most Simple Amalgamating Process known that actually saves all the gold. Can be used in hydraulic, river washing, or quartz mining.

Is not a Dry-Washer.
Positively saves the Float Gold and fine Quick-silver

Office, Room 305 Carrier Building
213 W. Third Street
Los Angeles, Cal.
ORE TARIFF.

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

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

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<th>FROM</th>
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**RATES ON COPPER OR ZINC ORE TO CANON CITY.**

Taking Effect July 1st, 1901.—So far as rates on Copper or Zinc Ore are concerned, this table will be considered as common with Pueblo; in other words the rates shown in Table as to the valuation of Ore to Pueblo, will also apply on shipments of Copper or Zinc Ore to Canon City.

Rates on Copper or Zinc Ore to Canon City.

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**SOUTHERN CALIFORNIA RAILWAY.**

Rate on Ore in car loads, valuation not to exceed $50 per ton, minimum weight 4,000 lbs. Ore Grade, Cal., to Pueblo, Col., $50 per ton.

Ore, car loads, when coming from the Republic of Mexico valuation not to exceed $50 per ton, National City to Denver, Cal., Pueblo, Col., $50 per ton of 4,000 lbs.

Ore, valuation not to exceed $50 per ton and not to be accepted for, minimum weight 3,000 lbs. per 100 lbs. to Denver and Pueblo, Cal., from all points on the Southern California Railway.

**SOUTHERN PACIFIC R. R. COMPANY.**

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THE PUEBLO
Smelting and Refining Company,
PUEBLO, COLORADO.

BUYERS OF
Gold, Silver, Lead and Copper Ores,
Copper Matte and Bullion.

Refiners of Gold, Silver, Lead and Copper.

Manufacturers of Bar and Pig Lead, Lead Pipe, Antimonial Lead, Copper Ingots,
Granulated Test Leads and Litharge.

Pays Highest Prices for all classes of Ores.
Especially Attention to Sampling by most Approved Processes.
Quick Returns on all Consignments.

Agency TRIUMPH ELECTRIC CO.
CINCINNATI, OHIO

Generators,
.... Motors
Isolated Lighting
.... Plants
Electric Elevators
and Pumps
Water Wheels,
Boilers & Engines

Write for Estimates.
122 W. Second Street
LOS ANGELES, CAL.

THE Puget Sound Reduction Company
PURCHASERS OF
GOLD, SILVER, LEAD AND COPPER ORES
Special Facilities for Handling ores from the South-West and Mexico

TURBINE
AND CASCADE WATER WHEEL

Adapted to all Heads from
3 Feet to 2000 Feet

Our experience of 33 Years enables us to build any required type of Water Power Machinery.

Send for a Pamphlet of either Wheel and write for full particulars.
James Leffel & Co.
SPRINGFIELD, OHIO, U.S.A.

VULCAN ROPEWAY

With Automatic Ore Loader and
Automatic Ditching Device

For Conveying
Ore, Cordwood,
Etc.

*Empire, Nevada, April 17th, 1896
Vulcan Iron Works—Gentlemen: The rope-way furnished by your Company to convey tailings from Morgan Mill to Mexican Mill, a distance of seven-eighths of a mile, is giving entire satisfaction. We transport 200 tons of tailings in ten hours; one man does the whole business, including elevating tailings from hopper in the ground, operating Vulcan self-loader, and attending to the rope-way generally. The self-dumper requires no attention whatever. The Vulcan Loader I consider the best feature in the whole Ropeway, making it possible for one man to load 200 tons in ten hours.

Your very truly,
J. P. Woodbury, Sept.

VULCAN IRON WORKS,
Manufacturers of Mining Machinery,
SAN FRANCISCO, CAL.

Babbit Metal
Kiln, guaranteed best Babbit Made
COPPER FOR ANODIZING PLATES, Brass, Sheet Copper.
SATURY ZINC, ROOFING TINPLATE, ETC.
Pacific Metal Works,
127-129 FIRST ST., SAN FRANCISCO, CAL.

CLARENCE HERSEY,
Assayer and Chemist,
LEADVILLE, COLORADO

Established 1879

Samples by Mail or Express Receive Prompt Attention

SPECIMEN ASSAY PRICES:
Gold and silver, $1.00; any two of the above, silver or copper, 50c. platinum, nickel or zinc, 25c.

Write for full price list and mailing envelopes.
Fraser & Chalmers
CHICAGO, ILL.

Have Bought Out a New Line of
MEDIUM SIZED
STEAM HOISTING ENGINES

These are designed with great
care by engineers familiar with
the best previous practice, and
knowing just what is wanted to
render satisfactory service on a
mine. Do you want such ser-
vice? Then buy one of these
improved machines.

Our Special Lines
of Manufacture

On which we would be glad to quote are:
STAMP MILLS, SMELTING FURNACES,
CYANIDE PLANT, ORE CRUSHERS,
TRUE VANER CONCENTRATORS,
HEIDELBERG AIR CONCENTRATORS AND PUMPS,
OTTO AERIAL TRAMWAYS,
SHOES, DEERS, CAMS,
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Qualified by a Quarter Century of Experience to render you the
best of service we invite your inquiries and patronage.

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SALT LAKE CITY, UTAH
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JOSHUA HENDY MACHINE WORKS

Nos. 38 to 44 Fremont St., San Francisco

DEALERS IN AND MANUFACTURERS OF
All the Latest Improved
Mining, Sawmilling, Pumping, Smelting and
Electrical Machinery, Engines and Boilers,
and Mining Supplies of all kinds.

Manufacturers of the HENDY IMPROVED TWO-STAMP MILL

BAKER IRON WORKS
LOS ANGELES, CALIFORNIA

Manufacturers of
Mining and Milling Machinery, Atlas Engines and Boilers, Worthington Steam Pumps

B Water Works Machinery
A SPECIALTY

RISDON IRON WORKS

Office and Works, Cor. Beale and Howard Sts., San Francisco

MANUFACTURERS OF
Johnston Concentrators
Risdon Improved Concentrators, True Type
Bryan Patent Roller Quartz Mills
Evans' Patent Hydraulic Gravel Elevators
Risdon Ore Feeders, Olallie Type
Air Compressors
Mining, Milling, Pumping
and Hoisting Plants,
Risdon Pat. Water Wheels,
Knight Water Wheels

Cable Address, “Risdon’s,” San Francisco

IMPROVED HYDRAULIC GIANT

The above cut illustrates the improved form of Hydraulic Giants, in which
the Centre Shaft is dispensed with, which was so liable to catch in the
Plates. Prices and catalogues of our specialties sent free on application.

PARKE & LACY COMPANY
21 and 23 Fremont Street, San Francisco, Cal.

MINING MACHINERY AND SUPPLIES, ENGINES AND BOILERS

ROPP STRAIGHT LINE FURNACE
FOR ROASTING, CHLORINATING, AND DESULPHURIZING ORES.

Knowles Steam Pumps
Dodge Rock Breakers and Pulverizers
Ingersoll-Sergeant Rock Drills and Air Compressors