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THE SIDE BOUNDARIES OF A CLAIM

At the last meeting of the State Miners’ Association a resolution or rather a series of resolutions were presented to the Convention by Colonel W. S. Keys, of which the following one necessitates a few remarks:

Resolved, That the law of the apex and its corollary, the so-called extra lateral right, should be abolished and a return made to the common law right of surface boundaries, and that the claim of unit of location be of sufficient width, i.e., of sufficient width on the side of the dip, to permit of excavation on the top of a ridge of 1,000 or 2,000 feet when the angle of the dip is not less than 45 degrees.

The only part worth answering is the proposition “to return to the common law right of surface boundaries.” In support of this proposed change Colonel W. S. Keys said that Senator Stewart was years ago an advocate of surface locations on the Comstock, and Judge Whitman, attorney for the great Bonanza firm, said that with a square location there could be no litigation. Mining men would be more willing to invest in a square location than in what we call a ledge location.” He quoted from Dr. Raymond, Secretary of the American Institute of Mining Engineers, and an authority on the law of the apex; W. H. Stevens, of Ewing and Colorado; Arthur F. Wendt, a mining engineer, and the Mining and Scientific Press of San Francisco, in favor of surface boundaries for lode claims.

As a warrior the gallant Colonel may be worthy of his spurs, but as one experienced in the injustice of the vertical production downward of the sides of a claim for its legal boundaries, he can not have had any experience in such boundaries or he would not recommend them. In the eastern part of America there have been more mines closed down on account of their mining through or beyond the vertical production in depth or downwards of the sides of the properties, than there have been cases of dispute under the law of the apex or the so-called extra lateral right. There have been more cases of trespass or theft of minerals under square claims in the east than under lode claims in the west. The main passing of a law does not, unfortunately, make people honest. The right on the ledge claim to follow the dip of the same vein (not a parallel one) by continuous mining with no depth is a right both in the interests of labor and capital, as it permits of continuous work in depth. The surface and vertical side line boundary is against the interests of labor and capital, as it limits the ownership of the interests in the claims of the miners and gives that ownership to a neighbor who has not expended a cent to develop the mine, but knowing the vein dipped the purchased a claim adjacent to the shaft, and by compounding the construction of the shaft itself, he has obtained the property not from the shaft passed into his property.

On a square claim the reward of industry is to develop a mine for an adjoining owner, when the vein dipped he purchased the claim adjacent to the shaft at a nominal sum. At the present time, mining is a capital business and not a labor business, and all mining laws have a tendency to encourage the capital interest at the expense of the labor interest. Mining is the privilege of the nation, and the mining laws and the conditions in some branches of mining, which encourage monopoly, are detrimental to the interests of the nation, and the mining laws and the conditions in some branches of mining, which encourage monopoly, are detrimental to the interests of the nation, and the mining laws and the conditions in some branches of mining, which encourage monopoly, are detrimental to the interests of the nation, and the mining laws and the conditions in some branches of mining, which encourage monopoly, are detrimental to the interests of the nation, and the mining laws and the conditions in some branches of mining, which encourage monopoly, are detrimental to the interests of the nation, and the mining laws and the conditions in some branches of mining, which encourage monopoly, are detrimental to the interests of the nation, and the mining laws and the conditions in some branches of mining, which encourage monopoly, are detrimental to the interests of the nation, and the mining laws and the conditions in some branches of mining, which encourage monopoly, are detrimental to the interests of the nation.
THE COMBINE OR TRUST.

It is a common thing to read in the daily press in all sections of the country that the sugar, cotton, whiskey, iron, coal, etc., etc., interests of such a district or state, or of the whole country, have combined to control prices or trade. The question arises, is the combination of two or more corporations a legal act, when the intention is to fix prices and stifle competition? When two or more individuals join in partnership, legal steps are necessary, and registration of partnership is demanded in some countries, to make such a firm or corporation a legally constituted body, and to protect the interests of the partners and also of their creditors. The combination of two or more corporations is a similar act, differing only in degree, and ought to require a further act of incorporation to make it legal; hence, the combine or trust is an illegal union of trade interests contrary to public policy, and the companies combining ought to be prosecuted, for it is illegal in the individual to combine with others to corner the market and monopolize trade; but the council less corporation is at liberty to do that which the individual cannot do in the matter of a trade partnership, or, what is worse, to control the market price of the necessities of life. Probably, at some future date, the Attorney General will awaken to the facts of the case, and tell the corporations and trusts who have combined, as he recently had to tell Secretary of War, Alger, with regard to his actions in delaying the San Pedro harbor construction, that “Congress passes laws and they must be obeyed.”

CORRESPONDENCE

CALIFORNIA.

Tuolumne Mines.

Work is actively going on at the Trio mine.

The Kelz mill is running only five stamps now, and that during the night shift.

At the Tarantula grading for the hoist has been nearly completed and machinery is arriving.

The Amalga is drifting to the north and is sending up exceedingly good rock showing free gold.

The Rappahannock continues to show up splendidly. Superintendent Chute recently put in another engine and cable reel in the hoist.

The Fisher Gold Development Co. is making extensive improvements on their property.

The work has been intrusted to Demarest & Fullen.

The Lady Washington mine is running full handed and taking out good ore. This is one mine that has been very fortunate in not having to shut down owing to scarcity of water supply.

Rodger O'Donnell of Jamestown has sold nineteen acres of mineral land southeast of that town to a San Francisco syndicate who have gone to work to develop it. They are on a tunnel on the west side of the vein has commenced.

ALABAMA.

A force of men have a contract for sinking the Alabama shaft, arrived on the grounds, Friday of last week, from Angels Camp. There are six men under the contract.

ors, Gallagher & Serry. The work was begun last Monday, and it is to result in sinking the shaft 100 feet below its present level of 300 feet. A pump station has been put in on elevated ground for drainage and sinking the shaft. Supt. Newhall is making great effort Saturday in the interest of these improvements. At the present six months' work, the three old Arrow mining district about 35 miles north of here, has won a bond on the Hidden Hill, Golden Queen and three other claims belonging to Supt. Newhall.

Under the most favorable circumstances the work cannot be completed under three months.

OMEGA.

This mine, which is now in the hands of A. F. Dron, and which was worked some years ago, and begun perhaps forty years prior to this time, is not yet extended beyond the old works, which have long since ceased in, and this week has begun the advance work. The Omega, being situated in the best mining belt, on the mother lode and in the vicinity of Rawhide and Alabama, we cannot help joining expectations with the operator, Mr. Dron.

MAMMOTH.

This mine is not the busy one it has been in times past, but arrangements are under way to have it started again soon and it is thought probable by November first.

SHAWMUT.

It is the presence of numerous carpenters busy with hammer and saw, that gives this mine a lively aspect just now. Recently the Shawmut put in ten additional stamps to their mill and now the company are building quite a number of cottages for the accommodation of employees. A number of men are also employed constructing a stone wall along the creek front as a provision against possible ravages from high water. The payroll calls for seventy-five men. Great things are expected of the Shawmut. Sufficient developments have been made to determine its rich character and the body of ore in sight would seem endless.

THE JUNCTION MINE.

The above struck $4500 pay in a vein three to four feet wide. The rich sulphurites of ar- senic and antimony (not solid metal) in width, of very high percentage. This find is of considerable importance, as regards great value in sight. Its future is now assured.

THE KELZ MINE.

The present company are about to run a low level tunnel that will open up the mine to great depth. The tunnel will start from above high water mark of South Ford of Stanislaus River. The mill will eventually be moved to the tunnel mouth.

THE RIVERSIDE.

Below the Kelz mine, have completed their 100-stamp mill, and will soon commence crushing on the cumulonick, which is of paying value in free gold. The sulphurates are of high grade. This mine, we expect, will shortly be on a dividend basis.

THE PROVIDENCE.

On the North Ford of Tuolumne River, looks exceedingly well, a four-foot vein, widening to six feet in places, shows false gold in abundance. The rock carries a considerable lead in galena sulphurites, and is rich.

ARGUS.

Fenner, Cal., Oct. 29, 1857.

EDITORIAL: The following mining notes may be of interest to your readers:

Col. Thomas Ewing, the well-known mining man of San Francisco, who has been investigating the old Arrow mining district about 25 miles north of here, has secured a bond on the Hidden Hill, Golden Queen and three other claims belonging to Supt. Newhall.

John Domingo, the Ben McKinley, a good mine belonging to Messrs. Miller, West and Monaghan. Col. Ewing is a pusher when it comes to making a bonanza, has gone out to examine the mines named, last week, and the next day he had a bond on the properties, and never had seen any of them before. The Colonel has taken immediate charge and will place the mines in the best condition in the shortest possible time. The terms are not given out for publication. A shaft is now down 183 feet on the Golden Queen. Ore worth from $125 to $250 per ton in gold and from 20 to 50 per cent. in copper has been shipped from the Golden Queen by the former owner. The present value of the ore is much richer than ever before.

The Hidden Hill is famous on account of a rich strike having been made there about a year ago. In two shots they broke into two veins and took through about $200,000. The first pocket disclosed contained $3500 and in the second there was $5000. This statement is no estimate or an assertion that cannot be proven, as the cash was paid for the bullion by the Crocker-Woolworth National Bank of San Francisco to Monaghan & Murphy of the Needles, at that time. Kean & Monaghan have been arrasting large blocks of gold from this mine that was very rich in gold and silver.

The Ben McKinley is also a large producer. Very recently 40 sacks of $500 were shipped to the sampler at Kingman.

John Domingo has also shipped some very rich ore from his Minas Prieta.

W. R. Fales of Boston, who is well known in mining circles, has taken a bond on the Gannon & Barker group of mines in the vicinity of the properties that Col. Ewing has a bond on.

Henry & Berg of Goldstone have had experts examining their properties, and feel assured they will have a fine up crushing ore from their mines before spring.

Allen G. Campbell has taken a bond on groups of mines near Granite Springs, where he is now working eight men.

INDEstructible.

SIXTH ANNUAL CONVENTION OF THE STATE MINERS' ASSOCIATION.

The sixth annual meeting of this association met in the Odd Fellows' Hall, San Francisco, on the 18th, 19th and 20th ults., with a attendance of over 400 delegates from the counties. The hall was decorated with flowers and on blue silk were the names of the counties represented, being Plumas, Yuba, Butte, Sierra, Sacramento, Los Angeles, Contra Costa, Sonoma, Tuolumne, San Francisco, Shasta, Siskiyou, Trinity, Santa Clara, Amador, Alameda, Calaveras and El Dorado.

The Hon. J. H. Neff, the efficient president of the association, called the meeting to order at 10:30, and the first business was to appoint a committee on credentials:

J. S. McBride... Nevada... chairman

Thomas Clark... El Dorado...

John McMurray... Trinity...
A. M. McDonald... Twelvemile...

Thomas W. John... Alamere...

Dan T. Cole... Sierra...

F. W. Edelesten... Los Angeles...

J. M. Gleaves... Shasta...

R. L. Freeman... Trinity... 

A. G. Myers... Siskiyou...

George Stone... San Francisco...

M. B. Krerr... Calaveras...

Joseph B. Millard... Placer...

E. C. Vorhies... Amador...

A. B. White... Plumas...

J. L. Gould... Placer...

In the afternoon, Major Hefner remarked that Judge Earle, in his capacity as a member of the Anti-Debris Association, was present, and suggested that he address the convention. President Neff said: "There is no man whom we would more like to listen to than Judge Earle, whose words of wisdom the miners have often heard." The fact that Judge Earle had been chosen as a spokesman to present a silver cup to the retiring president had been kept from Mr. Neff. After a short speech the presentation took place, and President Neff thanked the Association for this token of regard and esteem and followed by reading the following address:

"We are happily assembled at a time when the mining industry in California has experienced and its future outlook is more than bright. This year, the increase in the annual yield of our state is supplemented by renewed activity and increasing yields in other branches of mining, to the extent that the eyes of the world are now turned upon California, and legitimate investors are making careful and earnest examination of the advantages here offered.

This happy situation is in small measure the result of the united efforts of the miners of California through the association whose representatives are here assembled. The value of organization and unity of action is thus signally emphasized, and the duty of the California miner made clear and plain. I sometimes ask whether the miners of this state have always appreciated, or even realized, the substantial benefits that have resulted from their united efforts. Six years ago the mining industry of this state was in a lamentable condition. The annual yield was much less than it is now, and in many parts of the gold mining was practically destroyed. The yield of other minerals was limited, and the belief generally prevailed in the industrial world that mining in California was rapidly becoming a thing of the past. So general was this belief that capital, in its search for mining investments, scarcely gave California a thought, but passed on to more alluring fields.

Then came the California Miners' Association, with its enthusiastic energy and co-operative determination. Our State Legislature promptly responded to our call, and as Congress left as a willing ear, public sentiment suddenly turned in our direction, and the people of the valley gave respectful attention to our appeal to reason and justice. Above all, the world once more learned of our marvelous resources, and capital hastened to make investments in California mines. Today the mining industry of California is better understood, and is attracting more favorable attention than for a quarter of a century past.

It is my purpose at this time to review the history of the mining industry of California, nor shall I detain you with any detailed statement of the work of the association for the year just past. The former I had the honor to present in my annual address a year ago, and the latter will be fully covered by the reports of the various committees.

I am glad to report that cordiality and good feeling exist between those who are in charge of the Mining in the State and the executive officers of the Anti-Debris Association of the Sacramento Valley, and that there is no difference of opinion regarding these matters, leaving harmonious action. Several conferences have taken place during the past year between a committee representing this association and a committee representing the Anti-Debris Association, looking to a joint appeal to Congress for financial aid in the furtherance of such work as the two associations might be able to mutually approve. Although these conferences have so far produced no definite results yet, I am glad to report that cordiality and good feeling existed, and that there is no difference of opinion regarding the possibility of such action, each working in cooperation for the common good and mutual prosperity of our state, in which we are all so deeply interested. To this end we await the action of the government engineers in adopting and reporting a plan for the protection and improvement of the Sacramento and San Joaquin rivers, as contemplated in the Act of Congress known as the Cuyamaca Act.

You are doubtless, gentlemen, familiar with the fact that since we last met considerable progress has been made in the important matter of Federal and State appropriation for purposes agreed upon by mountain and valley residents of this state. You are also doubtless, fully conversant with the projected effort on the part of our state and national legislatures, and I will but direct your attention to the results.

By an Act of March 24, 1853, the legislature of this state appropriated $500,000 to be applied to this work—namely, the building of restraining dams. This appropriation, contingent upon a like appropriation by Congress, was made good by a similar appropriation on the part of the Federal Government; and to obviate any possible legal technicalities, the California legislature at its last session reapportioned the amount. At the same time the State Legislature appropriated $300,000 for dredging the Sacramento river, which makes the purpose on which all are agreed $800,000, all of which, except the $500,000 appropriated by the state and under state direction, is to be expended under the direction of the United States Government engineers for building dams and restraining debris.

There has been considerable delay and some impatience manifested regarding the beginning of the actual work, and some considerable discussion has been published concerning the proper character of such work. It may be said, in passing, that when the bill for the $500,000 was signed by Governor Budd it was with the distinct understanding that the money was not to be immediately available. Without expressing any opinion one way or the other upon the state appropriation, it is believed that in a broad view of the matter, the engineers can proceed wisely in making haste slowly, and it is sincerely to be hoped that at the coming session of Congress the Federal Government may be induced to further appropriation in this same work, as it is believed that such improvement naturally and rightfully belongs to the Federal Government.

It is understood that the present conference between the state authorities in charge of the dredger scheme and the United States engineers will result satisfactorily. It is likewise understood that the expenditure of the $500,000 joint state and national appropriation in the construction of debris-restraining dams has been occasioned by the difficulty in determining the exact point at which the work should begin. In this connection it is to be noted that there has been considerable change in the United States Senate, and it is to be hoped that upon the return of Major Hefner from Cincinnati that progress in this matter will be stimulated.

The $500,000 appropriated for the building of debris-restraining dams is not understood, nor was it so understood at the time, to be for the impounding of fresh debris, or for miners to use as dams for their tailings, but to stop the movement of material mined by miners, and stirred up by agricultural development when you and I were boys. It is also clearly understood that under the Cuyamaca Act, regardless of the amount of appropriation, hydraulic miners must continue to build their own dams and take care of their own debris.

I would have been pleased to have given you my favorable impression made in the expenditure of the $500,000 appropriated, but in the above have briefly outlined the facts as they exist. I would suggest, in my judgment, it would be well for the association at this meeting to set forth the present status of the matter, and petition Congress for further appropriation, to continue the work which the $500,000 was intended to inaugurate.

I also hope that the Mineral Land bill, so long pending in Congress may be passed at the ensuing session of that body.

I also desire to refer briefly to the International Gold Miners' Convention, held at Denver in July last, and the Trans-Mississippi Commercial Congress, held at Salt Lake City during the same month. This association was represented at both conventions, and action was taken at each convention looking to the creation of a Department of Mines and Mining, and also to the revision of our Federal mining laws. At the Denver Convention, Col. W. S. Keys of this association was made a member of the Committee for Revision of the Federal Mining Laws, and at the Salt Lake Convention, Hon. T. E. Ford was made chairman of the committee upon the Department of Mines and Mining. These gentlemen will doubtless report what action, if any, has been taken by their respective committees.

I cannot conclude without adding a word in commendation of those who have thus far so successfully carried on the work of the association and of encouragement to those in the future who may be intrusted. The position with which you have so continuously and so generously honored me has afforded me unusual facilities for the work of the association. In those who have so industriously devoted their time and energies to the cause. Whenever legal services have been required, they have been cheerfully and gratuitously rendered without pecuniary reward. Whenever anything was to be done requiring executive or business ability, men of affairs have not been wanting to perform the same with dispatch. When money was needed to defray the necessary expenses of important undertakings, that, too, was promptly furnished by the
friends of the mining industry. In short, gratuitous service and generous financial aid have marked the course of the association continuously since its birth. It must be confessed, however, that the mine owners themselves have always responded as they should, and that the financial burdens of the association have fallen quite largely upon the merchants and manufacturers of San Francisco.

To all those who have so generously aided the cause, I desire to tender the thanks of the association, coupled with a good word of comfort and the assurance that all assistance from those upon whom have fallen the principal burdens of our noble work.

For those who shall succeed to the duties of the present officers of the association, I bespeak the same kind generous treatment that you have ever accorded to those whom you have so highly honored in the past. Above all, I appeal once more to the miners in the mountains to respond more liberally with financial aid. You are the direct beneficiaries of the great work that has been done, and you are the best judge of the necessity for and the merit of the aid you have been asked to extend to the association.

Without your cordial support, the association must confine its activities to what is practically a daily evening walk with your hearty co-operation and financial aid, the past achievements will but mark the beginning of a glorious dawn for the industry that means so much to our state and nation and upon which you must rely for your own prosperity and material advancement.

Secretary Julian Sonntag reported that up to October 15th the receipts were $1,724.10, and the expenditures $2,407.30, leaving a balance of $674.90. Since then $260 has been received.

The Committee of Resolutions was appointed as follows: J. M. Walling, Nevada county; Chairman; J. F. Halloran, San Francisco; A. H. Ten Broeck, El Dorado; Harold T. Power, Placer; T. J. Parsons, San Francisco; A. Caminiti, Amador; F. R. Wehe, Sierra; John F. Davis, Amador; John McMurry, Trinity; James O'Brien, Yuba; J. R. Shugart, Calaveras.

On the motion of ex-Judge Walling, it was ordered that all resolutions be referred to the Committee on Resolutions without discussion.

The following resolutions were presented:

That the State of California should aid in every possible way to make a large and successful mineral exhibit, at the Paris Exposition in the year 1900, etc. That a committee of this association be appointed to confer with the Executive Committee of the State Anti-Debris Association—in urging the attention of the United States Debris Commission—the importance of securing protection against a further flow of heavy material into the navigable rivers, etc.

Curtis H. Lindley, chairman of the Committee on the Revision of Mining Laws, said that the Committee on Legislation should be consolidated as they consider the same matters. Incorporated in the report was a statement by Colonel W. S. Keyes, chairman of the committee and also a delegate to the International Mining Congress at Denver. He presented resolutions favoring square locations and that the common-law right of surface boundaries be adopted for the side lines of mining claims, etc. The Committee on Resolutions, however, very wisely reported unfavorably on the resolutions of Colonel Keyes on the following day.

The day's proceedings closed with addresses from Curtis H. Lindley, A. H. Ricketts, S. K. Thornton, Ivan H. Parker, John Daggett, J. S. McRide. In the evening, Prof. S. B. Christy and Lieutenant Hason on "electric power."

At the second day's meeting, resolutions were submitted from county associations, the State Board of Trade, on a Secretary of Mines and Mining.

Ex-Congressman Caminiti brought forward Congresswoman Mariclare Vries, who addressed the meeting on the Mineral Lands bill. The Committee on the Protection of Mineral Lands reported that the conditions existing as of the commencement of the year have remained practically unchanged, except in the marked diminution of the area of advertised selections by the railroad companies of lands lying within the limits of their grants.

Report of the Committee on Dredgers favors the construction of restraining dams. The Committee on Legislation reported as follows:

According to the estimate made for your committee by the Commissioner of the General Land Office, on June 15th last, there remained unappropriated within the railroad lands grants in California, 11,566,072.86 acres, distributed as follows, to wit:

- Western Pacific (San Jose to Sacramento) 1,128,317.25
- Central Pacific (Sacramento to Nevada line) 1,199,384.71
- California and Oregon (Roseville to Oregon State line) 922,201.04
- S. P. Main line (Needles) 4,418,266.80
- S. P. branch line 3,927,873.96

Total: 11,566,072.86

Your committee has no means of knowing how much of this vast acreage is mineral in character, though it is believed that a large percentage of it would be found upon examination to be mineral land within the meaning of the proposed Mineral Lands bill.

After referring to the Acts passed by the Legislature at its last session, when much good was accomplished in the way of mining legislation, and your committee recommends:

First—that pending the next session of Congress, measures be taken to secure the passage of the so-called Mineral Lands bill at the approaching session of Congress.

Second—that Congress be urged to make further appropriations for the construction of restraining barriers and other works, with a view to the protection of the Sacramento and San Joaquin river systems, to the end that all branches of mining may be successfully and profitably conducted without material injury to other interests.

Third—that further steps be taken to secure a revision of the Federal mining laws and the creation of a department of mines and mining.

State Mineralogist Cooper read a paper which will produce the greatest interest, and the creation of a department of mines and mining.

The following prominent men addressed the Convention: Governor Budd, Senator Perkins, Congressman Marion de Vries, Congressman Bain, W. S. Keyes, Hon. Tiley L. Ford, John B. Irish, Professor S. B. Christy and Professor George Davidson. Against his protestations, Jacob H. Neff was again elected president, and Julian Snodgrass re-elected. T. J. Parsons, vice-president, and S. J. Hendy, treasurer.

The following members of the Executive Committee were named by counties:


The Convention then adjourned sine die.

After the Convention had closed, Chairman Neff announced the following list of committees:


County Executive Committee—Yuba—John Durpee, Louis Conrad; Sierra, F. R. Wehe, J. O. Jones; Trinity, F. M. Paulsen; Amador—J. F. Parks, E. C. Voorhees; Nevada—E. J. Rector; Plumas—Dixson Brabon, John Robbins; Shasta—J. M. Gleaves; Calaveras, Richard A. Parker, Mark B. Kerr; San Francisco, Andrew Carrigan; El Dorado, H. E. Picket, G. H. Ten Brock; Tuolumne, N. M. Williams, A. M. McDonald; Santa Clara, Charles C. Derby, R. B. Bultmore; Siskiyou, Andrew G. Myers, John Daggett; Placer, Charles H. Carr, H. T. Power.


Committee on Conference with Anti-Debris Association—John Spaulding, James O'Brien, Thomas Clark.

Committee on Finance—Andrew Carrigan, A. A. Watkins, Louis Sloss, Jr.

Miscellaneous Mining News.

CALIFORNIA.

SAN BERNARDINO COUNTY.

Big Strike in the Rose.

An immense strike has been made in the Rose mine at the depth of 800 and 900 feet during the last few days. One of the most wonderful strikes yet made has been found at its lowest levels, not only in richness, but in magnitude. Four feet of solid shingling, averaging 600 per ton, was encountered while stopping between the 800 and 900-foot levels. At 900 they have
large quantities of high grade milling ore and no doubt will soon strike the shipping ore. The Rose people have enough of ore out and in sight to keep their 10-stamp mill running for years.

This extraordinary strike shows that by depth the mine is richer and the ore chimneys much larger. Such a strike at this depth would attract mining capital in the north and would make quite a boom. There is now no doubt that the mines of the south are liable to ‘go down’ as in any other part of the State.

Tracey N. Stebbens, who has bonded the Memphis and Central mines from Mr. and Mrs. S. H. Baird, is giving the mines a thorough investigation.

The Valley Gold Company, W. E. Pedley manager, has given up working their placer ground and has bonded several quartz mines which they intend to develop this winter. They will employ about twenty men and are now getting in their winter supply of provisions.

The Golden Slope Mining Company is making a road into their gold mines for the purpose of bringing in reduction works at an early date.

COLORADO.

SUMMIT COUNTY.

A boiler, engine crusher, stamps and the complete machinery is being hauled to the Johanneburg mine, and will be put in position at once.

The Blue Hill mine is at work day and night on Minnie ore, with good returns to Lessees Foote and White.

The Jessie mine has been started up under the charge of Mr. Singer, and the work is being done further to the east than the present workings, with a view to development work. The mill will start up later on.

At the Ouray the water has all been taken out and drifting on the vein is being prosecuted with vigor. A large amount of ore is being taken out and thrown over the dump for future treatment.

The Jack mill is working right along with the stamps and cyanide. Manager Boone talks of putting in crusher and rolls in order to expedite work.

CRIPPLE CREEK.

For the first half of October the output from the Maloney lease workings on the Orphan Belle aggregated 119 tons, all of the ore going to the smelters. The new find in the Herrington lease is rivalling the Maloney one in richness and the width is greater. From 10 to 15 tons are now being broken daily with the machine drills in driving the levels both ways from the crosscut.

The management of the Anaconda positively refuse to give any more leases on ground owned by that company, and as fast as the time of the few miners working under tribute expire they are politely invited to leave the property. The reason for this action, so the story goes, is due to the fact that an option for the entire estate is out and within sixty or ninety days the company may be asked to give possession and that in order to make it easier, did not want to be bothered with any lessees.—Mining Industry and Review.

IDAHO.

It is possible that years must elapse before the mineral wealth of the State will be fully known in its true magnitude to the outside world, but when it is once properly set in motion many of the now barely known districts will give to the operators the largest rewards ever turned out of any State in the west, says the souvenir edition of the Western Mining World. But as yet only the means of conveyance to a great portion of the State is by canoe or stage.

There was considerable talk of railroads, and especially that of the one from Butte, Montanas, to San Francisco, which proposed building from Butte, up Big Hole, then over Gibbonsville divide, down Dahnolaya creek to North Fork, up North Fork to the main Salmon, and then 200 miles up Salmon to Bear Valley, and then by some means to Cape Horn and Boise City, thence to San Francisco, but it has never materialized. Such a road would be a paying proposition, and until it is built, or some other one in another direction, certain rich mineral districts must lie dormant.

A well known writer, in speaking of the gold deposits of the Salmon river and adjacent districts, says there is sufficient ore in sight to run 500 stamps for twenty years. This silent and unprofitable state arises wholly from the fact that there are no roads leading into this district, and again, the ores, though rich in gold, are base, and cannot be treated by the simple milling process. The removal of these two obstacles would leave room for the profitable employment of several thousand miners and a splendid return for the capital invested.

The Mullen mining district ought certainly to be one of the most prosperous sections in the whole State of Idaho, but owing to difficulties existing between the miners and the owners some few years ago nearly everything is at a standstill, and in consequence of which the camp has had a set-back that will take years of hard work to re-establish its old prosperity.

Mullen was located in 1885, but was not incorporated until 1893. It is located in the midst of a mountainous country, as nearly all Idaho mining camps are, surrounded by good timber lands and plenty of water.
Among the most prominent mines and mills is the Mining and Milling Company’s properties. The mill has a capacity of 300 tons per day, and all ore is conveyed from the mine to the mill by a narrow-gauge railway two miles and a half long and a gravity tramway. The mine is worked by a series of tunnels and a nominal cost. The You Like and Just What are located about four miles south of the morning of the mountain, and are worked by the same company. The ore is sent to the mill by a gravity tramway railroad. The mine is opened by a series of tunnels similar to the morning tramway. We show here a view of the Morning Concentrator.

Another very prominent mill is the Hunter Concentrator, which has a capacity of 250 tons per day. It is nearly one mile from the mine and the ore is conveyed in a bucket tramway. When in full operation this property employs from 100 to 150 men. The mill is worked through tunnels, of which 400 feet have been run, and shows a back of some 500 feet. Drilling machines are worked exclusively. There are numerous other valuable prospects in the immediate vicinity of Mullen, which will, with a little development work, prove to be valuable mines.

The formation of the district is a typical gold ledge—quartz and clay slates tilted to a high angle and traversed by dykes of diorite.

While mining so far has been confined chiefly to the neighborhood of Mullen, there are fair prospects for a larger output from the more distant properties, as the whole district is sprinkled with gold-bearing ore, some of which will doubtless develop into profitable producers.

One of the most important finds that has been chronicled for some time is the large ledge of marble about six miles from Kendrick, on the Clearwater. The body of marble was discovered by Doc Ferguson, a former resident of Kendrick, who, since discovering it, has sent samples to different points, and received the most favorable replies as to its merits as a marble. A block of the marble was taken to Kendrick some time ago and polished in fine shape.

Henry and Lou Johnston have made a strike on the South Salmon. When Henry came back to Weser from last season’s trip he said he was going to strike it this year and he started out with all confidence last spring. The prediction has been verified, to judge from the samples sent by mail with a letter to a friend, which consisted of two pieces of quartz fairly glittering with gold over its entire surface. The letter states that they had only sunk eight feet on the vein, which was about a foot wide. From the bottom of the hole, Henry writes, he took a piece of quartz as large as he could lift, from which the gold projected in knobs, the piece evidently containing several hundred dollars.

Little is heard in regard to the placer mines along this line of War ren, but though little spoken of, they are in many cases of the same importance and value that it seems strange that more extensive capital has not found a resting place in them. On this creek is found nearly all the most valuable of the promising placer propositions in the northwest. This consists of what is known as “Sees Meadow,” twelve miles this side of Warran. It has been the subject of much discussion as one of the original company are interested.

The property known as the Gold Hill, about one and a half miles southwest of Radersburg, is another of the very little attention in that vicinity, owing to the large amount of free gold that is daily being taken from it. It is estimated by conservative old-timers that the richest part of the vein, if properly saved, will yield five to one hundred and fifty dollars per sack. This Gold Hill is by no means a new discovery, having been worked previously to nine or ten years ago by the Omega company, but it was allowed to go by default. They had sunk a shaft some forty five or fifty feet, and were just beginning to understand what was in store for them when the work was discontinued to them to hide their find, which they speedily and to all appearances effectually did by filling the shaft up; but the eagle eyes of Morning Concentrator and others were too experienced to be thus deceived, and when the pickaxe god- dess, that is a stranger to so many, guided their footsteps near the hidden treasure, they found an old man, who had been an investigation by cleaning out the old shaft, at the bottom of which they found a well-defined lead of dolomite of pyrites assaying some 50 to the ton, of gold. The main lead is some three feet wide, and is said to be a fine concentrating ore. On the hanging wall is about two and one-half inches of silicious quartz, which is literally alive with free gold.

The output of coal at Johnson & McCarthys mine, at Chestnut, is again assuming the proportions it maintained throughout the summer. The Northern Pacific is again a large customer, and their coal trains will soon again have to be placed in operation. The railroad company is putting in extra side tracks and will have a depot erected in less than thirty days.

The United Smelting and Refining Company, lessors of the Broadwater, is contemplating a piece of property that will in getting its ore down the hill very much cheaper than the present mode of hauling down by team, that is, by putting the tram away from the lower tunnel to the railroad track. Mr. Henley, the superintendent, has had this in view ever since he took charge; but the old management did not feel like undertaking the proposition of putting $5,000 or $4,000 into the scheme when the price of silver might force the mine to shut down at any time. The smelting company apparently intending to keep right on extracting ore, regardless of the price of silver, has taken the matter up seriously, and the appearance of Mr. Henley, on behalf of the company, before the council last week to obtain permission to cross the streets, was a forerunner of their intentions. At present it costs the company 75 cents per ton to haul the ore down, besides cost of filling up timber and supplies. If a tramway is put in, it may be reduced to about 8 or 10 cents; in other words, at the present rate of shipping, the new machinery will pay for itself in about three months by the saving effected. Two schemes are being figured on, a tram with two five-ton cars, and a bucket system.

OREGON.

A Cyanide Plant for Ashland.

Mention was made some weeks ago of the bonding of 2000 tons of tailings owned by the Ashland Quartz mill, to Portland partier, Messrs. A. T. Caldwell and G. W. Inglis. The sale has been so far completed that Mr. Caldwell is expected here shortly to arrive by a Denver expert, to commence the building of the plant at Ashland to work the tailings by a patent cyanide process which Mr. Caldwell is represented to have made. A test was made by the purchasers of 100 pounds of ore at the Ashland mill, and the result is highly pleasing with the result that they possess losing no time in putting in the plant, which will have a capacity of 500 tons per day.
FOREIGN MINING NEWS

BRITISH COLUMBIA.

A description of the mines contained in this far-famed section would fill a volume, so rapid has been the development in the past few years. This country, taken as a whole, is one of the most wonderful mineralized sections on the face of the globe.

In 1894 there was practically no ore shipped out of Trail Creek district. In 1895 the ore taken out of these mines amounted to 21,000 tons. The output for 1896 was 98,000 tons. From January 1st to August 28th, inclusive, the production of ore was 51,891 tons, of which the Le Roi produced 35,749 tons, the War Eagle produced 6,538 tons, Columbia and Kootenay 2,140 tons. The Iron Mask shipped 2,324 tons of rich ore. The O. K. shipped 172 tons and milled in camp 2,472 tons of ore from January 14th to June 19th inclusive. The balance of the production is credited to well known mines of the Trail country, such as the Jumbo, Josie, Cliff, Centre Star, Red Mountain, Evening Star, Giant, I. X. L., etc.

The Rossland district, of which so much has been written, is located in West Kootenay, near the boundary line of the United States, bordering on Lower Arrow lake. The rich district in and around Rossland, or Trail creek, is but a fraction, and a small one, too, of the vastness and extent of the mining district included within the Canadian border. This does not detract anything, however, from Trail creek's fame, for there is no mining camp in the West which has so suddenly risen into prominence. At the present time Rossland is shipping a moderate total, aggregating 1,295 tons weekly.

Thomas H. Fraser of Vancouver, B. C., says: During the last twelve months the country has settled down to legitimate mining, and there is now more real mining going on in British Columbia than at any time in its history. The Rossland district, I am convinced, will in the course of the next twelve months come to the front again, and my reason for thinking so is that better transportation facilities, and smelters built in close proximity to the mines, will enable the owners of low grade properties to go on with development work.

Of course more capital will be required for working the low grade propositions, as they must be worked on a large scale to make them profitable, but as mining proceeds and depth shows increased value of the ore, this capital is bound to come.

The hydraulic mines in the vicinity of Nelson is also a branch of the mining industry of British Columbia that is well worth mentioning. The company that has a lease on the hydraulic gold claims on Forty-nine Mile creek, just above the Nelson Hydraulic Company's property, will demonstrate by a ten foot shaft which has been sunk in an effort to reach bedrock, that it is only in its infancy as yet, and from good authority it is ascertained that the gravel is over fifty feet deep. Mr. Bennett, one of the lessees of the company, is of the opinion that bedrock has never been reached of Forty-nine Mile creek, and that the Nelson Hydraulic and other companies have been working rim rock.

The smelting and concentrating plant of the Kootenay Mining and Smelting Company, located at Pilot Bay, on a peninsula nearly in the center of the east shore of Kootenay lake, which is one of the first plants of British Columbia, is also a great feature in the advancement recorded. All ore and material used here are unloaded at the wharf and carried to the different departments by tramways. The Blue Bell mine is the principal source of supply aside from that of custom ore. This mine is located some eight or nine miles distant, and the ore is transported by barges from the mine to the smelter. Pilot Bay is now of much importance to Kootenay, indeed to British Columbia, as it is the central point to a vast mineral country. Just south of this point is the Hall mines, which produce in the neighborhood of 6,210 tons of ore monthly, yielding something like 522 tons of matte, containing 249 tons of copper, 141,860 ounces of silver and 98 ounces of gold.

The following item, taken from a late issue of the British Columbia Mining News, will demonstrate the coke supply for British Columbia:

"The coke production of the Duncan smelter at Comox, Vancouver Island, is so steadily enlarging in response to the growing demands of the mine country, that Messrs. Dunsmuir are about to build a large ferry steamer to carry this smelter fuel from Comox to Vancouver, whence it is forwarded by the C. P. R. R. to mine country points. The steam ferryboat now under construction will probably also be followed by a second, designed also to carry passengers and cattle between Nanaimo and Vancouver. Soon, too, the Crow's Nest coal measure will be utilized for coke production, which is certain in the early future to become a very important by-products industry of the Province."

An awakening to the fact that the mining industry is the chief source of wealth and that in it lies the future of the Province, is now becoming general; well might it be said it is yet difficult to foresee the amount or the end of the era of prosperity and expansion which is fairly under way.
MEXICO.

President's Message.

The number of mining grants embracing new properties, issued during the period embraced by this report is 715, covering 7,775 claims of one hectare each. The total number of mining grants issued since the coming into force of the law of June 25th, 1892, is 7,719 while the mining property located under such grant amounts to $3,047 claims.

The exportation of ore increased last fiscal year to a value of $74,000,000 in round numbers.

The exportation of silver in its different forms was practically the same in the two latest fiscal years, while the exportation of gold in the fiscal year 1896-7, was nearly a million dollars more than in the previous year. The exportation of antimony, lead, copper and coal increased and tin ore and zinc also figured among the exports.

Mexico.

The Dona Rosa mill in the district of Temascaltepec has been rented by Mr. Millan, who is running the plant on custom ores and shipping the concentrates. The Kincon company, the Quebradillas Co. and the Protecora are also shipping ores and concentrates.

In the district of Sultepec, the "zona minera de la Barranca" has recently made two successful runs with their smelter. The resulting mate was sold to the local agency of the Lewis Company.

In the district of Zacualtipan, de Alcarr mine, as also the mina de la Socavon are both in bonanza. There is more activity in this district than usual.

Sonora.

The Indians who work in a crude way in the gold placers, only operating when in pressing need of money, get large returns for very little labor, and an explorer who has recently been through the remote regions states that Sonora will eventually equal California in its palmy days as a gold producer.

Hidalgo.

It is estimated that last year the output of silver from the Pachnco mines was fully $8,000,000, of which $5,000,000 was treated in the vicinity and the rest in the form of ores was shipped to the United States and Europe. It is reported that the principal lode of the La Reina mine has been cut with a width of one and a half meters. The ore runs ten to forty marcos to the monton. The marco is $8 and the monton is 2,000 pounds. The shares, however, at $14, are now considered to be worth $25, and may soon jump up to $50.

Michoacan.

Messrs. Rothschild have acquired a vast copper deposit situated in this state. Some French engineers are at present studying the best modes of exploiting this section, and are surveying a line of railway to connect it with the Mexican National Railway. Other parties are negotiating the purchase of another copper deposit, owned by parties of the City of Mexico which is regarded as one of the best in the state.

PERSONAL NEWS ITEMS.

B. S. RYETT, who has been in Bennett, Idaho, superintending some place mining enterprises, has recently returned to Lake City, Utah.

G. A. F. MOLENKAMP, professor of mineralogy of the University of Amsterdam, has been appointed state geologist to the South African Republic.

PROF. JAMES M. CRAFTS has been appointed professor of the Massachusetts Institute of Technology, to succeed the late Gen. Francis A. Walker. Professor Crafts holds the chair of organic chemistry, but has been acting president of the Institute since the death of General Walker, says the Engineering and Mining Journal. He was born in Boston, Mass., in 1839, and graduated from the Lawrence Scientific School at Harvard in 1859, after which he spent four years in Germany and France, studying chemistry. He received a medal of honor from the French Government for his discoveries in that science. He returned to America in 1865, and after two years' teaching at Cornell University became associated with the Institute Technology.

T. E. HOKESWAN was in Butte, Montana, last week, examining the newhouse tunnel for the Exploration Company of England.

J. B. SELMAN, a noted mining expert, of Boston, Mass., has been examining some East Kootenay, B. C., mines.

HORACE P. BROWN has gone to Mercur, Utah, where he will superintend the erection of his patent furnaces and the Lumia gas producers for the new De La Mar Golden Gate mill. Brown can be addressed at Mercur, Utah, until January 1st.
The chief object of the assayer, whether in the capacity of private work for a mining company, or in a custom establishment, in a city or town, is speed and dispatch in making his assays. The first necessity, for expeditious work in making the assays is a compact, easily and quickly-heated furnace. The experience and inventive skill of Messrs. Lonergan & Calkins, assayers, 127 W. First St., Los Angeles, have given to this profession such a boon, in their combined melting and muffle furnace, of the gasoline fired type, which, for compactness and heating power, together with the advantage of being a good oxidizing furnace, places it superior to all others in the market. The three illustrations presented hereewith show a cross section of the build and ideal view of the operation of the furnace, with the melting and cupelling operations in progress at one time, with the use of only one burner. Another one of the illustrations shows the swivel plate and knock-bottom. The furnace being built to revolve on a central pivot, so that either end can be used. If necessary, the bottom of the furnace can be quickly removed and cleaned through a trap door in the melting part, making it possible to recover bullion split, in a very few minutes, without disturbing the brick work of the furnace. The other illustration shows the sheet iron hood and damper, by means of which the oxidizing power of the furnace is under complete control of the operator, as a continuous flow of fresh air, regulated by the damper is passed through the muffle. In the cut, the burner is at the melting end, and also heats the muffle, which is ready for use when the fusion is over, thus saving one-half of the fuel and time. By turning the furnace round on its pivot the muffle alone can be used, or melting also conducted as desired. These furnaces have long ago passed the experimental stage in their construction, as the number in use and the increasing demand are the best guarantee of their appreciation and worth to assayers. The owners have wisely placed the price at the reasonable figure of $20. For further information, address the inventors, as given in our advertising columns.

Electro-Magnets to Move Heavy Metal Beams.

Electro magnets capable of picking up a load not exceeding five tons are now used by the Illinois Steel Co. in its works at Joliet to transfer iron or steel beams or plates from one part of the shop to another. The amount of electricity necessary to give a magnet enough drawing power to make a five-ton load adhere to it is only four amperes at a pressure of 240 volts, or about one-tenth of that, required to move an ordinary trolley car on the level. The magnets used are in the form of the old-fashioned horse-shoe. The poles of the horse-shoe are 7½ inches apart and are connected at the upper end by a soft steel plate one inch thick. The poles themselves are each ten inches long and are elliptical in cross section, being twenty-four inches in depth by three inches in width. The upper 7½ inches of each pole are covered with coils of insulated copper wire, through which the current flows, to a depth of 1½ inches. The working of the magnet is simple. When a plate or beam is lying anywhere else every day with the improvement in electrical apparatus.

To guard against accidents the insulated coils are enclosed in water tight brass casing, and the whole magnet is covered in with half-inch steel. If the five-ton electro-magnets in the Illinois Steel Co.'s works prove a success when tested by long enough time, larger sizes will be employed. When used in connection with electric cranes, which are now becoming common, only two hand switches will be required to move iron or steel loads. Of course, loads of other materials could be picked up equally well by an electro-magnet, with a heavy keeper and a hook attached to it for the ordinary sling.

The Colorado Iron Works Company reports the following shipments of Mining Machinery during the last week. One carload mining machinery to Boston Battle Mountain Mining Co., of Victor, Colo. One carload machinery to Metallic Extraction Co. of Cyanide, Colo. to five stamp mill to Westchester Mining Co. of Breckenridge, Colorado.

J. S. MacArthur has taken out United States patent No. 592,153, dated October 19th, 1897, upon an improvement in the precipitation of gold by means of zinc from cyanide solutions containing copper, which is ordinarily precipitated on the zinc, interfering more or less with the precipitation of gold and silver. The zinc is previously coated, according to the new specifications, with metallic lead, the shavings being conveniently prepared by immersing them for about a minute in a solution containing 1 per cent of lead in the form of acetate or some other suitable salt. In the case of solutions containing mercury, metallic lead, preferable in the form of shot, is added, the claim being that the mercury and possibly a little of the silver will be precipitated on the lead, while the precipitation of the gold and the remainder of the silver will proceed without inconvenience on the zinc.
THE MARKETS.

New York, Oct. 27th, 1897.

The following are the Silver, Copper and Lead quotations for the last two weeks:

<table>
<thead>
<tr>
<th></th>
<th>Silver</th>
<th>Copper</th>
<th>Lead</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct. 16</td>
<td>$15</td>
<td>$15</td>
<td>$15</td>
</tr>
<tr>
<td>Oct. 17</td>
<td>$15</td>
<td>$15</td>
<td>$15</td>
</tr>
<tr>
<td>Oct. 18</td>
<td>$15</td>
<td>$15</td>
<td>$15</td>
</tr>
<tr>
<td>Oct. 19</td>
<td>$15</td>
<td>$15</td>
<td>$15</td>
</tr>
<tr>
<td>Oct. 20</td>
<td>$15</td>
<td>$15</td>
<td>$15</td>
</tr>
<tr>
<td>Oct. 21</td>
<td>$15</td>
<td>$15</td>
<td>$15</td>
</tr>
<tr>
<td>Oct. 22</td>
<td>$15</td>
<td>$15</td>
<td>$15</td>
</tr>
<tr>
<td>Oct. 23</td>
<td>$15</td>
<td>$15</td>
<td>$15</td>
</tr>
<tr>
<td>Oct. 24</td>
<td>$15</td>
<td>$15</td>
<td>$15</td>
</tr>
</tbody>
</table>

Owing to a scarcity of spot silver the price has held steady. The refusal of England to cooperate with the United States and France would drive lower prices a little. Under the present administration there is no hope of an advance of the price of silver to any great extent. The United States Army Office reports the total receipts of silver at $345,000 ounces for the past two weeks.

COPPER.

The copper market is very disappointing this week. Copper is quoted in New York at 31¢ per pound; electrolytic copper in casks, 30¢ per pound, and in bales at 31¢ per pound, and copper at 30¢ per pound.

LEAD.

The lead market in the lead market has caused a decline but was steady at last reports. The quotations were $3.90.

Nickel.

A very satisfactory demand for spelter is reported, but prices do not seem to advance much. The St. Louis market is quoted at $4.00 and the New York market at $4.50.

ANTIMONY.

The quotations are 74¢ for Cockroft's, 74¢ for Hallett's, 74¢ for Hallett's, 74¢ for Japanese, and 74¢ for U. S. Mint.

TIN.

There has been some movement, but no change in prices can be reported. New York quotations for tin lots are 73¢ and 83¢ per pound and for smaller orders 85¢ and 83¢.

CHLORIDE OF SODA.

The tin market remains quiet but steady and deliveries continue at rather a satisfactory rate. New York quotations for spot are $4.00.

Platinum.

Prices are firm at $14 and $15 per ounce in New York. For chemical ware, best hammered metal, 35¢. American of New York follows the following quotations, the prices given below being representative of orders of over 250 grams, for orders of 100 and less for 250 grams and for orders of less than 100 grams. Chromium and nickel, 5¢, 5¢, and 5¢ per gram. Wire and foil are 5¢, 5¢, and 5¢ per gram. Wire and foil are 5¢, 5¢, and 5¢ per gram.

Jewelry.

The market is steady with some little trading. The New York quotation is $37.50 per flask. San Francisco quotations are $38 for domestic consumption.

Akalni.

Domestic, 56 per cent., 65¢ for 50 tons and over and 75¢ for 100 tons; 55¢ per cent., 75¢, 80¢ per cent., 100 tons, and 120¢ for jobbing lots.

Carbonyl SODA.

48 per cent., 65¢, 5¢ per cent., 100 lbs.; 55¢ per cent., 80¢, 75¢, 80¢ per cent., 100 lbs.

Bicarbonate of Soda.

English, 3¢ per cent., per lb.; American, 1¢ per cent., 50¢ per cent., 100 lbs.

Chlorate of Potash.

$0.67 and $0.67 per 100 lbs.

Acids.

In almost every line of the acid trade the demand has been rather good, for unchanged prices. Prices are per 100 lbs. in New York and vicinity in lots of 60 carboys or over. Quotations are as follows: Acid, 75¢, 75¢, 75¢, 75¢. Acid, 75¢, 75¢, 75¢, 75¢. Acidic, 75¢, 75¢, 75¢, 75¢. Chloroform, 75¢, 75¢, 75¢, 75¢. Nitric acid, 75¢, 75¢, 75¢, 75¢. Perchloric acid, 75¢, 75¢, 75¢, 75¢. Sulfuric acid, 75¢, 75¢, 75¢, 75¢.

Gold.

The demand is good at San Francisco with no change in quotations. For Hercules No. 1, from 17¢ to 27¢, according to strength and quantity. No. 2, from 1¢ to 11¢, according to strength and quality.

COD.

The market is quoted as follows:

<table>
<thead>
<tr>
<th>Kind</th>
<th>quotation</th>
</tr>
</thead>
<tbody>
<tr>
<td>English, in bulk</td>
<td>3¢</td>
</tr>
<tr>
<td>in sacks</td>
<td>3¢</td>
</tr>
<tr>
<td>in bags</td>
<td>3¢</td>
</tr>
</tbody>
</table>

ORAN.

The San Francisco market is unchanged. The market is quoted as follows:

<table>
<thead>
<tr>
<th>Kind</th>
<th>quotation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw</td>
<td>3¢</td>
</tr>
<tr>
<td>Powder</td>
<td>3¢</td>
</tr>
<tr>
<td>Lump</td>
<td>3¢</td>
</tr>
</tbody>
</table>

THE MINERAL OILS.

Quotations are given below for New York delivery:

<table>
<thead>
<tr>
<th>Kind</th>
<th>quotation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gasoline</td>
<td>3¢</td>
</tr>
<tr>
<td>Kerosene</td>
<td>3¢</td>
</tr>
<tr>
<td>Turpentine</td>
<td>3¢</td>
</tr>
<tr>
<td>Benzine</td>
<td>3¢</td>
</tr>
<tr>
<td>Petroleum</td>
<td>3¢</td>
</tr>
<tr>
<td>Toluene</td>
<td>3¢</td>
</tr>
<tr>
<td>Tersol</td>
<td>3¢</td>
</tr>
</tbody>
</table>

CHEMICALS.

The market shows no new features this week.

The makers of cyanide of potassium are sold ahead for the next six months. This article is quoted at 25¢ 25¢ according to quantity. Quotations, generally, are as follows: Cyanide of Soda.

<table>
<thead>
<tr>
<th>Kind</th>
<th>quotation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soda</td>
<td>3¢</td>
</tr>
<tr>
<td>Sodium</td>
<td>3¢</td>
</tr>
</tbody>
</table>

The demand for nitrate of soda continues very quiet and quotations are $1.02 or $1.02 per pound.

W. T. SMITH & JAMES IRVING

SMITH & IRVING, FORMERLY W. T. SMITH & CO.

Gold Refiners and Assayers.

Bullion at any time may be bought and Cash paid for the same day it is received. We guarantee two (2) grams on every sample left with us. Our Mr. Smith owned and operated Sealing Waxing, Refining and Chemical Works in Los Angeles, Cal.

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FINANCIAL NOTES.

Imports of specie by water at San Francisco in September were $3,560,000 and $2,461,000 in August. The imports of specie by water during September 1897 were $3,560,000 and $2,461,000 in August. The statement of the United States Treasury, on Thursday, October 30th, shows balances in excess of outstanding certificates as below, comparison being made with the balances for the corresponding date last week:

<table>
<thead>
<tr>
<th>Kind</th>
<th>quotation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gold</td>
<td>3¢</td>
</tr>
<tr>
<td>Silver</td>
<td>3¢</td>
</tr>
<tr>
<td>Copper</td>
<td>3¢</td>
</tr>
</tbody>
</table>

Total: $7,120,000

All specie went through the Customs House. A much larger quantity was received overland, which did not pass through that agency.

The statement of the United States Treasury, on Thursday, October 30th, shows balances in excess of outstanding certificates as below, comparison being made with the balances for the corresponding date last week:

<table>
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<td>Silver</td>
<td>3¢</td>
</tr>
<tr>
<td>Copper</td>
<td>3¢</td>
</tr>
</tbody>
</table>

These balances are included in the Treasury accounts and are subject to the usual deductions.
MINING STOCK MARKETS.

LOS ANGELES, Oct. 20, 1897.

Market on the Exchange is firm, active and looks well. Brokers are kept busy guessing the probabilities of wedge stock and the possibilities of new management. During the past week N. F. Wilshire has been elected president and Mr. Plant is President of the Farmers & Merchants Bank, secretary and treasurer of this company, and since the election the stock has advanced quite a little, going up about a cent and a half. Many believe, now N. F. Wilshire will be placed in such strong hands, that the ultimate outcome of the property is better than it ever has been. Physically, this mine is looking splendidly. Mr. McGaughan, the superintendent, is down from Randalph and reports everything in good shape and plenty of ore in sight.

The change for the week in the Aurelia Co., if practically handled, would be a great factor in the coming winter in the speculation on the Exchange board.

Magganite is strong at 354, with a few thousand changing hands daily. East Amargosa has surprised all holders by moving up to the eight-dollar mark, with no stock offered less than fifteen dollars per thousand shares.

The reports from the different companies listed on the Exchange, are nearly all up and can be seen by any broker of the Exchange at any time. Copies of these reports will be furnished to outsiders by the secretary's signature, by N. F. Wilshire, dressing a letter to him. All the companies have money in the treasury and considerable stock on hand for the further development.

The party of inspection which left for the Randalph Co., in the week, reports that they found all the properties located from the Randalph District in good condition; some, of course, being more promising than others, but all still well for the amount of work done.

A nice little story was current in Mohawk Co. on Monday's market by the short selling of 25,000 shares by one of the brokers, who was taken by the impression that it was some other stock. He has been, however, all right by paying the successful buyer a good round commission and taking considerable cash off the market.

SAN FRANCISCO, Calif., Oct. 26, 1897.

This market this week was entirely featureless. There was no sale in Alpha. The shares of Ollier are showing very good results. The Potomac began to show more activity and made quite an advance. Hale & Noyes was much better selling at 74 1/2. On the Laytonville, the Sierra Nevada they are taking some ore, also on the 20 foot level. There is no change in Utah.

In the Consolidated Virginia, they are doing excellent work. The 1450 foot, 1650 foot and 1350 foot levels, which shows signs of working well. The work on the Cloth and Gould & Curry show no change. In Yellow Jacket some good ore is said to be found recently in the 1900 foot level. They are now opening a 600 foot level in the main. On the old Central tunnel they are drifting south.

Between the 650 foot level of Belcher and the 700 foot level of Crown Point they have made some air connections. Slight additions are being made in the Gold Hill shares and stock is being traded. There was an assessment level by the Kentuck this week. This shows that they intend to prospect their ground and not wait for development work of Yellow Jacket and Crown Point.

They are still drifting east in their 1900 foot level in Mexican. Cross tunnel east in their 700 foot level in Ophir still continues.

SALT LAKE CITY, Utah, Oct. 29, 1897.

During the week the mining exchange was very active and in the early part of the week there were some heavy sales in the stock which shows a net return of $7.25 per share, which is about the same as what has been received during the last few days. It is reported that brokerage fees in the market are about the same as they were, and that there are no sales in the market.

The directors of the White Pine mine in the Utah district have declared a dividend of $24,000, making $64,000 in all dividends to date. It is stated that the returns from 14 cars of ore shipments have amounted to $31,000, and that the remaining $700,000 of ore remain to be collected, when another substantial dividend shall be declared.

MINING & METALLURGICAL JOURNAL.

MINING & METALLURGICAL JOURNAL.
NEW IMPROVED
McGlew Ore Concentrator

IN USE IN
California Oregon Washington Nevada Arizona New Mexico Central America Australia

Patented Sept. 1893

We guarantee these machines to handle an average of ten tons per 24 hours, and to do cleaner and closer work than any Other CONCENTRATOR in use.

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Spadone's Concentrator Belts

This illustration shows the edge flaring outwardly as it passes over the pulley. This relieves the strain from the top and bottom of the edge by directing the strain automatically to the inside face of the edge. Therefore all belts have been so constructed that when they pass over the pulley or roll, a direct strain comes upon the top or at the back of the edge, causing the edge to break away from the body of the belt. A unique feature of the Spadone Concentrator Belt is that the Kevlar is on both sides, the center being the Preventive Belt edge. The Spadone Belt is the only one now on the market that will stand up under the severe service of Concentrator Belts. Prices and samples on application.

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Ore Milling and Smelting EQUIPMENTS

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Bates Corliss Engines, Snow Steam Pumps
OIL CITY BOILERS AND ENGINES,
Hercules Gas Engines, Lawrence Centrifugal Pumps
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