

ENGINEERING and MINING JOURNAL.

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AMERICAN INSTITUTE OF MINING ENGINEERS—LAKE SUPERIOR MEETING.

PRELIMINARY ANNOUNCEMENT.

The preliminary arrangements for the Lake Superior Meeting of the American Institute of Mining Engineers have been completed sufficiently to enable us to make the following announcement:

The members living in the East will leave New York on the 20th of August (hour to be announced hereafter), reaching Chicago on Saturday, the 21st, where they will be joined by members from other sections, the party remaining in Chicago over Sunday. On the morning of Monday, the 23d of August, the party will leave Chicago on a special train, via the Chicago & Northwestern Railroad, reaching Marquette the same evening.

Arrangements have been made to have a steamer meet the party at Marquette, on which the members and ladies accompanying them will reside during their stay in the Lake Superior regions, and on which excursions will be made to various points on the lake, including the Copper Regions, Thunder Bay, Silver Islet, and, via Sault St. Marie and the Straits of Mackinaw, into Lake Michigan.

The committee is not prepared at the present time to give further details, but the meeting and excursions will be so arranged that the members can reach New York on their return not later than Saturday, the 4th of September.

Further details, as to route from New York, place of entertainment in Chicago, rates of fare, subsistence in the Lake Regions, and the details of the excursions, will be given in a subsequent circular.

As it is important to know at as early a date as possible how many will attend this meeting, every member who proposes being present is requested to fill out the blanks on the inclosed card and mail it at his earliest convenience. This is especially necessary in regard to accommodations on the steamer at Marquette. Respectfully,

W. P. SHINN, St. Louis, Mo., Chairman,  
 JOSEPH D. WEEKS, Pittsburg, Pa., Secretary,  
 Committee on Lake Superior Meeting.

PITTSBURG, July 24.

\*I.....join the excursion of the Mining Engineers to Lake Superior at.....and will need transportation from.....to.....I will be accompanied by.....ladies.  
 Name,.....  
 Address,.....

\* Insert "will" or "will not" as the case may be.

THE Pennsylvania Coal Company's engineers are looking into the feasibility of converting one of the company's gravity tracks into a locomotive road. It is thought there will be no difficulty in the undertaking; and

when it is accomplished, it will furnish an additional desirable outlet for both freight and passengers to the Wyoming and Lackawanna valleys, besides becoming an important feeder to the Erie road and a source of increased revenue to the Pennsylvania Coal Company.

It is announced that General GRANT has accepted the presidency of the San Pedro & Canon del Agua Mining Company. It is also intimated that he may not assume the active duties of the office for some time; in other words, that he will for a time at least become the tool of the promoters, by acting as a figure-head. It has been demonstrated that there is no more important position of trust than that of the presidency of a large mining company, and none where the reputation of a man is more at stake. The day has passed for the public to accept mere figure-heads for mining companies. In the future, there should be demanded from officers their closest attention to the companies' interests, and for any neglect in this particular they should be made accountable.

If the rumors be true—and we have no reason to discredit them—that a highly respectable and responsible Board of Directors has been substituted by the Chrysolite Company, and that some of those prominent in bringing about the recent decline in the company's stock have largely oversold it, there will probably, be some active times in the mining stock market. If the gentlemen named by rumor as having been appointed directors accept the positions, the public may depend upon it that they will manage the mines, and give an honest accounting to the stockholders and the public. Furthermore, the mines will be worked strictly for legitimate earnings, and not for stock-speculating purposes, as seems to have been the case heretofore.

PRICES in the iron market have been advancing for several weeks, and the outlook is very encouraging for a large fall business at remunerative prices. The coal trade is benefited by the improvement in iron and the starting of the regular fall demand. In metals, the "boom" has been confined to tin, the statistical position of which is an encouraging one. In mining stocks, there is more demoralization than depression. The removal of the former will probably bring increased activity and a revival of confidence. The experience of the Eastern public during the past two years should enable it to pick out legitimate enterprises on a fair basis and conduct them as they should be conducted. The investors to this day relate their experience in oil stocks, and yet the oil business has developed to an enormous extent and is perfectly legitimate, with not nearly the attractions that gold and silver mining have.

NEW PUBLICATIONS.

THE MINES AND MINERAL LANDS OF NOVA SCOTIA. By EDWIN GILPIN, Jr., A.M., F.G.S., Inspector of Mines for the Province of Nova Scotia, etc Halifax, N. S. 1880. 8vo, 129 pages.

After giving an outline of the geology of Nova Scotia, the writer describes the mineral resources, and gives some valuable information in regard to coal, iron, and gold, the development of which must have an important place in the future history of the province. Valuable ores of copper have been discovered, but as yet they are almost untested. Among the minerals other than coal, iron, and gold, etc., that have been worked and present themselves over large tracts of country, are mentioned the ores of manganese, gypsum, and barytes; also ochers, brine, marble, etc. Sulphur and arsenic ores receive attention under a chapter devoted to "Minerals applicable to certain chemical manufactures." Another chapter treats of "Minerals applicable to building purposes." Plumbago, fire-clay, soapstone, pottery clay, and kaolin come under the heading of "Refractory minerals." "Materials for grinding and polishing" receive a chapter to themselves.

The author, in his introduction, says:

"In the absence of geological surveys, embracing the whole of the province, it would be premature to venture beyond a bare reference to the districts likely to contain valuable minerals. It may, however, be remarked that I am able to give, from authentic sources, the extent of our coal-fields. The area of the gold districts has been estimated at about 3000 square miles. The iron ores of the province are as yet known only in isolated localities, the total extent of which can hardly be estimated. When, however, it is considered that the ore properties of the only two companies who have turned their attention to the subject cover 55 and 30 square miles without monopolizing their respective districts, the extent of the deposits will be understood. There being comparatively no demand for iron ores, but little search has been made. Should inquiries be raised, doubtless many new deposits would be found."

The description of the various coal-producing districts is arranged in order from the eastern extremity of the province, and treats of the nature of the seams, the uses to which they are applicable, the thickness of the beds, their composition, names of the chief mines, etc. The coal, as far as yet developed, belongs entirely to the bituminous division, and may be subdivided into coking, cherry, free-burning, and Cannel coal. The productive coal measures of Nova Scotia are given as belonging to "the same horizon in the geological sequence as those of England and the United States." The first twenty-nine pages of the work are devoted to coal, shales, and petroleum, and are largely interspersed with analyses and other valuable tables, added to which in the appendix are found tables showing coal

sales in Nova Scotia 1875 to 1879; coal exported to the United States, 1850 to 1879; coal trade by counties; coal produce, 1879; colliery labor returns.

In the next chapter, on "Metals and their ores," gold, iron, and seven other minerals are treated. We have only space, however, to notice the two former.

The gold-fields of Nova Scotia are divided into many districts, embraced in an area which extends from Canso to Yarmouth, approximating some 6500 square miles. These gold districts, comprising large belts of rocks, commonly called granite, extend in irregular, curved bands, and are estimated to cover about one half of the whole area. The writer says:

"The age of the beds holding the auriferous lodes of the province is not yet determined. Geologically speaking, they remain, in spite of many ingenious speculations, an unknown land. At first, they were regarded as middle or lower Silurian; afterward, as Laurentian. At present, adopting the provisional division of the Geological Survey, they are considered of Cambrian age.

"The ages of these rocks, unfortunately, can not be determined by the imperfect and ill-preserved fossils that have been found. Their mineralogical characteristics are not to be relied upon for such a classification, as the strata can not be traced into connection with any supposed counterparts on this continent. Their age can be approximated only by a systematic survey, which would require to be carried over the whole district in question. Although the age of these measures and the associated crystalline rock is an interesting question, and, in some respects, a matter of practical importance, the survey would serve other most necessary purposes, commending it to all who are in any way connected with gold mining."

The iron ores of Nova Scotia are of the most varied species, and many of them are of great purity; but they have not as yet received attention commensurate with their value. The ores form a broad band, extending from one end of the province to the other, and the description of them follows from west to east as they are successively met. Various analyses are given of the different ores throughout the chapter, as well as a short description of the works and property of the Steel Company of Canada, at Londonderry. The chapter concludes with the following remarks:

"When it is considered that the value of the imports (into Canada) of iron, raw, partly and completely manufactured, was, during the fiscal year 1877, \$10,400,000; 1878, \$9,215,000; and in 1879, \$7,916,846, it will be seen that an ample field is open for our iron-workers. When once such operations are commenced, it will be found that many of our ores offer facilities for the manufacture of high grades of iron and steel which can be exported. There can be no doubt that the increasing advantages steamers offer for freighting will cause our ship-builders to consider if they can not build iron vessels here also.

"In this connection, the important fact must not be forgotten that in Nova Scotia, alone of all the provinces of the Dominion, the ores, fuels, and fluxes occur close together, and therefore it is from this province that Canada must draw its future supplies of iron."

Of the copper ores of the province, it is said that "they occur in rocks of every geological age met in descending order from the Triassic downward." They are widely distributed, but so far, there has been little or no systematic attempt made at mining which has been successful.

The other minerals, etc., mentioned above receive each of them a passing notice in proportion to the development attained, and the report concludes with a note on the "Tenure of Mineral Lands" and extracts from the United States tariff of duties payable on minerals.

From our own knowledge, Nova Scotia presents a good and accessible field for the prospector and capitalist in mining; but we think the Nova Scotians themselves (who are proverbially a slow people) are largely to blame that their mineral wealth is not more fully developed. A much greater expenditure of money and time should be devoted to procure for the benefit of the province the advantages of a thorough and exhaustive geological survey.

Of all the monthly magazines, the *Popular Science Monthly* seems to us to maintain in the most remarkable degree the quality of attractiveness in its table of contents. We mean by this somewhat vague epithet that, apart from the mere charm of great names in literature, which often draws us to the perusal of essays in which we would otherwise take no interest, and apart from the spell of serial fictions, which is as potent to-day as in the time of SCHEHERAZADE, there is a distinct appeal to the general reader in the range and timeliness of the topics treated in each number of a popular magazine. In looking over the contents of the *Popular Science Monthly*, our first feeling concerning almost every article is a desire to read that particular article. In many cases, a second glance gives us a second reason for this desire, by revealing the eminence of the author as an authority on the subject. But the first pleasure is due to an appreciation of the bill of fare, not a recognition of the cook.

Taking the August number as a sample, we find, besides the editorial and miscellaneous matter, a series of fourteen articles, nearly all of which address themselves with both entertainment and instruction to the general reader, not possessed of special scientific knowledge, yet capable of appreciating plain and untechnical statements of scientific observations and theory. One of the most remarkable of these is the article of Mr. HENRY GEORGE on the Kearney Agitation in California, which may be called a study in social science. While we are constrained by personal knowledge to regard Mr. GEORGE'S representation of the facts as not wholly unbiassed, since we think he underrates both the peril and the patience of the mercantile classes in San Francisco, we must admit

the wonderful force of his style and the fascination of his argument; and we grant both the suggestiveness and the general validity of his conclusions. The next article is the second of RADAU'S lectures on the Interior of the Earth, in which a most convenient survey is given of the present state of a still-continuing controversy—one of those things for which the student searches in vain in text-books, and must usually compile for himself from numerous monographs. Professor HUXLEY'S little satire on the Method of Zadig makes amusing use of VOLTAIRE'S famous philosopher, though, after all, it adds very little (except a capital illustration about belemnites) to what VOLTAIRE had already said.

An article which will first attract, and then disappoint, the lay reader, is that of Dr. GEORGE B. HALSTED on Algebras, Spaces, Logics. A great many people, whose mathematics stop with EUCLID and the differential calculus, greatly yearn to know what the still higher mathematics really deal with; what sort of conceptions underlie quaternions; what is space of more than three dimensions, etc., etc. Dr. HALSTED undertakes to state the progress of modern mathematics; but the statement is not comprehensible to those who do not already know something of the subject.

Most timely and valuable is Prof. WILLIAM SEE'S short essay on the Extreme Rarity of Premature Burials. It is calculated to do a great deal of good, in allaying the unreasonable fears aroused by writers who have overstated the difficulty of determining the fact of death.

We have mentioned but a few of the contributions in the number before us; but we have said enough to vindicate our praise of the magazine. Long may it flourish, while it bears proof of such variety and excellence!

#### FUEL-RATIOS—VOLATILIZED SULPHUR IN COKING.

EDITOR ENGINEERING AND MINING JOURNAL:

SIR: On turning over the file of the JOURNAL (of which I have been deprived for two months, during my absence in Colorado), I find the letter of my esteemed friend, Mr. McCreath, in yours of June 19th. He is "sorry to find" that I am not convinced; but let him take courage: for since the day when the first educational enthusiast failed in his effort to instruct his maternal relative once removed in the art of extracting the contents of oological specimens by the labial exhaust-pump, the pathway of the too ardent has been beset with such difficulties.

I stated in my first comment on Mr. McCreath's note that I believed—(1) that his method was founded upon error; (2) that his calculations were wrong; (3) that his corrections were immaterial. With these trifling exceptions, I had no word to say against it.

This is why I thought so: (1.) His method, as he has explained it, consists in setting down the same constituent (or part of it) twice in the same column under two different heads; adding all up together and subtracting their sum from 100 to obtain the residue (by loss). Then, in another part of the book (to which no reference is made under the analyses), he gives twenty-five numbers which are to be subtracted from certain weights p. c. printed in the early part of the book and added to certain others—namely, the aforementioned determinations by loss. If subsequent experiments led him to correct his first results, why does he not say so plainly, instead of finding that by too much adding his coal is out, and with all his might and main jumping into another addition to scratch it in again? It is as if the census man, having added up the population of Georgetown, D. C., with that of Virginia, should add to this the total population of the District of Columbia, and, subtracting their sum from the number of souls in the republic, give the remainder as the population of the United States outside of the said commonwealths; and then, in another part of his report, give the population of Georgetown, and state that it was to be subtracted from Virginia and added to the residual United States, to give the correct proportion. I think any one would call this method erroneous, even if the result were right.

(2.) As to the calculations being wrong, I submit a simple postulate, namely: Of two inconsistent numerical statements of the same facts, one must be wrong. (Of course, both may be.) Let it be premised that in every analysis which is referred to in the twenty-five corrections of fuel-ratios tabled by Mr. McCreath (except No. 658 a, p. 92, and No. 664, p. 79, where he has evidently made slight mistakes in addition), the coke per cent is the sum of the fixed carbon, the ash, and all the sulphur. Now, on p. 97, Vol. MM, will be found the analysis of the Mercer Upper Coal, which furnished the basis for the first of Mr. McCreath's corrected ratios. He has (with a notable omission, namely, "Coke p. c. 50-670") given the items of this analysis in his first letter, including fixed carbon (44.048 p. c.), ash (4.635 p. c.), and sulphur (1.951 p. c.), which together make 50.670. Yet in Mr. McCreath's letter of June 19th, he says of this same coal, "Coke contains sulphur .821." One of the statements is certainly wrong, and of course all the calculations depending on it.

(3.) As regards the third, if Mr. McCreath does not admit it (as he seems to do in his first letter), I am willing to leave it to the unfortunates who have read this controversy over a second decimal. Mr. McCreath misrepresents my statement in the table of McCreath's corrections corrected (unwittingly, doubtless). He says, "Professor Frazer's first attempt at correcting my fuel-ratios gave him .996, his second attempt gives .937." These statements are utterly without foundation. What I showed was, that .96 "should be by his own method"  $\frac{44.084-1.951}{48.140+1.951} = .996$ , but I never believed this correct; on the contrary, I believed .937 correct, because it was the quotient of 44.084 (stated to be the p. c. of fixed carbon in my friend's letter of April 24th) by 47.010 (stated in the same letter to be the p. c. of hydrocarbons). With thanks for your courtesy and apologies for taking up so much space, I now leave this subject finally. Yours, PERSIFOR FRAZER, JR.  
PHILADELPHIA, July 14.



## DRY CONCENTRATION.

EDITOR ENGINEERING AND MINING JOURNAL:

SIR: Mr. D. C. Roberts's desire to have his concentrator investigated by actual working tests should be gratified. As he proposes to introduce it into all the prominent mining camps in Colorado, the test should be made in this State. In that event, the writer will engage to be present, to carefully inspect the operations, and to report in full the results obtained. Should the test be made in another State, the ENGINEERING AND MINING JOURNAL can doubtless find a representative who will gladly attend.

Mr. Roberts's theory is correct, and he is regarded as an honest man and an enthusiast on the subject of dry concentration. But we, who studied for eleven years the practical workings of dry and wet concentrators on Colorado ores, see in his machine so many crudities and absurdities, so many fatal defects, that it hardly seems worth our while to argue seriously with the deluded inventor. However, for the sake of fairness and justice, he shall have all the opportunities he wishes in this State to exhibit the practical workings of his machine.

GEORGETOWN, COLO., July 22.

## IS GOLD SOLUBLE?

EDITOR ENGINEERING AND MINING JOURNAL:

SIR: I would like to throw a small brand among our metallurgists, by asking a solution from some of them of the following apparent muddle: I have never been able to believe or to prove that in roasting gold ores, with or without salt, a sub-chloride, or any other soluble compound, as is claimed, could be found. Of course, Rözner's process is based upon the assumption that it can, and at an extremely low temperature it may be possible.

I have taken gold ores that had been roasted at a dark cherry heat, with the addition of 3 to 5 per cent salt. After accurate sampling and assaying, I boiled, first, with water; secondly, with very dilute muriatic acid; and thirdly, with strong common salt brine. Only the last test showed traces of gold extracted, which I explained by supposing that in some way the chloride of silver that had been formed in roasting and leached with the salt included traces of chloride of gold.

I then leached the same lot of roasted ore with a solution of hyposulphite of soda, and found that up to \$10 per ton in gold could be extracted. Now, the question is, Did not (as I firmly believe) the hyposulphite attack the metallic gold? Of course, I know that the usual explanation is, that the sub-chloride is soluble in hyposulphate. But will not somebody please prove this?

At Diamond City, Juab County, Utah, unroasted silver ore is leached with hyposulphate of soda, and the bars produced actually show a gold extraction of from \$5 to \$6.50 per ton.

Now, as far as I know, nobody has ever claimed that chloride, or any other soluble state of this metal, did occur in nature.

It would finally remind the reader that sulphate of iron (peroxide) will also solve metallic gold, especially if the solution contains chloride of iron or sodium at the same time.

E. N. RIOTTE.

## PARLEY'S PARK, LITTLE COTTONWOOD, MARY'S VALE, FRISCO, AND SILVER REEF UTAH.

Special Correspondence of the Engineering and Mining Journal.

The Miller mine, in American Fork, which, in 1874, produced immense quantities of high-grade ore, has been leased by the company to Baskin & Hians, of this city, and was started up this morning. Mr. Hians is a very thorough miner of long experience in American Fork, and he says a week's preliminary work in the Miller will put it into shape so that he can thereafter ship 100 tons of sixty-ounce ore per month. The Pittsburg is working some ten men, and is shipping about ten tons daily. The Silver Bell is also sending down ore. Mr. H. A. Van Waag is driving tunnel into Miller Hill to tap the Sunday lode. The grand scenery of American Fork Cañon is attracting many visitors.

## PARLEY'S PARK.

The new machinery for the Hawkeye hoisting-works is now nearly all on the ground, and will be placed at once. A new shaft has been commenced on the Barrios, the second property east of the Ontario. In the Parley's Park mine, Superintendent Morgan says they have cut the west extension of the Ontario vein. Developments are pushed. In the Ontario, the work of development goes forward steadily, and the east and west lower levels are extending. Work on the Empire goes vigorously forward. Good reports continue to come from the mine. The Tidal Wave, a new property, is hoisting some very good smelting-ore, which is being shipped to the Park City smelter. The Utah and the White Pine continue to hoist ore, and both these mines are daily improving.

The tunnel on the Little Giant has cut quite through the vein, which is twenty feet thick, but which carries only about ten inches of ore that will run 120 ounces of silver per ton. The prospects in Snake Creek District are giving great promise.

## LITTLE COTTONWOOD.

The new machinery in the Emma is running smoothly, and the main shaft from the Bay City tunnel-level is going down as rapidly as possible. The Joab Lawrence is shipping fifty tons of ore daily. The mine looks very well. Developments in the City Rock continue, and fine ore-showings are everywhere made. Smaller claims are sending down small ore shipments.

## MARY'S VALE.

Some very flattering discoveries have been made in this district during the present season, but none of them have been sufficiently developed as yet to warrant a statement as to their merits. In the Deer Trail and in the Copper-Belt, it is otherwise, particularly in the former, which is developed by several thousand feet of workings, and shows a remarkably large body of milling ore. It is bonded to J. T. Gilmer of this city, who will probably make the purchase and then put a mill on the mine.

## FRISCO

has been quiet up to this time, but the two big companies, the Frisco and the Horn-Silver, have resumed vigorous operations. Mr. Thomas Couch, one of the ablest mining men in the country, now has charge of the Horn-Silver, and he proposes to send out all of the ore a sixty-horse-power engine can hoist to the surface. The mine shows immense bodies of milling ore, and a stamp-mill to reduce this is talked of; also additional stacks to the smelter.

## SILVER REEF.

The mines of the Reef all look well, and give promise of permanency. The Christy Company's properties keep the mill running steadily, while ore-reserves are constantly developed. The Stormont is likewise doing good work, and fully sustains its name by pounding out its regular silver bars. The Barbee & Walker continues to improve.

Shipments of antimony ore from the Coyote District will be resumed this month.

The Wood River, Idaho, excitement continues. Several reliable Salt Lake gentlemen will return from there this week, when something definite can be learned about this new El Dorado.

The Walker House of this city is full of notable mining men from the Pacific coast, who have come to see some of Utah's mines.

SALT LAKE CITY, UTAH, July 22.

YOSEMITE.

## SAN JUAN MINING NEWS.

Special Correspondence of the Engineering and Mining Journal.

June has been a busy month in the San Juan country, and it is not too much to say that more and better work has never been done here. All the signs are most favorable, and almost every blast adds new encouragement to those whose faith has been unwavering from the start. There is now only one drawback, and that seems to have come to replace the birth of "wild-cats," which are always brought forth more abundantly in winter, when purchasers are careless and investigation is impossible. Strangely enough, the mining business in this region is to-day conducted on a more just and honorable basis than certain other pursuits. We are largely at the mercy of sharks in trade, though, to their credit be it said, our merchants are commonly but little to blame, at least in this country. Discreditable rumors of "throat-cutting" combinations come to us from Rico; but it is currently reported that these have resulted in commercial suicides, to the prospective advantage of the people. The special phase of extortion in this particular locality is largely confined to freight transportation over a portion of the route from Alamosa to Silverton. As a consequence, provisions and other supplies are lying at the end of the railroad, and almost a winter scarcity exists near the mines. This is partly due to the lack of stock, but is mainly owing to a monopoly of wagon transportation. Pack-trains can not procure enough freight to keep them at work, and they must receive a greater price for what they carry, in order to recompense them for lost time. Silverton is out of flour, and Eureka and Animas Forks are supplying the deficiency to some extent. On the other hand, Silverton must supply hardware and other goods to these same towns. Stage-lines are hard put for feed for their stock, hay being very scarce at \$200 per ton, and oats and corn greedily bought at 8 and 9 cents per cwt. Lumber for building purposes is in good demand at \$30 per thousand; shingles readily bring \$5.50 and \$6; brick being very scarce at from \$14 to \$18. Laborers are plenty, though skilled mechanics are lacking, notwithstanding that there are many more here than ever before. Carpenters are particularly needed, and readily obtain from \$3.50 to \$4 per day. Very many of those applying for work are unwilling to engage at any thing but mining, and many amateur managers are learning to their cost that unskilled hands in our hard rock are dear at any price. Large numbers of men have passed Eureka, who could have obtained ordinary employment for which they were fitted, at highly remunerative wages, but who have steadily refused all offers, being lured onward by irregular rumors that ignorant miners were receiving four dollars a day and board at Silverton. There is no doubt that this state of affairs has been partly due to the injudicious action of a few inexperienced superintendents, who have considered their first duty to their companies to be to put men to work at all hazards; but the fact remains that the best results are achieved under different management. The history of mining development in San Juan shows nothing more clearly than that "haste makes waste."

I would not have your readers think that my eyes and ears are not wide open, because I talk more of principles than of detailed facts of progress. It has been my good or bad fortune to make careful examination of a large number of veins in the San Juan country, over a wide area, and it is because I know well the vast resources of this section that I am the more anxious to put investors on their guard against the insignificant properties which also abound. Within a day's reach of my own headquarters, it is possible to see hundreds of lodes, cross-lodes, "chimneys," "blow-outs," and other quartz-filled crevices, and it would be difficult to find a dozen without locator's stakes upon every available fifteen-hundred-foot length. Now this abundance, this network character, the peculiar geological features, the doubt which every capable mining engineer must share with your correspondent, Mr. F. M. Amelung, whether we are really working in the true "mother-rock" of our veins, should make one very cautious how he undertakes to dig holes for the deposit of the money of himself and his associates. Upon the admitted truth that our knowledge of veins and vein-formation is all too limited, the unthinking masses, practically represented by sanguine and inexperienced managers, will continue to act upon the illogical and disastrous principle that one theory is as good as another, any man's judgment and experience as good as the best. If I could put before your readers a plan of one locality in this neighborhood, which has become my *bête noire*, on account of the frequency of the calls to visit it, and the great rarity of any successful termination of those visits, they would realize more fully the necessity of most laborious and detailed study of a large variety of problems before allowing themselves to loosen the clasps of their portemonnaies.

The mining news for the month is not remarkable, because few but the older companies have large forces at work. Good reports of steady progress come from the North Star (Sultan Mountain), from Aspen

Belcher (Sultan Mountain), from Picayune Gulch also, and favorable developments are announced in Poughkeepsie Gulch, the American Basin, and elsewhere. In Eureka Gulch, the Sunnyside, an extension of the Mastodon, has yielded a quantity of fine-appearing gray copper ore, after a long and weary working through low-grade galena. Other claims in the same gulch are justifying the labor that is expended upon them. Massive veins of galena are showing up in Burns's Gulch. In Niagara Gulch, the Pride of San Juan and Boomerang lodes are working by the Niagara Consolidated Company, with results of favorable character. Dr. J. Reaton is working a force of eighteen men up Minnie Gulch, below Eureka, and Dr. Lawrence has a few men at work in the Animas Valley, directly opposite. J. H. Winspear is working the Moultrie, in Eureka Gulch, and has struck some good ore, bearing bismuth.

The Diamond Tunnel, below Silverton, has at last been sold. J. A. Porter, Superintendent of the San Juan & New York Company, is now ready to buy ore. Sweet's sampling works are sending crushed and concentrated ores to Pueblo at lower rates than heretofore, and it is probable that Mr. Porter's schedule of prices will have to be advanced to compete with outside rates. At last accounts, his price for 100 ounces silver, carrying twenty per cent of lead, was only \$55. Mr. Porter, very justly, however, makes greater difference than has been common here between high and low-grade ores per ounce.

The Red Cloud mine, on Mineral Mountain, has yielded some excellent ore since I last wrote. Much of the success of this property has been due to the efficient superintendency of Dick Trezoria, formerly of Lake Superior.

The rainy season was inaugurated by three days of storm, two weeks ago, since which time we have had very pleasant weather, though hot. For a month or more, we shall now have a wet season, probably.

Stage-lines are now running regularly, and travel is as good as it will be this summer, except by the northern route between Lake City and Animas Forks. Accommodations are very much better than at any time last summer. Visitors are numerous, and daily increasing. There is no hope of a railroad into Silverton this year. The promised completion of the Denver & Rio Grande to the Animas River by July 1st is unfulfilled, and there are now about two hundred miles of road to build to reach that point (Durango), which is over fifty miles from Silverton. Nothing but this coveted means of transportation is needed to give our district a fame abroad unsurpassed by any other mining region.

EUREKA, SAN JUAN CO., COLO., July 5. THEODORE B. COMSTOCK.

#### THE MINERAL FARM (OURAY, COLO.) ORE-DEPOSIT.

Special Correspondence of the Engineering and Mining Journal.

There are two separate and distinct systems of veins running through this property, one of which has a northerly and southerly strike, the other system running easterly and westerly. The northerly and southerly system consists of three large and well-defined veins, from three to five feet in width, and are evidently the results of the same plutonic activity which caused the upheaval of the range; they correspond in character with the main veins of the Sneffels Mining District, the strike being about the same. They are decidedly siliceous in composition, with a gangue of quartzite carrying galena, pyrites, etc. On the other hand, the system of easterly and westerly courses has its origin in a volcanic dike of aphanitic diorite, which breaks through the sedimentary strata of the hillside below. The volcanic nature of this rock is clearly proved by the changes in texture which the limestone and sandstone have undergone. At the point of contact with the diorite, the limestone is changed to a crystalline, granular variety, in appearance approaching the texture of marble, while the sandstone is metamorphosed into a true quartzite for a distance of several feet from the dike-rock. These latter veins are basic in composition, and have a calcareous and barytic gangue. They vary in width from a few inches to five feet, and of themselves are not mineral-bearing. A full dozen of these have been found.

Most of the ore is found massed together at the intersection of the veins of the two different systems. Huge ore-chimneys have been formed at the points of junction by the mineral waters, which latter, not content with occupying the space given them by the fissures, have transformed part of the adjoining country-rock, and impregnated it to such a degree as to make it profitable to be extracted. These ore-chimneys show unmistakable evidence of having been formed by the action of hot springs, which latter may have been the subsequent effects of the same volcanic action by which the dike of diorite was forced to the surface. In support of this argument, a series of huge flat cones of siliceous material have been found at different points of intersection of the two vein-systems, which have been deposited by the spring-waters, and which, in texture, remind me very much of similar terraced mounds encountered in the Geyser Basins of the Yellowstone National Park. There they were forming at the time of my visit, and it was impossible to take them for anything but what they were—the gradual accumulation of the silt or deposit from the overflow of the thermal springs. This deposit-material incloses, in a great many instances, fragments of ore, gangue (lime, quartz, and baryte), and also occasional pieces of the red sandstone met with several hundred feet down the hill, thus proving that the depositing waters must have originated at a great depth. The points of junction of the veins being so near together at times, occasionally but fifteen or twenty feet apart, several of the ore-chimneys have run together at the surface, and have given rise to the erroneous impression that the ore occurs merely as a huge spring-deposit, and that it would prove to have no depth.

It will be seen from the foregoing that this ore-deposit presents geological features of unusual interest. From what I was able to gather in a thorough investigation of the case, I believe that the system of easterly and westerly courses originated long after the first system of veins had been in existence. At the time they were formed by the upheaval of the dioritic dike below, huge mineral springs carrying lime and baryta in solution were formed along the lines of fractures, whose thermal waters, permeating through those parts of the northerly and southerly veins nearest them, leached or washed out the ore, and, partly from a chemical solution, partly from a mechanical mixture, deposited it again along the walls of the circulating channels in a more concentrated form than before. At the surface, of course, this process would be rather more extended than below, and I think perhaps that, with fifty feet

of depth, the character of the mine will change in so far that, whereas the radius of the ore-chimneys at the surface might now be thirty feet in some instances, down below, it would diminish to half that length, the ore of course necessarily being in a far more concentrated form than above. Why these springs, of later origin, should have such an effect on the older veins, is of course as yet an open question. The mine is too little developed to lay down the law on the subject; but I think the action of the basic thermal waters of the easterly and westerly courses upon the acid material of the older veins had a good deal to do with it. In fact, the barrenness of the easterly and westerly courses, when beyond the influence of the older veins, would strongly point to that conclusion.

The country-rock, where unaltered, is a Silurian limestone with *Zoantharia rugosa* corals (forms similar to *Cyathaxonia Dalmani*, Edw., and *Omphyma turbinatum*, Goldf.). I also ran across an *Orthis (elegantula?)*, and, lower down, found a *Pentamerus* cast. This limestone has a steep westerly dip, and underlies, seemingly conformably, a series of red sandstones, which may belong to the Old Red. These in turn are capped by the eruptive rock of the range.

FREDERICK M. AMELUNG.

OURAY, OURAY CO., COLO., July 4.

#### MAINE MINING NEWS.

Special Correspondence of the Engineering and Mining Journal.

The outlook of the mining interest in Maine was never better than it is at the present time. The mines are now in a healthy condition, very different from that of last year, inasmuch as they are worked against great odds, and for all that are continually improving. It shows that there are men at the bottom of the movement now who are proceeding in a thorough and business-like manner, and who know how the affairs of a mine should be managed. The notion no longer prevails that any one could superintend the sinking of a hole in the ground, and take out the mineral and make a success of mining, without knowing the first thing about the formation of veins, or being able to tell one ore from another; and now, with practical and intelligent miners at the head of our mining forces, and with experienced and resolute business men to manage the outside affairs of the mines, it is no wonder that the great mineral wealth of Maine is sure to be developed, no matter what may spring up to hinder the work of advancement. And it is not at all strange that capitalists should be attracted by the natural facilities so abundantly offered for the pursuit of mining at a very small outlay, compared with the Western States. Pay-ore is found almost from the very start; the veins are located where the cost of transportation of ores and of supplies is the cheapest; many of the mines are situated right on the shore, where the ore can be dumped immediately into vessels; while others are but short distances from the shore. Besides this, there are usually good country roads near the mines which lead to some good position for a wharf. Another thing is the extremely low price at which workmen can be obtained, the general price paid the average miner being but one dollar and fifty cents a day, which alone would enable a Maine mine to pay dividends when a Western mine with the same ore could not pay expenses. Another advantage offered to the capitalist to invest his money is the abundance and cheapness of water-power: the hills of Maine, which have so long been a source of trouble and annoyance to the traveler, will now prove that they were not made in vain.

In the Sullivan District, the mines continue to improve. The Waukeag is working on the 142-foot level, and is taking out fine ore from a vein from three and a half feet to four feet wide. It is using an air-drill. The Sullivan is making good progress in both shafts with the aid of the compressed air-drills, although more attention is bestowed on the mill than on the mine, and all haste is making that the mill may be got to running as soon as possible. The Milton has just put in air-drills and will soon begin to drift for the veins. Shaft No. 1 is down 156 feet, and in very hard rock. Shaft No. 2 is down 135 feet.

On Blue Hill, general activity prevails. The Douglass, Atlantic, and Twin Lead are all taking out fine ore. The new mill at the Douglass for the concentration of the copper ore is working satisfactorily, and has been the center of attraction for all visitors. The features at the Gouldsborough, outside of the ore, which is always an attraction, is a new shaft-house, with new steam works. The foundation for the mill has been completed, and the dam is progressing. The Golden Circle is down about thirty feet, and finds an abundance of gold-bearing quartz. The Custer and the Boss of the Bay show fine copper ore. They are both new mines, and will soon be put on the market. The smelting works at the Edgemoggin, which were built when the mine was first started, but which have not been used, were completely destroyed by lightning on the 17th inst.

DOUGLASS.

ELLSWORTH, ME., July 26.

#### ST. JOHN DEL REY MINING COMPANY, BRAZIL.

The fiftieth annual meeting of this company was held in London on June 30th. From a report in the *Mining Journal* we condense the following information:

The profit this year had been unfavorably affected by a reduced output of 7273 tons of mineral, caused by want of suitable hauling-machinery and scarcity of labor. The yield of the mineral was nearly one third of an oitava, or 2s. 6d. per ton better than last year, while the cost was only about £700 more; had, therefore, the mineral raised been equal to the previous year, the profits would have been quite as large. Active steps have been taken to have the necessary underground and surface arrangements completed to remedy this defect, and the new hauling-machinery is now at the mine. The B shaft has been sunk to the requisite depth, and a man-engine has been added to convey the miners to and from their work. Forty-eight thousand cubic feet of timber-props have been effectively placed in the mines during the year, and the property is reported as being in an especially safe condition.

In the first process, over 70 per cent of the gold is recovered, notwithstanding the small proportion of stamped mineral which is amalgamated



(only 9 tons out of every 160 tons, or about 6 per cent). The second process consists in regrinding a portion of the sand in the Morro Velho arrastras; and the third process in regrinding a further portion at the Praia. In these subsequent processes, but little is accomplished. The ore, after stamping, is passed through a sieve with 12,000 holes to the square inch, 90 per cent of the mineral passing through. At the Morro Velho arrastras, of the 160 tons stamped daily, 69 tons are there reground; contents by assay 246 oits., or over 3½ oits. per ton; but only 33 oits. or 477 oits. per ton (less than ¼th) are recovered. In the third process at the Praia, further 42 tons are reground with a recovery of about ½ oit. per ton; but the whole recovery by these two processes is only 54 oitavas, out of a total of 400 oitavas, the assay contents of the sand daily passed through. Seventy per cent of the gold is recovered in the first process, but only about 4 per cent in the two subsequent ones. In March, 628 oits. were recovered, or say 20.2 oits. per day from the 40 stamp-heads. In April, the recovery was 1002 oits. or 33 oits. per day, some mineral having been stamped with the sand. A portion of the sand is stored for future treatment. The American pan and settler have been tried, by which the recovery of gold was satisfactory, but the loss of quicksilver was very great. The calcining-furnace had not been completed in time for any experiments to be made. Considerable additions to the water-power had been made, and future additions were contemplated, which, when completed, would give ample power throughout the dry season.

At the Cuiabá mine, considerable work has been done, and ¼ths of the outlay—the larger portion of which has been on capital account preparing for extended operations—has been met by gold sold.

The mineral stamped during the year has been a fair average of the quality of the lode passed through, and the yield has been 2.3 oits. per ton, the gold realizing 4d. per oit., or 3s. per oz. troy more than the gold from Morro Velho; but the appliances being rude, the unrecovered gold has been large. The new machinery, when up, will somewhat remedy this defect, but the want of an effective mode of second treatment will, it is feared, be felt at the Cuiabá mine as well as at Morro Velho. The average cost of extracting and treating the mineral during ten months of the year has been 13s. 2d. per ton, while at Morro Velho it has been 28s. 2d.; so that a recovery of 3 oitavas at Cuiabá is equal to 5 oitavas at Morro Velho, and large profits have been realized at Morro Velho from a yield considerably under 5 oits. per ton.

A deep adit-level has been commenced, to strike the lode at 32 fathoms below present workings, which will unwater the mine to that depth; it will be 300 fathoms long, of which 21 fathoms are already driven. Efficient boring-machinery has been sent out under charge of Mr. J. G. Cranston, of Newcastle, the inventor of the machines.

These celebrated old mines have a capital of £253,000 in shares of £100 each, on which a half-yearly dividend of 12½ per cent was declared, and the stock is quoted at £230.

PROGRESS IN SCIENCE AND THE ARTS.

Technology.

**Technical Brevities.**—The French are generally so well advanced in technical processes that it is rather singular to notice in our exchanges from that country accounts of a novelty in the way of *treating paper* so as to convert it into a material resembling leather, which is effected by subjecting it in a suitable manner to the action of chloride of zinc. These accounts detail the use of this "hardened paper" as a floor covering, as a substitute for leather in coarse shoes, as material for whip and saw-handles, buttons, combs, and the like. Our purpose in mentioning these facts is simply to observe that this material and others like it have been known and used in this country for years, and in one form have long been sold here under the name of "vulcanized fiber."—Apropos of the above, we may note the recent statement of an alleged improvement in the preparation of *parchment-paper*. It consists in passing the paper, before treatment in the acid bath, through an alum solution, and drying it. Paper that has thus been filled with alum is said to be less liable to be destructively attacked by the acid, and the resulting product is said to possess superior toughness and flexibility over that prepared in the usual manner.—An anonymous correspondent, writing to the *London Times*, has discovered an entirely new and hitherto unsuspected danger that threatens the downfall of the States. It is what our readers would never have suspected—*over-prosperity*. This sapient individual writes that "the country is at this moment in a state of dangerous prosperity. Its vitality and strength exceed all previous estimates. \* \* \* There is no bridle strong enough to hold the excitable American people under such circumstances; and if the downfall of the States should occur, it will be from over-prosperity." Personally, we feel like risking it anyhow, and without knowing much about the ability of our neighbors to hold up under the affliction, we seriously think that we could endure the severest attacks of the disease with heroic fortitude.—Our neighbor, *The Sanitary Engineer*, criticises the suggestion of "the usually well-informed" *Philadelphia Bulletin*, which has been discussing the question of *sewer ventilation*, for raising the old and oft-proposed plan "of connecting the sewers with factory and other chimneys in which there are strong draughts, so that the gas may be drawn off constantly." *The Sanitary Engineer* has repeatedly shown this to be impracticable, and affirms that the plan has signally failed in London.—On the next page, by some mischance, our "usually well-informed" contemporary, *The Sanitary Engineer*, in summarizing the results of his late important research into the cause and prevention of cholera in fowls, refers to the most distinguished living chemist of France as "*Pasteur, the French dentist*."—Recent experiments by Piazzoli appear to establish the fact that the *tenacity of iron* increases on magnetization.—It is reported that Professor Baeyer, whose researches in the direction of the *artificial production of indigo* have made him famous, has discovered a method of obtaining artificial indigo on the commercial scale. The process is reported to have been patented, and the patent has been assigned to the Baden Aniline Company. The indigo is obtained from isatine chloride, which in turn is produced from benzole.—The accident in the *Hudson River Tunnel* has intensified the public distrust of Colonel Haskins's plan of driving a tunnel through yielding

materials, without the aid of caissons and shields, with compressed air as the only reliance against a disastrous cave-in. The plan, when first proposed, was condemned in many quarters as faulty, and liable to originate precisely the kind of accident that has just happened. There are doubtless many locations where a tunnel could be driven successfully on this plan, but it is doubtful if the Hudson is one of them.—Charnay, the leader of the *Franco-Lorillard Archaeological Expedition* to Central America, writes that the Mexican government has granted him all the privileges and facilities he requires in making the proposed explorations, and has, furthermore, appointed a representative to accompany him. He reports having already made one very important discovery. On the other hand, it has been very broadly intimated that the Mexican authorities would decline to recognize the expedition, and would not permit the removal from the country of such archaeological treasures as might be collected. Our readers may draw their own inferences.—The production of the *South African diamond mines* still continues to be enormous, and the statement is made that the quality of the stones, which is frequently marred by a slight tinge of color, is improving.—Our building exchanges note the fact that the year 1880 will be famous in the ecclesiastical annals of Germany; for it will see the final completion of the *famous Cathedral of Cologne*, and also the restoration of the venerable cathedral of Frankfort-on-the-Main, in the electoral chapel of which the ceremony of crowning the German emperors was solemnized for centuries.—The French government has granted to M. Pasteur the sum of 50,000 francs for the purpose of enabling him to carry out his researches on the *contagious diseases of animals*.—The steamer *Gulnare*, of the Howgate Arctic Colonization Expedition, has been towed into the harbor of St. John's, Newfoundland, with machinery disabled. The accident is not serious and the detention will not exceed a fortnight.—An *Arctic Exhibition*, in the interest of Commander Cheyne's project for reaching the pole with the aid of balloons, is at present held at the Alexandra Palace in London, where pictures, photographs, and other things connected with Arctic exploration, are displayed.—Professor Stürmer has constructed a table showing the *length of railways* in the principal countries of the world, and their proportion to the population. In Europe, it appears from this, there are on the average, 4.9 kilometers (1 kilom. = .62 mile) to every 10,000 inhabitants of European nations. Greece has the smallest proportion, having only .08 kilom. per 10,000 inhabitants. Turkey comes next with 1.6; then Portugal, with 2.3; Russia, with 2.8; Italy, with 2.9; and so on up the scale; France having 6.3; Germany, 7.1; Great Britain, 8.1; and Sweden leading them all with 10.8, though her total mileage is not one fifth that of Great Britain. Asia has but .16 kilom. to every 10,000 inhabitants. The United States have 32.9 kilom. to 10,000 inhabitants; the whole of America an average of 17.2; while in Australia the proportion is 10.6.—The engine of the train that was engulfed when the *Tay Bridge* fell has been recovered, and is said to be only slightly damaged. It is stated that it had not been reversed.—The railroads of a country, unless affected by special circumstances, are generally held to reflect more than any other branch of industry the real condition of its agricultural and manufacturing interests. Viewed from this stand-point, the business condition of the United States should be sufficiently satisfactory. The *Railway Age* records the fact that, during the six months ended June 30th, 1880, thirty-six (36) railroads, representing more than one quarter of the mileage of the United States, and including lines in all parts of the country, reported gross earnings of \$83,326,895, against \$65,908,736 for the same period of 1879. This represents an increase of 26½ per cent; and it should be borne in mind, in judging of these figures, that the business of our railways during the year 1879 was in a fairly prosperous state.—A number of engineers who have examined the *Saint-Gothard Tunnel* report that it can not be made ready for traffic before the end of April, 1881. According to agreement, the contractors forfeit 5000 francs for every day's delay after the 1st of October. The question of their liability to this penalty, however, will probably be disputed.

**Specific Gravity of Nickel and Cobalt.**—Respecting these constants, authorities differ so widely in their figures that, in the preparation of a new edition of Trautwine's "Pocket-Book," the author has made some new determinations from the very pure commercial nickel and cobalt made by the American Nickel Works (Joseph Wharton's), of Camden, N. J. To illustrate the differences on these points in the books, we append the following statement of values:

NICKEL.		COBALT.	
Sp. grav.	Authority.	Sp. grav.	Authority.
7.807	Brisson.	8.710	Lampadius.
8.279	Richter.	8.485	Brunner.
8.380	Tupputi.	8.500	Mitscherlich.
8.402	Tourte.	8.513	Berzelius.
8.477	Baumgartner.	8.538	Haüy.
8.637	Brunner.	8.538	T. H. Henry.
7.861	Reduced by hy-	7.718	Reduced by hy-
7.803	drogen.	8.260	drogen.
8.880	wire. Arndtsen.	8.957	do. Rammelsberg.
8.975	Reduced by hy-		
9.261	drogen.		
8.900	Schroeder.		

Mr. Trautwine has handed us the following statement of his results:

Cobalt (cast), specific grav	= 8.37
Cobalt (rolled), "	= 8.32
Nickel (cast), "	= 8.28
Nickel (rolled), "	= 8.58

In examining Mr. Trautwine's figures, it will be observed that the specific gravity of the cast cobalt slightly exceeds that of the rolled metal. This is the reverse of what should be anticipated; but Mr. T., in calling attention to this anomaly, remarks that "four repetitions of the trials leave no doubt of the fact in this instance." These figures were obtained by means of the hydrometer, and the probable error is given as 1 in 150.

**THE EMMA MINE.**—LONDON, Thursday, June 29, 1880.—Sir George Jessel, Master of the Rolls, has given judgment against Albert Grant in favor of the Emma Silver Mining Company for £120,000, that sum being the profit which Grant made as promoter of that company. The judgment is not to be affected by bankruptcy proceedings against Grant, inasmuch as his making a profit as promoter of the company was a breach of trust.

## GENERAL MINING NEWS.

## ARIZONA.

## GLOBE DISTRICT.

**MACK MORRIS.**—The *Silver Belt* of the 10th inst. says that the mine is producing exceedingly rich ore. Forty-eight cubic inches from the winze, about four tons were taken out on Wednesday, which was supposed to contain \$3600. This was only a part of the ore taken from the mine on that day, but was the most valuable per ton. Fifty tons of rich ore were hauled from the mine to the mill in one day last week.

**STONEWALL JACKSON.**—Water, struck in the main shaft at a depth of 485 feet, came in with such force as to cause a suspension of the sinking until pumping machinery can be procured from San Francisco. The vein will be cross-cut at 470 feet. The mine never looked better.

## HARSHAW DISTRICT.

A correspondent of the *Tucson Citizen* writes of the mines of this district as follows:

**ALTA.**—The main shaft is down 110 feet, and one corner of it has just cut the ledge. An incline shaft was sunk on the ledge 160 feet, and showed at the bottom about 14 inches of fine rich bromide ore, carrying some galena, and assaying as high as \$630. There are several rich pay-streaks in the ledge.

**AMERICAN.**—The new working-shaft has reached a depth of 68 feet. It was started on the ledge, which, at the point where the shaft cut through its incline, was about seven feet wide. A fine dump of ore lies near the shaft, the rock being a species of chlorides. As soon as 100 feet has been reached, a cross-cut will be run to find the ledge.

**HARSHAW.**—Of the Hermosa mine, he writes as follows: The two main parallel ledges traverse the hill, and are cut by a tunnel at a vertical depth of 250 feet from the summit, or 460 feet on the incline. This tunnel is as yet the deepest working, and was but recently finished. There are altogether in the mine 14 openings, which, when measured on last Saturday night, showed a total length of 3002 feet. The face of each of the entire number of openings is in ore. The two veins at nearly all points of the present development show a width of 12 feet, with a most remarkable uniformity, and the quartzite foot-walls wherever exposed are clearly marked. From the start, the quality of the ore, which is free-milling chlorides and horn-silver, has been carefully determined by assays and averages, and the most striking circumstance in connection with the property is the uniform results obtained. An examination of the assay-books shows column after column of figures with but the slightest difference, and the estimate based on the numerous averages places the value of the ore throughout the entire mine at \$100 per ton. The next feature of the mine which attracts immediate attention is the manner in which its has been opened, and the judgment displayed in the arrangements for extracting the ores. The only hoisting that is necessary is in the sinking of the shafts. When connection is once made with the lower workings, all hoisting ceases, and by means of a series of chutes and tracks, the only time the ore has to be handled is when it is first taken from the ledge. It is now intended to begin milling the ore on the 20th inst., and the estimated capacity of the stamps will be 2000 tons monthly. It has only been 62 days in construction. Altogether, the superintendent states that the present works of the company represent an expenditure of about \$250,000.

## TOMBSTONE DISTRICT.

Subjoined will be found a partial list, taken from the *Epitaph*, of mines of this district, with depth of deepest shafts, to say nothing of the level development and numerous shafts of less depth on many:

	Deepest Shafts.	Deepest Shafts.
Girard	200 Contention	300
Empire	330 Head Center	275
Sulphuret	350 Good Enough	150
Contentment	100 Tough Nut	200
Juniata	60 St. Louis	70
Lucknow	40 Ruby	45
Owl's Nest	60 Shorty	50
Sunset	100 Stonewall	100
Eestary	50 Lucky Cuss	200
Bronkow	60 Bradshaw	90
Charleston	60 Los Angeles	50
Burleigh	90 Carbonate	118
Bassett	45 Byron	50
Emerald	48 Rattlesnake	100
Grand Dipper	62 Sydney	60
Prompter	50 Mountain Top	50
Naumkeag	130 Sweet Nut	70
True Blue	130 Gordon	60
San Pedro	100 El Monte	60
Monitor	60 Merrimac	116
Argenta	40 Uncle Sam	45
Red Top	75 Hartford	50
Mamie	80 Randolph	100
Mammoth	100 Eagle	50
Fortress	40 Empire	330
South Ex Grand Central	60	

## CALIFORNIA.

## THE BODIE DISTRICT.

Our Bodie exchanges of the 19th and 20th instant report as follows:

**BOSTON CONSOLIDATED.**—The work of building an air-shaft was in progress during the week. This shaft is down 158 feet, and is passing through a soft vein-formation, about four feet in width, with hard smooth walls, and yielding some fair milling ore. The north drift on the 300-foot level has been advanced 8 feet; total length, 108 feet. The vein averages about 2½ feet in width, nearly all quartz, which is sent to the dump.

**CONSOLIDATED PACIFIC.**—The main shaft has reached a depth of 595 feet; progress for the week, 6 feet.

**DUDLEY.**—The following is from the superintendent's weekly report of the Dudley: The main west cross-cut is in 637 feet; progress, 21 feet. The north drift on the Dudley ledge is in 73 feet; progress, 30 feet. There is no change to report from north drift on Dudley ledge.

**GOODSHAW.**—Development at this mine is making fine progress. The south drift on the 600 level on vein No. 4 is in 40 feet; progress for the week, 12 feet. The face is in ore of a good milling quality. Work has been suspended on the main Goodshaw ledge in the west cross-cut, same level, in consequence of the ledge trending rapidly to the south. In a few days, work will be resumed on vein No. 2.

**GLYNN DALE.**—Work is making good progress. The shaft is down 100 feet, and is in good working ground.

**SOUTH BODIE.**—Work is pushed rapidly forward. The formation in the east drift is changing for the better. The rock breaks well and carries seams of good-looking quartz.

**SUMMIT.**—The south drift, 530 level, has been run during the past week 13 feet; total length from shaft, 433 feet. The ledge is three feet wide. The east cross-cut from the south drift is in 204 feet; progress for the week, 24 feet. The face is in hard blasting rock. The south drift on the east Summit ledge is in 90 feet; progress for the week, 20 feet. The ledge is four feet wide.

## COLORADO.

## CLEAR CREEK COUNTY.

**MAYFLOWER.**—The Idaho Springs *Iris* says: The improvements which have

been in progress during the past winter have been completed. Connection has been made, from surface, with the winze in the tunnel-level, by sinking on the slope of the mountain at a point about 200 feet above the office buildings located on the plateau, and equidistant from it and the old discovery-shaft above. This new shaft will be known hereafter as the Burt shaft, and through this the principal working of the mine will be done. It has been timbered as a double-compartment shaft and in the most substantial manner. The improvements at this shaft consist of the erection of a shaft-house of ample dimensions, in which has been placed a fifteen horse-power boiler, engine and accompanying substantial hoisting-rig. All this machinery was working in the most satisfactory manner in hoisting ore from the shaft, near which is a receiver into which the ore is dumped, and, dropping into a chute which extends down to level below, is deposited upon the large platform or sorting-floor near the office. The Burt shaft will be driven down to a depth of from one thousand to fifteen hundred feet as rapidly as possible, and levels run each way at every one hundred feet.

The following items are from the *Georgetown Courier*:  
**CAPITAL.**—A force of nine men is employed on the Capital mine, Montana District, at running the 200-foot level west. The lode is from 30 to 35 feet in width, and carries an ore-vein ranging from four inches to four feet in thickness; but a large percentage is so mixed with quartz that it is only valuable as a concentrating product.

**EQUATOR.**—The Equator tunnel has reached a length of nearly 1100 feet, the last 60 being in the lode, which is now being crossed, the north wall not having been reached. Several small ore-veins and veins of quartz have been crossed, which are not large enough to pay for working. The tunnel cuts the lode about 30 feet east of the main shaft and 180 feet below the level of the Marshall tunnel; and when connections are made so that the mine can be worked through the tunnel, an expense of \$20 per day for hoisting will be saved. The tunnel is 8 x 9 feet in size, large enough for a double track. The last 1000 feet was run during the past year, only nine months of which were used; for during the three winter months the water in the creek was too low to run the air-compressor. There are about 50 men employed by the company, the output of ore being regular and profitable.

**LULU.**—The *Courier* reports the sale of this Red Elephant mine to Illinois capitalists. It is the intention of the owners to organize a company with \$1,000,000 capital stock, and to prosecute the work of development much more extensively than heretofore. A contract has been let to sink the shaft, now 260 feet deep, 100 feet deeper, the contractors to employ three eight-hour shifts, and soon contracts will be let to drive both of the levels west. The property embraces the Lulu, a patented claim, 1500 feet long by 150 wide, and the White Extension West claim, which covers the lode from the western boundary of the Red Elephant Company's property to the eastern end of the Lulu, making altogether 2400 linear feet upon the lode.

**WALL STREET.**—The water has been taken out of the shaft on the Wall Street lode, Montana District, and work at sinking has been commenced, the work being done by contractors, who will sink it 50 feet deeper, making it 115 feet deep, and then run a level from the bottom 100 feet. The shaft shows a vein of quartz four or five inches in thickness that carries bunches of ore.

The *Georgetown Miner* epitomizes as follows:  
A force of 14 men is now at work on the Dominion lode, adjoining the Hukill, drifting on the vein. The ore runs from 4½ to 10 ounces gold.

The Freeland mine is said to be producing nearly \$60,000 per month, the profits being about two thirds of that sum. The mill concentrates about 115 tons of ore into some 50 tons of marketable ore that goes to Argo. Work on the stamp-mill is progressing. They are shipping from 40 to 50 tons daily.

The Hukill sends 30 tons of low-grade ore daily to the Roberts concentrating mill. The dressed ore contains nearly or quite \$100 per ton.  
The Idaho tunnel is 543 feet in length, and they have three shifts employed driving it forward.

The Lone Tree mine is steadily improving as work progresses. The tunnel adit is over 600 feet long, and the shafts show white quartz specked and dotted with native gold.

A new discovery has lately been made, called the Forget lode, on Seaton Hill, near Idaho. There is a 25-foot shaft sunk on the lode, which discloses a splendid pay-streak.

## CUSTER COUNTY.

A correspondent of the *Denver Tribune*, writing from Silver Cliff, says of the mines: The recent rich strike of horn-silver by the Coston Brothers in the Hecla, adjoining the Racine Boy, has given mining interests a new impetus. The ore of the Hecla is found at the grass-roots in a formation known as volcanic glass or obsidian. These obsidian dikes are filled with flute-like boulders which are coated and impregnated with horn-silver and chlorides.

The Plata Verde stamp-mill is rapidly reaching completion, and soon another mill will be grinding out silver bars. The company is sinking an artesian well to obtain a sufficient supply of water for the operation of the mill.

The Racine Boy and Silver Cliff mines are becoming richer with development, as is evidenced by the more frequent shipments of bullion. The Silver Cliff Company has been hauling large quantities of low-grade ore to the Adelia mill, from which handsome returns have been realized.

The Vanderbilt has again resumed work, and is, shipping to the Adelia, the only custom mill in the camp. The Bull-Donkey is working a large number of men, and it is reported as showing richer ore in the more recent developments. The concentration works for this mine will soon be completed, and then it will be worked to its fullest capacity.

Sinking will be resumed on the Sady Franklin as soon as the air-shaft is completed. This mine has a large body of ore similar to the Leadville carbonates. Within the next month, the Portage & Colorado Mining Company will put hoisting-works on this mine.

The Song Bird and Gray Eagle have recently been stocked for \$1,000,000 by the Song Bird Mining Company, and these mines will now be actively developed. The Katydid, adjoining the Lone Star, is 150 feet deep, and has a large body of ore that would yield a profit with concentration works.

The Abandoned, situated upon Ben West Hill, is 125 feet deep, and has a narrow but rich vein of galena and sulphurets.

The Plata Piedra, owned by a Galveston company, is showing rich bodies of free-milling ore.

The Silver Prize Mining Company has recently been organized, and has stocked the Prize, Board of Trade, and other claims for \$2,000,000. This company will erect a forty-stamp mill on a site near the Silver Cliff mill before fall. Parties from New York will be here next week to further inspect the ground and commence operations.

## GILPIN COUNTY.

The *Register-Call* of the 21st inst. says that the agent of the Pizarro Gold and Silver Mining Company has three fine veins in York Gulch, on which he has a force of men at work in driving a tunnel on one of the veins. These lodes are in the same belt as the Pewabic, Grizzly, Wheel of Fortune, and others in Russell District, Gilpin County. The force of miners which has been employed on the Pizarro mine, on Bald Mountain, has been taken off until such time as the line of air-pipe now running in the main shaft of the Pizarro shall have been completed.

Mr. Isaac Roe is exploiting the east extension of the Nimrod lode, on Quartz Hill. A shaft sunk on the vein to the depth of forty-five feet has a crevice of pay-matter thirty inches in width, milling and smelting. A 2-cord lot is now at the Kimber mill in Black Hawk, for treatment. The smelting iron is about four inches wide, and is characteristic of the vein west of the Roe workings.



The Nimrod proper is worked under lease—rather by a party of tributers—with favorable results, as also the Pyrenees, west of and adjoining the Nimrod.

Mr. Mellor, of the Hasetine Mining Company, is working a full force of masons and laborers in getting the building ready which is to inclose the improved machinery recently ordered from the East, and which is now on the ground.

Mr. John Q. A. Rollins, in company with Mr. Isaac Frees, is developing some six new and recent locations in Independent District.

The Rollins Gold and Silver Mining Company's new stamp-mill in Gamble Gulch is pushing to completion just as fast as men and means will permit. It is expected that the mill will be in running order by the 10th of August.

#### GRAND COUNTY.

The mines in the vicinity of Middle Park are looking well. About 200 men are prospecting and mining near Lulu City, on the head-waters of the north fork of Grand River, on the Middle Park slope. This is about 14 miles north of Grand Lake.

The Grand Lake Mining Company is employing 26 men in the Campbell District, Rabbit Ear Range, which is about 13 miles northwest from the Lake. On the north slope of Rabbit Ear, including Jack City, Park City, and Tyner, there are from 300 to 500 men prospecting and mining. At the head of Wilson Creek and Stillwater, there are about 40 men mining and prospecting—mostly placer-mining. On John Kinzey's claim, on Wilson Creek, they have a dry concentrator and amalgamator, which will be set to work in a short time.

#### LAKE COUNTY.

From our latest Leadville exchanges, we extract the following notes regarding Leadville mines:

**BIG PITTSBURG.**—Two shafts are worked on the Big Pittsburg property. The Pierson shaft will soon reach the ore-body in the Joe Bates claim, already discovered by the old shaft.

**BREECE IRON.**—The demand for iron ore as a flux at the smelters having somewhat fallen off, the production is not as large, and a smaller force of employes is engaged. There is an immense amount of the ore now out.

**CLIMAX.**—Ore-raising from the Climax has been resumed. The drift from the No. 5 shaft has been completed, and the ore-chute is in.

**GLASS-PENDERY.**—The drift to connect the Glass with the Pendency shafts, the two most important openings on the Glass-Pendency consolidation, has been completed.

**HIGHLAND CHIEF.**—The new engine of the Highland Chief was started on the 17th inst. It is at present engaged in taking out the water from the mine. As soon as this is accomplished, a pump will be put in and then a full force of miners will be put at work.

**KENT.**—The property of this company consists of the Kent, Ishpeming, Silver Cloud, and Williamsburg claims, which join the property of the Breece Iron mine on the west slope of Breece Hill. The company was organized in New York last March. Shafts have been sunk on all the claims, ranging from 25 to 165 feet in depth. At present, work is prosecuted only on the Kent. The shaft on this is 115 feet deep. The building is sixteen by forty-two feet in size, and the engine is twelve horse-power, of the Diedrich make. The shaft is four by eight feet in size, and work is pushed upon it with three eight-hour shifts. There is an apparent crevice of iron-stained material, between porphyry, extending down nearly perpendicularly in the shaft.

**LA PLATA.**—The new Rustin shaft on the La Plata is not yet completed. With more development from the workings from the tunnel below, the ore-body is showing up larger than ever.

**LITTLE CHIEF.**—The Leadville Herald says that an impression seems to have gained credence, both in the East and even in Leadville, that the mine has lately become much weaker than formerly, and will in a short time cease to yield. A visit through the new openings, however, and a view of the vast ore-bodies exposed, can not but convince any one that such is not the case, and that the mine will continue to pour out its vast amount of ore for a long period to come. The mine is regularly shipping an average of a hundred tons per day, and has never failed since the company was organized to pay a dividend of a hundred thousand dollars a month, even with the vast expense and improvements to be met, and in the face of the strike, which really cost the company thousands in money and a much greater amount in time. It would undoubtedly have been better in the end for the company to have paid smaller dividends, or made them less frequently, or to have put the mine in good shape in the first place, before beginning to divide among the stockholders. It has driven work to take out ore, and has hindered Mr. Daly in pushing and completing improvements. Still, the mine is capable of continuing its dividends for a long time to come, if the New York management demands them. Some four hundred feet to the south from the No. 3 shaft is located the No. 7. In this Mr. Daly deserves the entire credit for having exposed and developed the ore-bodies, as the former owners had abandoned this part of the mine as worthless. Here, however, he has opened out the richest ore-bodies ever exposed in the mine, and has probably developed more new ore already than he has ever yet taken from the mine. The shaft is 120 feet deep. A level extends west forty feet to the New Discovery line, and five levels extend north, all in extremely rich ore and in large bodies. From this portion of the mine comes the rich chloride ore that has yielded so largely. One level is extending to connect with the No. 4 workings, and so on to the Daly shaft. A level also runs east, connecting with the No. 1 shaft, and levels are also extending south, one of which will soon connect with the No. 5 shaft. The level running north to connect with the No. 4 will be cut through by the early part of next week. Through these southern workings on the mines, great quantities of ore are taken out, that is perfectly studded with chlorides of silver, and yields thousands of dollars to the ton. The general average of the entire product is also very high.

**LITTLE PITTSBURG.**—The Leadville Herald says that reliable information is received that an ore-body of considerable magnitude has been found in the Pittsburg mine from the No. 4 shaft. How important this discovery may prove is yet indefinite. The discovery is made in the same part of the mine where Mr. Herrick commenced operations some months ago, and the work was suspended at the time of the strike.

**LOWLAND CHIEF.**—The Lowland Chief is actively worked, and from it is taken a large amount of low-grade carbonates, similar to much of the product of the Highland Chief. Both shafts are worked, the No. 1 by a windlass, and the No. 2 with the new engine.

**PRINTER BOY.**—On the lower Printer Boy, a good crevice of gold-bearing quartz has been found, that runs very high. Washings from it show large nuggets of gold, besides a quantity of fine dust. The quartz is saved carefully for future treatment.

**ROBERT E. LEE.**—The Leadville Herald says that the ore coming from the Robert E. Lee mine is beyond all precedent in richness. As each foot of the new drift, seventy feet from the Hibernia line, is driven, the ore increases in width and thickness. There are now about thirty inches of a vein of pure chloride ore, worth fifteen thousand dollars a ton. Such figures seem fabulous, but facts will bear out the statement. The mine will in a short time be producing shipments that will throw in the shade any thing heretofore known in mining, either in Leadville or elsewhere. This is not guess-work; it is a reliable statement from knowledge of the present condition of the mine.

**SILVER CORD.**—The Silver Cord mine, located above the Silver Wave and Iron mines, is at present working but a very small force. The shaft is down three hundred and sixty feet, from which a drift runs a short distance. At the end of the drift, a winze has been commenced and sunk a considerable depth, passing through the limestone and striking an iron contact. It has been believed that bed-rock lime was reached at the foot of the shaft, but the recent workings have

proved that such was not the case. From the main level a drift has been run some distance north of the shaft, following a lead, which at first was fair lead carbonates, but has changed into an ocher, which the foreman assures us will run from forty to fifty ounces in silver. The company is sacking this stuff, and will send it to the smelters.

#### PARK COUNTY.

The Fairplay Flume states that a strong company has been organized to develop the Morrison and Kansas lodes, on Mosquito Mountain, which will be known as the Kansas Consolidated Silver Mining Company. The capital stock is \$500,000; shares, ten dollars. The working capital is \$50,000. This company owns the lodes outright, the former owners taking stock for their interest. The present openings on the Kansas consist of nearly 300 feet of tunnels and drifts, all in poor shape, and none of them will be used by this company to work the mine. All of the work thus represented has been paid for, and more, out of the product of ore. The Kansas can claim what but few mines can; that is, that it never had a mill-run of less than one hundred ounces to the ton, and the ore frequently runs up to 600 and 700 ounces in value. The trouble has been lack of money to open the mine systematically, and quarrels among the owners. The intention now is, to start a main working-tunnel below the old openings, and it will soon afford ample stopping-ground. On the Morrison, a shaft has been sunk that produces ore that runs up to a value of \$1300 in gold and silver per ton, and it is well assured that platinum in unknown quantity exists in the ore, which may prove an important factor in its value. By August 1st, the company will begin operations on a good scale.

#### SAN JUAN COUNTRY.

**RED CLOUD.**—The Lake City Mining Register says: We visited this property, and found a shoot of mineral 250 feet long, in a vein that averages five feet in width. A force of laborers is grading midway between shafts Nos. 1 and 2 for the engine now on the way, so that both shafts can be operated by the same power. Shaft No. 1 has been widened to 10 x 5 and splendidly timbered, and No. 2 will be similarly treated. We found not less than 250 tons of rich ore on the dump. Ore is shipping to the concentrator at Animas Forks, and yields 240 ounces silver, 4 1/2 gold, and 16 per cent copper.

**THE ALLIED MINES.**—The Ouray Muldoon says of the property of this company: Their property includes the Hidden Treasure, Gertrude, Norma, Talisman, Emily, and one half and two thirds respectively of the Crusader and Yellow Rose lodes, each being 1500 by 300 feet—the total area covering more than 70 acres. The claims are situated in and adjoining a fine body of heavy timber on Imogene Creek which furnishes an abundant and never-failing supply of water. With the single exception of the Gertrude, all of these mines can be worked by drifting on the veins, and, possessing excellent sites for levels, the necessity of hoisting and pumping machinery is avoided. Upon the Hidden Treasure, the development has been done by means of a drift on the vein to the distance of over 230 feet—the ore-body being from one to two feet in width. The vein of the Gertrude crosses the head of the basin, and the development consists of a cross-cut tunnel 148 feet in length. The vein shows a body of ore 13 feet in width, one half of which is solid metal.

The Norma lode has been developed by a tunnel 160 feet in length, in which the ore-body has an average width of more than two feet, while upon the Talisman there has been but little development, having only a 10-foot open cut on the vein, which is three and a half feet between walls and carries from ten to fifteen inches of ore. Over 30 feet of tunneling has been done on the Emily, which is most advantageously situated for working, as it possesses sites for no less than a half-dozen levels. Upon the Crusader, which is an extension of the Norma, a tunnel of 90 feet in length has been run, and its ore-body has a width of from one to two feet. The great vein of the Yellow Rose, which is traceable for several miles and has an average width of from five to seven feet, has been cut by a tunnel 105 feet in length. These mines have been worked steadily for the past three years, and now show not less than \$10,000 worth of development.

#### MONTANA.

The Butte Miner, dated the 18th and 22d, contains notes as follows:

**ANSELMO.**—The new shaft has attained a depth of 40 feet on a vein of ore remarkable for richness rather than width, as it is not more than a foot wide. Within the last few feet, water has intruded its unwelcome presence, but not in sufficient volume to cause much trouble. The west drift of the main shaft has attained a length of 48 feet, the face showing a two-foot body of high-grade base ore. From the bottom of the shaft, a cross-cut has been started to tap a ledge lying north of and parallel with the main vein. The cut is in eight feet, and will be extended until the desired object is attained. About 20 tons of ore carrying visible quantities of native and wire silver are on the dump.

**BELL.**—With a force of 20 men, the successful development of this property continues. From the bottom of the middle shaft, the east drift has been extended to a length of 45 feet on the hanging-wall side of the ledge. A blast of ore six feet wide is extracting, the bulk of which shows a profusion of native silver, and with it 50 per cent of copper, which pays handsomely for shipping. The west drift is in 35 feet, the face being in ore of excellent quality. In the east shaft, which is 160 feet deep, the drift west has been started; but owing to impure air, some delay has been necessary during the past few days, in order to put in air-pipes. These have been adjusted, and we may now expect the drift to be pushed vigorously ahead to open up the ore-chutes discovered in the lower levels of the middle shaft.

**COLUSA.**—Operations on the new shaft have been started up with a vim, and in a few days will be continued with a whim. The shaft, which is now 20 feet deep, is intended to be the largest in the camp, the cage apartment being 4 x 4 feet 8 inches, and the pump apartment 6 x 4 feet 8 inches. The shaft is situated 100 feet south of the old shaft, and is intended to tap the vein at a depth of 150 feet, from which point it will be continued 150 feet farther where a cross-cut will be run to ascertain the character and continuity of the ledge; and if a satisfactory showing is made at that depth, sinking will be resumed.

**GAGNON.**—The west drift of the 225-foot level is in 180 feet, and is progressing slowly on account of the extreme hardness of the rock. A considerable portion of high-grade silver-copper ore, however, is extracted, some of which is being reduced at the Colorado smelter, and the remainder of the higher quality crushed at that establishment and shipped East. The east drift, at a distance of 70 feet from the shaft, having reached Original ground, has been stopped. The ore at that point was wide and rich, conclusively proving the value of the Original claim and the permanence and richness of the ledge to a depth of 225 feet. In the Gagnon shaft yesterday, a No. 8 pump was lowered, with which the water can easily be kept under subjection.

**GRAY ROCK.**—The east and west drifts from the bottom of the west shaft have a total length of 150 feet, and are still vigorously driven ahead. In the east drift, the ore-body remains about six feet wide, with no perceptible difference in the quality of the product. In the west drift, the face is somewhat intermixed with ledge-matter, but is now approaching a place directly under which, on the surface, some float assaying 400 ounces was picked up. It is expected that some of the richest ore so far taken from the mine will be extracted within the next hundred feet of the west drift. Excellent progress is making on the new double-compartment shaft, which, though started only ten days ago, is already down 35 feet.

**LEXINGTON.**—The new shaft, started within the past few days, is 8 x 16 feet, and is down about 18 feet. The whim is in course of construction, and will begin running in a few days. The shaft is sinking about 150 feet south of the old shaft. The aspect of the mine in the main workings remains unchanged. The daily output from the east level continues at about 15 tons, being regulated by the stamp capacity of the Lexington mill.

NEVADA.

HILLSIDE.—The Pioche Record says that the Hillside furnace is running well and turning out a hundred bars a day; coal and lead ores are coming in fast, and there is every prospect for a long and successful run. The mine is still improving on the fifth level east.

COLUMBUS DISTRICT.

The True Fissure of July 17th notes the following :  
CANDELARIA.—Drifting still continues east from the 80 level. The distance now attained from the shaft is 60 feet.

MOUNT DIABLO.—The west drift on the first level has been advanced 13 feet during the past week. The east drift on the same level has also been advanced 9 feet. The cross-cut north on the east drift has been extended 12 feet, and the cross-cut south on the same level 16 feet. The station on the 250 level north has been completed this week, and a drift running north from this station has been advanced 4 feet to date.

NORTHERN BELLE.—The drift from the bottom of the winze on the tenth level has been advanced 12 feet during the week. In the third level, the stope above main tunnel shows an improvement. Three feet of \$55 ore is the strength and value of the ore in the stope. Some very rich ore is extracted from the stope above the east drift on the third level. The tenth and second levels show no material change. The shipment of ore approximates 95 tons. Both mills are running to full capacity. The bullion shipment up to date this month is \$65,000.

SARATOGA.—During the past week, work has been resumed in sinking the Hanke incline, and 21 feet progress made during that time. The total depth of the incline is 110 feet. At a depth of 130 feet, a drift will be run 30 feet to connect with the bottom of the Hanke perpendicular shaft. The work, when completed, will give good ventilation, and will prospect between these two points, which, at present writing, show favorable indications.

COMSTOCK LODE.

The Gold Hill Daily News, in its weekly summary of the mines, says: North Bonanza is raising 15 tons of ore per day from the 400-foot level.

The Union pump on the 2500-foot level is the key to the north end. It will be connected to-morrow, and started immediately. This will admit of the draining of the Sierra Nevada incline, the connecting of the northwest drift, 2500 foot of Union, with the station of the incline, ventilate the workings from winze No. 1 south, allow of operations both ways to connect the Union shaft with the incline on the 2500-foot level, loosen the bands which bind Sierra Nevada, and deter cross-cutting on the 2400-foot level north, and permit the opening up of the 2500-foot level of Union.

Operations farther south look to ventilation on a grand scale. This will be accomplished through four winzes through Ophir, California, Consolidated Virginia, and Best & Belcher.

Savage is bulkheading against water. There is no doubt that the success of these bulkheads, and they will cut off all the flow except that from the old north drift, 2200 level, which so long flooded that mine and Hale & Norcross. These bulkheads will be so far completed in three weeks as to allow Chollar to resume operations on the 2400 level—a step in permanent advance which will be most welcome to that mine and to the public.

The general outlook is therefore encouraging. The endeavors making to operate Crown Point and Belcher through the Jacket are progressing well, and offer some signs of coming resumption there of interesting operations.

EUREKA DISTRICT.

The following notes are taken from the review of the Ruby Hill Mining News :  
ALBION.—Bunches of good ore have been encountered the past week in the main drift running into the Uncle Sam claim, and there is every indication of striking a large body in undisputed ground. Ore is now found at two points in the mine.

EUREKA.—The new shaft of the Eureka Consolidated is going down steadily, and has now attained a depth of 180 feet. Every thing about the shaft is of the most substantial character. It has three compartments, two of which are four and three quarters by six feet in the clear. The timbering on the outside of the compartments is 12 by 12 inches, and the timbers between the compartments are 10 by 14 inches in size. The entire shaft, outside of timbering, is cribbed with two-inch plank.

GEDDES & BERTRAND.—Work in this mine was resumed on 13th, and some high-grade ore has been taken out during the week. The ore-body has been cut a distance of over 50 feet, and the mine has never looked better than at the present time.

HAMBURG.—The drift from the 850-foot level is in 200 feet and will be continued 200 feet. Contracts for this amount of work will be let shortly.

WALES.—The force of the Wales Consolidated has been increased, and the work of prospecting the mine will be pushed more vigorously than ever. New car-tracks are laying, and cross-cutting from the 300-foot level will begin at an early day.

NEW YORK.

The Utica Herald says that the excitement in the gold region of Fulton and Hamilton counties is said to be becoming quite high. Several veins have been found that promise well, and samples have assayed \$15 per ton. A company at Wellstown is said to be realizing \$150 per ton, and "belief" is entertained that \$1000-ton takes are found. The Albany Argus says that there is no doubt that gold abounds throughout that region in more than paying quantities, and perhaps at some future day it will be eagerly sought by miners, speculators, and adventurers, and the wild scenes of Western mining life will be transported to the midst of civilization. As said before, claims are made nearly every day, and many of the claimants do not trouble themselves with such a small matter as waiting until they have made a discovery of any thing, but go at it wholesale and file all the claims they can, trusting to luck in finding a vein afterward. Thus, out of the numerous claims already filed there are very few of any value, and these few really promise rich rewards for their owners.

ALBANY, July 29.—Discoveries of gold mines in the counties of Washington, Saratoga, and Hamilton are daily filed with the Secretary of State.

UTAH.

SAMPSON.—The Park County Record says: The discovery-shaft of the Sampson is down about thirty-five feet, showing a four-foot vein of smelting-ore, which would certainly pay well for working. But it was decided last fall that by erecting hoisting-works farther east the vein could be cross-cut from a shaft, and worked to better advantage. Accordingly, a good boarding-house was erected, as well as hoisting-works, and a shaft sunk about 150 feet. By that time, the water in the shaft, as well as the severe winter, caused a cessation of work until within the last week. The superintendent has been getting a boiler, pumps, and other machinery and material up, and we are informed will immediately drift for the vein. It is impossible to say how far the drift will be run before it catches the vein, as its course may have slightly varied between the discovery-shaft and the hoisting-works. They are about 1400 feet apart.

FRISCO.—The South Utah Times says: The properties on the west of the mountain are looking well, and work is actively prosecuted upon a number. The Cerro Gordo is down 63 feet in vein-matter bearing silver galena, and indications are favorable for this opening into a rich mine. The gold mine, a property of the Frisco Consolidated Company, has a shaft 135 feet deep. A platform has been erected at 65 feet, and they are cutting the vein. The Watseka, belonging to the Chicago & Frisco Company, has been sunk about 12 feet, and it shows a good breast of galena ore. The various companies own twenty properties in that locality.

OGDEN.—A correspondent of the Salt Lake Tribune says: The Ogden Gold

Mining Company, an incorporation formed in Chicago under the laws of Illinois, is working on two tunnels two miles from Ogden, one in the mines of the company running for the vein whose croppings appear above and on the line of the tunnel. The company is in about 15 feet. It has also started a tunnel, intended to cut the same vein in another place, and also to intersect other veins visible on top, as well as blind, that are in Taylor's Cañon hill.

PROPOSALS.

For the benefit of many of our readers, we compile weekly such proposals and solicitations for contracts, etc., as may be of interest. The table indicates the character of proposals wanted, the full name and address of parties soliciting, and the latest date at which they will be received :

Lighting the City of Guayaquil ; R. & C. Degener, No. 50 Wall street, New York City.....	July 31, 1880.
Veterinary Instruments, etc.; Depot Quartermaster's Office, Houston corner of Greene street, New York City.....	" 31, "
Rock Excavations in the Detroit River; G. Weitzel, U. S. Engineer's Office, 26 Washington avenue, Detroit, Mich.....	" 31, "
Competitive Designs for the Provincial Parliament and Departmental Buildings; Department of Public Works, Toronto, Ontario.....	August 1, "
Locks and Keys; D. M. Key, Postmaster, Washington, D. C.....	" 2, "
One Hundred Walnut Cases for "Farmer's Weather Indicator;" H. W. Howgate, War Department, Washington, D. C.....	" 2, "
Gas and Fuel; B. A. Banker, Steward Ohio Penitentiary, Ohio.....	" 2, "
Harbor Improvements; Major H. M. Robert, U. S. Engineer's Office, 427 Milwaukee street, Milwaukee, Wis.....	" 2, "
Repairing the Pier at the Foot of Noble street; John French, Department of City Works, Municipal Department Building, Brooklyn.....	" 2, "
Improving Appomattox River; William P. Craighill, U. S. Engineer's Office, 70 Saratoga street, Baltimore, Md.....	" 2, "
Bridge; Lucius Slade, Office of the Superintendent of Streets, City Hall, Boston, Mass.....	" 2, "
State Printing; Secretary of State, Office of Commissioner of Printing, Columbus, Ohio.....	" 2, "
Coal; H. P. Green, Office of South Carolina Lunatic Asylum, Columbia, S. C.....	" 2, "
Iron or Wooden Bridge; H. M. Somerville, Chairman of Bridge Commissioners, Tuscaloosa, Ala.....	" 2, "
Coal; Office of the Clerk of the Board of Supervisors, Room 10, County Court House, Brooklyn.....	" 3, "
New Jail for Melean County; H. A. Minor, Bloomington, Ill.....	" 4, "
Outlet Sewers; Engineer in Charge of Sewers, Room 21, City Hall, New York City.....	" 4, "
Building a Reservoir; Allan Campbell, Department of Public Works, Room 19, City Hall, New York City.....	" 4, "
Delivering and Laying 48-inch Cast-Iron Conduit-Pipe; Allan Campbell, Department of Public Works, Room 19 City Hall, New York City.....	" 4, "
150 Tons of Coal, Hard Egg, White Ash Coal; James C. C. Black, Augusta Orphan Asylum, Augusta, Ga.....	" 5, "
Improvement of Schooner Ledge, Delaware River; J. N. Macomb, U. S. Engineer's Office, 1619 Chestnut street, Philadelphia, Pa.....	" 5, "
Improvement of Cherry Island Flats, Delaware River; J. N. Macomb, U. S. Engineer's Office, 1619 Chestnut street, Philadelphia, Pa.....	" 5, "
Dredging and Rip-Rap Granite; J. W. Bartow, Engineer's Office, U. S. A., New London, Conn.....	" 5, "
Pumping Engine; Office of City Clerk, City Hall, Montreal, Canada.....	" 5, "
Coke and Coal; J. G. Pendergast, Office of Chief Fire Engineer, Indianapolis, Ind.....	" 5, "
Dredging and Construction of Dams, etc.; A. Mackenzie, U. S. Engineer's Office, Rock Island, Ill.....	" 6, "
Improving the Channel at the Mouth of the Salem River, N. J.; J. N. Macomb, U. S. Engineer's Office, 1619 Chestnut street, Philadelphia, Pa.....	" 6, "
Dredging on each side of the Pier foot of North Second street; John French, Department of City Works, Municipal Buildings, Brooklyn.....	" 6, "
Supplying Fuel to the City Institutions; G. W. Dingle, Office of the Clerk of the Council, Charleston, S. C.....	" 7, "
Improving the Narrows of Sabine Harbor, Texas; U. S. Engineer's Office, Hendley Building, Galveston, Texas.....	" 7, "
Construction of a Hospital; Alexander J. Perry, Office of the Chief Quartermaster, Department of the East, Governor's Island, New York Harbor.....	" 7, "
Quartermaster's stores; Depot Quartermaster's Office, Houston street, corner of Greene, New York City.....	" 9, "
School-House; G. D. Brinkman, Clerk of Board of Education, Moorefield, O.....	" 9, "
Metal Work of Bell Rock Light-House; O. E. Babcock, Office of Light-House Engineer, Fifth District, Baltimore, Md.....	" 10, "
Improvement of U. S. River and Harbor, and Lower Peninsula of Michigan; F. Harwood, U. S. Engineer's Office, Room 57 Moffat Block, Detroit, Mich.....	" 10, "
Erection of Church and Chapel Edifice; G. E. Potter, Architect, Hartford, Conn.....	" 10, "
Widening and Deepening the Channel of James River; U. S. Engineer's Office, 70 Saratoga street, Baltimore, Md.....	" 10, "
White Ash Egg Coal; H. A. Thissler, Secretary of the Shamokin School Board, Shamokin, Pa.....	" 11, "
Improvements on the Upper Mississippi River; A. Mackenzie, U. S. Engineer's Office, Rock Island, Ill.....	" 11, "
Erection of a Brick School-House; G. L. Green, Clerk of Green Township, Hamilton County, O.....	" 12, "
Supplying U. S. Public Buildings with Fuel; John Sherman, Treasury Department, Washington, D. C.....	" 12, "
Improvement of Grand Marais Harbor; U. S. Engineer's Office, 99½ West Third street, St. Paul, Minn.....	" 14, "
Improvement of Duluth Harbor; U. S. Engineer's Office, 99½ West Third street, St. Paul, Minn.....	" 14, "
Ordinance Supplies; S. C. Lyford, Ordnance Department U. S. A., Frankford Arsenal, Bridesburg, Philadelphia, Pa.....	" 16, "
Improvement of Erie Harbor; J. M. Wilson, U. S. Engineer's Office, Cleveland, Ohio.....	" 17, "
Improvement of Cleveland Harbor; J. M. Wilson, U. S. Engineer's Office, Cleveland, Ohio.....	" 17, "
Improvement of Delaware River, near Petty's Island; J. N. Macomb, U. S. Engineer's Office, 1619 Chestnut street, Philadelphia, Pa.....	" 17, "
Improvement of Ashtabula Harbor, O.; John M. Wilson, U. S. Engineer's Office, Cleveland, Ohio.....	" 17, "
Construction of Sewers and Drains, etc.; Office of the Board of Public Works, Cincinnati, O.....	" 17, "
Dredging 70,000 Cubic Yards; J. M. Wilson, U. S. Engineer's Office, Cleveland, O.....	" 17, "
Improving Vermilion Harbor; J. M. Wilson, U. S. Engineer's Office, Cleveland, O.....	" 17, "
Building a Town Hall; W. Price, Architect, Madisonville, O.....	" 18, "
20,000 Bushels Best Second Pool Youghiogheny Coal (80 lbs. to the bushel); W. S. Capper, County Auditor's Office, Commissioner's Department, Cincinnati, O.....	" 18, "
Improvement of Delaware River, near Miffin Bar; J. N. Macomb, U. S. Engineer's Office, 1619 Chestnut street, Philadelphia, Pa.....	" 18, "
Improvement of Schuylkill River, Pennsylvania; J. N. Macomb, U. S. Engineer's Office, 1619 Chestnut street, Philadelphia, Pa.....	" 19, "
Five Thousand Tons Australian Coal; Secretary of the Bonabay Gas Company (Limited), 6 Draper's Gardens, Throgmorton avenue, E. C., London, Eng.....	" 31, "
Fire-Engines; Den Burgermeisteramt, Colmar, Germany.....	Sept. 5, "
System of Water-Supply; T. P. Newell, City Clerk's Office, Joplin, Mo. See advertisement in another column.	
Designs for the Manufacture and Erection of the Bridge over Franklin Square; W. A. Roebling, Chief Engineer, 21 Water street, Brooklyn, N. Y.....	



**FINANCIAL.**

**Gold and Silver Stocks.**

NEW YORK, Friday Evening, July 30.

The week under review shows a very important business, and, upon the whole, a steady market. Some stocks are a little higher, while others show a slight falling off. The Leadville stocks have been the great attraction, and particularly Chrysolite and Little Chief, the former showing a business that formerly would have been considered large for even a "fancy." All the respectable evidence that has been brought forward on Chrysolite indicates that the mine is a good one, and, under proper management, will give large returns to the stockholders. The public, however, has before it its experience in Little Pittsburg, which the officers asserted was more valuable "than ever before," although there was not a month's available dividends in the mine. When the wreckers announced that Chrysolite was exhausted, there was more inclination to believe the parties who first heralded the fall of Little Pittsburg than the respectable authorities who gave evidence on Chrysolite. Time alone can demonstrate who is correct in the statements relative to this mine. Should Chrysolite assume the favorable position which it is confidently believed it will, confidence in mining, when disconnected with San Francisco manipulation, will once more be established. The blunders of inexperienced Eastern managers, although great, have not had nearly the damaging influence upon the market that the misstatements and unscrupulous manipulation of San Francisco operators have. We have steadily advised the public against this element, and to us and our readers there is no surprise at the demoralization caused by placing reliance upon it. The essence of a Western education seems to be to sell out the world, friends and every thing, when you are well enough paid for it.

Excuses have been made for the directors who offered their resignations in the Chrysolite Company. We are thoroughly satisfied that several of them saw a collapse in the stock, owing to mismanagement, and had they done their duty, they would either have corrected the abuses, or have promptly advised the public why they tendered their resignations. We are also satisfied that some of the directors knew that in paying the last dividend the "advances on ore" were on ore not mined and by a prominent insider to help his own ends. Had these directors protested at the time, they might have been exonerated from blame; but in not doing so, they simply protected their own interests and assisted those who were bleeding the public. At the close, the market shows considerable weakness, but it appears to be more from the result of desperation on the part of the bears than from other causes.

The Bodie stocks have been both quiet and weak. Bodie has been very quiet, the sales amounting to but 1800 shares at \$5@\$. Standard records but a moderate business and slightly weak prices, the sales amounting to 1815 shares at \$27%@\$26%. Bechtel has been quite irregular, selling from \$1.20 down to 80c. and up to \$1.15, the sales amounting to 900 shares. Bulwer has been very quiet at \$2.10@\$2.25 with sales of 210 shares. Consolidated Pacific, although quiet, has been exceedingly weak, declining from \$1.50 to \$1.05, with sales of 100 shares. Goodshaw has had a moderate business at weakening prices, the sales amounting to 3300 shares at \$1.20 @ 90c. May Belle has been quiet and weak, the sales aggregating 1700 shares at 30@20c. South Bodie has been quiet, but a little stronger, the sales amounting to 900 shares at 7@18c. South Bulwer has been quiet and slightly weak, with sales of 1100 shares at 60@50c. Tioga only records 100 shares at 80c.

The Comstock shares have been much more quiet than usual, although fairly steady. California only records sales of 405 shares at \$1.95@\$1.80. Consolidated Virginia has been quiet and weak, the sales amounting to 2640 shares at \$3.15@\$2.85. The sales of Yellow Jacket amount to but 20 shares at \$4.15@\$. Sierra Nevada records sales of 60 shares at \$11@ \$11.50. Consolidated Imperial has been quiet but very steady, the sales amounting to 2800 shares at 22@21c. In Union Consolidated, there have been dealings of 100 shares at \$20.50. Leviathan only records 100 shares at 5c. This is a stock that we pronounced

worthless when it was selling at \$1.50 a share. It seems to be appreciated now.

The Tuscarora stocks have been both quiet and very weak. The sales of Belle Isle aggregate 800 shares at 80@65c. Grand Prize has been dealt in to the extent of but 100 shares at \$1.25. Independence records sales of 950 shares at 37@30c. Navajo has been dealt in to the extent of but 400 shares at 50@37c., and Tuscarora, 2300 shares at 23@27c.

The miscellaneous San Francisco stocks show considerably more activity than of late. The sales of Eureka amount to 1110 shares at \$15¼@\$14½. Caledonia (B. H.) has been quite active, but exceedingly weak, the sales amounting to 2100 shares at \$2@85c. The cause of this decline is, that another assessment has been made. This causes considerable dissatisfaction among the holders, and is certainly cause for investigation.

The dealings in the stocks of the regular lists of the New York Stock Exchange and the New York Mining Stock Exchange have been as follows: Amie has shown a very active business at improving prices. The sales amount to 43,525 shares at 84c.@\$1. The reports from this mine are of a very favorable nature. Chrysolite has been the feature of the week, the sales amounting to the large aggregate of 90,404 shares at \$6.75@\$10.25@\$6.75. Mr. De Kay, Secretary of the Chrysolite Company, has published on his personal responsibility a long statement, which contains nothing new with regard to the condition of the mine, but some things both new and important concerning the holding of the stock and the management of the company. He says, for instance, that "Governor Tabor still holds 45,000 shares; that other large owners have not sold and will not sell (Mr. De Kay among the number), and that the vacancies in the Board of Trustees caused by the various resignations have been filled with good men." The names of the present trustees are not given, but street rumors have for several days past named Messrs. Walter S. Gurney, Abram S. Hewitt, J. C. Platt, Mr. Edward Larned, Mr. W. F. Shirley, and Dr. Raymond. We are not in a position to give official confirmation to these rumors, yet we have not heard them officially denied. Climax has had but a moderate business at fairly steady prices. The sales amount to 3700 shares at \$2.35@\$2.20. Deadwood only records sales of 50 shares at \$15. Findley has been very quiet and strong at the end with sales of 2800 shares at 15@21c. Great Eastern has been very much neglected, although steady, the sales amounting to but 2900 shares at 59@56c. Green Mountain has been quiet, with sales confined to the early portion of the week, and amounting to 600 shares at \$3.20@\$3.30. Homestake is quiet, but holds its own. The sales amount to 100 shares at \$34¼. Horn-Silver has been quiet but fairly steady, the sales aggregating 535 shares at \$16½@\$17¼. Hukill has been quiet and steady, the sales amounting to 7700 shares at \$1.15 @ \$1.45. Leadville has been quiet and weak, the sales aggregating 2720 shares at 72@60c. Little Chief has had a moderate business with an upward tendency, the sales aggregating 9805 shares at \$4.50@\$6. Little Pittsburg has been fairly dealt in at advancing prices, the sales aggregating 2810 shares at \$3½@\$5. Moose, with a moderate business, has been weak, the sales amounting to 5000 shares at 71@63c. Ontario only records 5 shares at \$35. Calaveras has been very active and weak, the sales amounting to 78,100 shares at 49@35c. Central Arizona has been quiet and a shade weak, with sales of 500 shares at \$5½@\$5¼. Durango has been liberally dealt in and shows moderate strength, the sales amounting to 14,200 shares at 40@47c. The Quicksilver stocks have been fairly active. Preferred shows a slight falling off, with sales of 5900 shares at \$57 @ \$47, while Common shows a slight advance, with sales of 4000 shares at \$13@\$16¼. Rappahannock has been quiet and steady, the sales aggregating 4800 shares at 31@30c. Silver Cliff has been very much neglected, the sales amounting to but 200 shares at \$4.25@\$4.10. South Hite has had a moderate business at a decline. The sales amount to 5600 shares at \$1.50@\$1.15. Sutro Tunnel has been fairly active but weak, the sales amounting to 19,800 shares at \$1¼@\$1¼.

The dealings in the fancies have been as follows: American Flag, 500 shares at 37c.; Buckeye, 27,800 shares at 31@28c.; Dahlonega, 2900 shares at 7@8c.; Gold Placer, 6200 shares at 67@62c.; Granville, 1100

shares at 11@12c.; Lacrosse, 8200 shares at 31@29c.; Lucerne, 3400 shares at 12@16c.

The dealings at the American Mining Stock Exchange show a weakness outside of the supported stocks. As has been the case since the starting of this Board, the San Francisco stocks contribute fairly to the total of the business. The dealings have been as follows:

AMERICAN MINING STOCK EXCHANGE.

STOCKS.	Open- ing.	High- est.	Low- est.	Final.	Sales- shares.
Amie.....	.85	.93	.85	.90	29,100
Auburn & Rock Creek.....	1.25	1.30	1.00	1.25	10,400
Battle Creek.....	4.50	4.62½	4.37½	4.50	4,600
Barbee & Walker.....	5.25	5.50	5.00	4.37½	8,200
Best & Belcher.....	8.00	8.00	7.87½	7.87½	300
Bodie.....	4.75	4.75	3.12½	4.12½	300
Boston.....	.90	.95	.90	.90	500
Bulwer.....	2.50	2.50	.....	2.25	400
By-and-By.....	.....	.....	.....	.....	.....
California.....	2.00	2.00	1.70	1.70	2,070
Con. Pacific.....	.....	.....	.....	.....	.....
Con. Virginia.....	2.90	3.00	2.85	2.90	2,750
Climax.....	2.25	2.25	.....	2.25	1,500
Columbia.....	.....	.....	.....	.....	.....
Cosette.....	.....	.....	.....	.....	.....
Crowell.....	.15	.16	.12	.16	3,500
Chrysolite.....	7.25	9.87½	6.75	7.00	11,500
Copper Knob.....	.30	.30	.....	.30	700
Durango.....	.45	.50	.42	.42	32,300
Glynn Dale.....	.....	.....	.....	.....	.....
Girard.....	.....	.....	.....	.....	.....
Hukill.....	1.15	1.30	1.15	1.30	600
Iron-Silver.....	4.50	4.50	.....	4.50	200
Leadville.....	.70	.70	.....	.70	500
Little Chief.....	5.00	5.00	.....	5.00	100
Mexican.....	8.00	8.12½	7.12½	7.12½	1,150
Mayflower.....	.85	.85	.75	.75	800
Mineral Creek.....	.....	.....	.....	.....	.....
Mono.....	.....	.....	.....	.....	.....
Ophir.....	7.00	7.12½	6.25	6.25	400
Silver Nugget.....	1.55	1.65	1.50	1.60	41,600
Standby.....	4.25	4.25	.....	4.25	200
Standard.....	.....	.....	.....	.....	.....
Sutro Tunnel.....	1.50	1.50	.....	1.50	100
South Bulwer.....	.50	.50	.....	.50	500
Sierra Nevada.....	.....	.....	.....	.....	.....
Tomestone.....	.50	.50	.....	.50	3,000
Vandewater.....	.21	.21	.....	.21	100
Union Con.....	.....	.....	.....	.....	.....
Total sales.....	.....	.....	.....	.....	147,370

QUOTATIONS OF UNLISTED STOCKS.

Messrs. Trask & Francis, under date of July 30th, 3 P.M., report the current quotations of unlisted stocks as follows:

	Bid.	Off'd.	Bid.	Off'd.
Bassick.....	\$8¼	\$9	Iron Silver.....	\$2
Breece.....	.60	.70	May Flower.....	.70
Bull-Domingo.....	\$5¼	\$6	New Philadel-phia.....	.50
Briggs Con.....	.....	.....	.....	.....
Bald Mountain.....	.31	.35	O K & Winneb'o.....	\$1
Belmont.....	\$2	\$2.25	Penobscot.....	\$1
Bonanza Chief.....	.25	.30	Red Elephant.....	.90
Cherokee.....	.85	1.00	Rocke.....	.75
Carbonate Hill.....	.25	.30	Sir Rod K Dhu.....	.50
Dunderberg.....	\$2	\$2.20	Standby.....	\$3
Empire Utah.....	\$5¼	\$6¼	Stormont.....	\$3
Father de Smet.....	.....	.....	Silver Nugget.....	.50
Freeland.....	\$3.50	\$3.90	Sacramento.....	\$3¼
Highland Chief.....	.....	.....	Telegraph Con.....	\$4
Horn-Silver.....	\$16¼	\$17	Trinity.....	.....
Hortense.....	.....	.50	Vandewater G.....	.40

The new Philadelphia Company has been placed in the hands of a receiver.

Judge Barnard on the 24th rendered a decision in the case of the Quicksilver Mining Company, disagreeing with the report of the referee and deciding against the claims of the preferred stockholders. The referee's report is not confirmed, but sent back to the referee for correction in accordance with these views.

OFFICIAL LETTERS.

Amie:—We append telegrams from the general manager of this mine as under.

LEADVILLE, July 23.—Eighteen tons first-class ore—about \$2000. Mine looking well as ever, and showing body of high-grade ore.

LEADVILLE, July 28.—Shipped 15 tons first-class and 15 tons second-class ore, value about \$2300. No change.

Bull-Domingo.—This company is working a large number of men, and it is reported as showing richer ore in the more recent developments. The concentration-works for this mine will soon be completed, and then it will be worked to its fullest capacity.

Buckeye.—We are in receipt of the following communication:

Mr. C. E. White having resigned his position as secretary of this company, pending a meeting of the trustees, Mr. George C. Keep has been appointed secretary pro tem., and will have charge of the transfer-office in this city.

Bulwer Consolidated.—The superintendent of this mine in his last letter says:

During the week ending July 17th, we employed 64 miners, 10 carmen, 4 timbermen, and 2 blacksmiths at \$4; 1 blacksmith's helper at \$3.50; 1 foreman at \$6, and 1 shift boss at \$5 per day; 1 clerk at \$50 per month. We extracted and shipped to the mill 417 tons of ore from the 200, 280, and 380 foot levels. The average pulp assay for the week is \$13.45. There have not been any amalgam

retorts during the week. The south drift, on Ralston ledge, 300-foot level, has been run 13 feet. The ledge is 2½ feet wide. The south drift, on Stonewall 400-foot level, has been run 30 feet during the week; the ledge is about 3 feet wide. The stopes throughout the mine look about the same as usual.

**Chrysolite.**—We append the following letter and telegrams received from the acting general-manager of this mine during the week :

July 19.—Herewith find tracing of new work done in the mine during the past week : Number of feet of drifts run, 172; number of feet of shafts and winzes run, 46; Chrysolite shaft No. 6, down 135 feet; Carboniferous shaft, B 34, down 151 feet; first level—9-30, looking fine; A 29, 10 feet from top of winze running south, very good; second level—A B, 30, 31, very good; C 31, about 3 feet of mineral; B 32, bunches of mineral in face. Your telegram of 17th received; people are visiting the mine daily; with one exception, no one has been denied admission to the mine; this was Van Wagenen; I very courteously asked him to await Mr. Keyes's return; this I did on my own judgment, believing that if Mr. Keyes were here he would deny him.

LEADVILLE, July 23.—Shipped to-day to smelters 102 tons of high-grade ore.

July 28.—Chrysolite shipped 58 tons on Tuesday. Little Chief shipped 303 tons on Monday and Tuesday.

July 28.—Shipped to smelters 70 tons high-grade ore. Keyes is here.

**Climax.**—Hoisting ore from this mine was resumed on the 21st inst., when the drift from No. 5 shaft had been completed, and the ore-chute put in place.

**Dunderberg.**—During the week ending the 17th inst., this mine sold from the jigs \$2712.45; cobbed ore from the mine, \$1504.18; total product for the week, \$4216.63. One hundred sacks of cobbed ore were sent to the mill, and were unsettled for at the time of the report, and there were still 600 bags at the jigs. The mine is reported looking better than for the past three weeks. A decided improvement had taken place in the third-level drift, which has opened up 14 inches of mineral, or 8 inches solid.

**Golden Prize.**—This mine is located in Flowery District, Storey County, Nevada. A recent letter from the superintendent says :

We have now in the old tunnel a considerable amount of fair grade-milling ore which can be extracted at very small expense. In the southeast drift, we have very encouraging prospects for a large body of high-grade ore. Assays taken from places where we have cut into the ledge give results of from \$22.30 to \$85.70 per ton. The quartz is of a very kindly nature. Am of the opinion the ore-chute makes to the south from this point. Shall continue the drift on this level in its present course 50 feet. It will not be possible to get to milling ore sooner than the middle of September. Every thing at the mine in good condition.

**Little Chief.**—The ore statement of the Little Chief for the week ending July 16th shows that 757 tons were delivered and 654 paid for, leaving 338 unpaid for. The amount received for the 654 tons was \$29,628.84, making a total for the month of \$59,954.40 received for 1238 tons delivered. The following telegrams from the general manager have been received as per dates annexed:

LEADVILLE, July 23.—Shipments Wednesday and Thursday, 133 tons. No change.

Geo. DALY, General Manager.

July 25.—Shipments on Friday and Saturday, 194 tons; ore of high grade. No change in mine.

July 28.—Shipments Monday and Tuesday, 303 tons.

Mr. A. L. Earle is now Secretary of the Little Chief Mining Co.

**North Hite & Yosemite.**—Official advices state that this company is extracting 20 tons per day, having an assay value of \$34 per ton. It is proposed to prospect the 500 and 700 levels of this mine.

**Ontario.**—The produce of this mine for the week ended July 21st was \$45,013, making a total of \$119,686 since July 1st. The ore extracted during the week was 434 tons, obtained as follows: 114½ tons from the fourth, 136 tons from the fifth, and 156½ tons from the sixth levels. The west drift in the 600 level has been entered nine feet, making a total length of 575 feet. The ore on hand in the ore houses amounted to 3356 tons.

**Rappahannock.**—Mr. Judson J. Embrey, superintendent of this mine, writing under date of July 28th, says :

We made a clean-up on Friday, July 23d after a run of six and one quarter hours, with a result of 125 ounces of dry amalgam. I estimate 20 ounces left untouched in the bottom of the mortars. Our new shaft is now going down and connection with the 80-foot level will be made in about four weeks. The vein at this end of the level is 3 feet, and gradually widening as it is extended. I am now increasing the mining force somewhat to meet the new demands. The other parts of the mine present the same general appearances. We are now putting in my new concentrator, by the use of which we expect to save our milling expenses.

**Red Elephant.**—The following telegrams were sent by the assistant treasurer :

GEORGETOWN, COLO., July 27.—Shipped on 26th to mill 10 tons second-class ore, assaying 107 ounces; also 28 tons concentrates, assaying 50 ounces. Shipped on 27th to concentrating-works, 15 tons. Net mill-receipts to-day over \$1700.

The following is to hand : Shipped on 28th 1100 pounds first-class ore; milled 665 ounces. Shipped to concentrating-works 10 tons concentrating-ore; also to mill 5

tons first-class ore, 153 ounces; 5 tons first-class ore, 103 ounces.

**San Xavier.**—We take the following dispatch from the New York Tribune concerning this mine :

TUCSON, A. T., July 29.—There are 800 tons of ore at the smelters of the San Xavier mine, and the quantity is being increased at the rate of 20 tons per day. Large numbers of prospectors and mining men have gone to Sonora during the month, but so far few developments have been made. The Davis mine, Patagonia District, has developed a large amount of smelting-ore. A large deposit of high-grade ore was recently struck on the south drift at a depth of 100 feet.

**Spring Valley Hydraulic.**—This company has 138 men employed in its mines at Cherokee, Butte County. The extent of the water supply is 2210 inches per diem. Six thousand cubic yards of dirt is the average day's work. Five banks of very rich ground are opened ready for piping. A greater portion of the ground worked, especially down toward the bed-rock, is blue gravel and rotten boulders. Tanks are now being put in with a view of saving the black sand. There is an enormous quantity of this in the claim.

**Trinity Hydraulic.**—The consulting engineer of this company writes, under date of the 12th inst., as follows :

The hydraulicking on Taylor's Flat is going on splendidly. Every thing has moved nicely without a hitch since they commenced. The pipe and giant are fastened down immovably upon an entirely new plan, and the manner in which the tail flume is extended into the river, gradually curving down stream, as the water in the stream is confirmed, will utilize the full force of the current in carrying off the tailings, and will be eminently successful in that direction.

Since I have seen the manner in which the claim is fitted up, I have great confidence in Superintendent Walker's ability as an hydraulic miner. Up to this time, they have been occupied in getting an opening, and have been compelled to run the boxes full, and consequently have run off the most of the fine gold, none or very little of the bed-rock stratum being run in yet. Yet Mr. Hubbard, the pipe man, tells me the flume is showing gold finely.

The rich streak on the rim-rock, as they started in, only showed a depth of four feet; it now has increased to 15, and the evidence is now, as far as gone, that our greatest expectations will be realized; the prospects in the face of the pipe run from 10 colors to 10 cents a pan.

I think that you may expect \$10,000 per month after the first month (this month having run none but the top, and that in such a manner that but little could be saved, which I think, under the circumstances, it would be imprudent to stop to clean up).

The ditch is not carrying nearly half of the water now running in French Creek, the supply of which is perennial and inexhaustible. The first clean up will be about September 15th.

DIVIDENDS.

It is reported that the Little Chief will declare its usual monthly dividend on the 9th of August.

Amic, it is said, will declare a quarterly dividend of 10c. per share.

The Georges Creek Coal and Iron Company has declared a dividend of \$3.25 per share, payable 3d of August next.

It is rumored that Delaware, Lackawanna & Western R.R. Co. will declare a dividend during the coming month.

The Fulton Coal Company announces a dividend of three per cent.

REVIEW OF THE SAN FRANCISCO MARKET.

The Comstocks are "off" again, and we never saw a more dreary outlook for the mines of the great lode. Unless a strike is made, it is believed that only a few shafts will be kept open and in operation. The indications are, that a movement inaugurated by Mackey to work the Union Consolidated, Mexican, and Sierra Nevada through the Union shaft; the Ophir, California, Consolidated Virginia, Best & Belcher through the C. & C. shaft; the Gould & Curry, Savage, and Hale & Norcross through the Combination shaft, and so on down to a point below the Belcher, where the lode is split, will be accomplished, and beyond which very little work will be done until better times.

A dispatch received from San Francisco, and dated July 27th, says that the business at the Mining Stock Boards has never been nearer a stand-still than now. No trustworthy news is received from the Comstock that gives promise of an upheaval in the old favorites in the near future, although a number of persons, claiming intimate business relations with the principal managers of those mines, predict a startling change within the next ninety days. Reports received from Bodie by the companies located here are very favorable, but the market value of their shares does not respond. To all appearances, there is not a manipulator on the market for any description of mining stock. There is a growing interest in the mines of Arizona and Sonora, Mexico, to which people are departing in greater numbers every week.

The Evening Post says :

Advices from the west indicate the return to New York,

SAN FRANCISCO MINING STOCK QUOTATIONS.  
Daily Range of Prices for the Week.

NAME OF COMPANY	CLOSING QUOTATIONS.						Open- ing, July 30.
	July 23.	July 24.	July 26.	July 27.	July 28.	July 29.	
Alpha.....	4½	4¾	4¾	4¾	4¼	1¾	1¾
Alta.....	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Argenta.....	13-32	13-32	13-32	13-32	13-32	13-32	13-32
Bechtel.....	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Belcher.....	2.10	2.05	1¾	1¾	1¾	1¾	1¾
Belle Isle.....	11-16	11-16	11-16	11-16	11-16	11-16	11-16
Belvidere.....	8¾	8	8¾	8¾	8	8	8
Best & Bel.....	8¾	8	8¾	8¾	8	8	8
Bodie.....	5	5	5	5	4	4	4
Boston Con.....	1.90c.	1.90c.	1.90c.	1.90c.	1.90c.	1.90c.	1.90c.
Bullion.....	15½	15½	15½	15½	15½	15½	15½
Bulwer.....	2½	2½	2½	2½	2½	2½	2½
Caledonia.....	11-32	11-32	11-32	11-32	11-32	11-32	11-32
California.....	2	2	2	2	1¾	1¾	1¾
Cal. B. H.....	2.05	1.90	1¾	2	1¾	1¾	2
Chollar.....	3-16	3-16	3-16	3-16	3-16	3-16	3-16
Con. Imp.....	3-16	3-16	3-16	3-16	3-16	3-16	3-16
Con. Pacific.....	2.90	2.90	3	3	2¾	2¾	3
Con. Va.....	1.55	1.45	1½	1½	1½	1½	1½
Crown Pitt.....	3-16	3-16	3-16	3-16	3-16	3-16	3-16
Dudley.....	15	15	15½	15	15	14¾	15
Eureka Con.....	1.60	1.60	1½	1½	1½	1½	1½
Exchequer.....	1	1	1	1	1	1	1
Goodshaw.....	3.05	3	3	3	2¾	2¾	3
Gould & Cur.....	1.15	1.20	1¼	1¼	1¼	1¼	1¼
Grand Prize.....	3	3	3	3	2¾	2¾	3
Hale & Nor.....	3	3	3	3	2¾	2¾	3
Hillside.....	5-16	5-16	5-16	5-16	5-16	5-16	5-16
Indep'd nce.....	1	1	1	1	1	1	1
Jackson.....	40c.	40c.	13-32	13-32	13-32	13-32	13-32
Jul Con.....	45c.	65c.	21-32	19-32	21-32	21-32	21-32
Justice.....	2.10	2.10	2.10	2.10	2.10	2.10	2.10
Kentuck.....	2.10	2.10	2.10	2.10	2.10	2.10	2.10
Lady Wash.....	3-16	3-16	3-16	3-16	3-16	3-16	3-16
Leeds.....	1.16	1.16	1.16	1.16	1.16	1.16	1.16
Leopard.....	1.16	1.16	1.16	1.16	1.16	1.16	1.16
Leviathan.....	1.16	1.16	1.16	1.16	1.16	1.16	1.16
Mammoth.....	1.16	1.16	1.16	1.16	1.16	1.16	1.16
Manhattan.....	1.16	1.16	1.16	1.16	1.16	1.16	1.16
May Belle.....	3-32	3-32	3-32	3-32	3-32	3-32	3-32
Mar. White.....	20-32	21-32	21-32	21-32	21-32	21-32	21-32
McClinton.....	5-16	5-16	5-16	5-16	5-16	5-16	5-16
Mexican.....	8	7½	8½	8	7½	7¼	7½
Mon.....	1¾	1.85	1¾	1¾	1¾	1¾	1¾
Navajo.....	1¾	1.85	1¾	1¾	1¾	1¾	1¾
North Belle.....	12	12	12¾	12	12¾	12¾	12¾
N. Bonanza.....	12	12	12¾	12	12¾	12¾	12¾
N. Standard.....	12	12	12¾	12	12¾	12¾	12¾
Nooday.....	3¼	3¼	3¼	3¼	3¼	3¼	3¼
Ophir.....	7¾	7¾	7¾	7¼	6¾	6¾	6¾
Orig. K's'e.....	7¾	7¾	7¾	7¼	6¾	6¾	6¾
Overman.....	1.30	1.30	1¼	1¼	1¼	1¼	1¼
Potosi.....	1.30	1.30	1¼	1¼	1¼	1¼	1¼
Ray & Ely.....	5-32	5-32	5-32	5-32	5-32	5-32	5-32
R. de Monte.....	1.16	1.16	1.16	1.16	1.16	1.16	1.16
Savage.....	1.40	1½	1¼	1½	1	2	2¼
Scorpion.....	1.40	1.40	1.40	1.40	1.40	1.40	1.40
Seg. Belcher.....	7	7	7	7	7	7	7
Sierra Nev.....	11½	11½	11½	11½	11½	11½	11½
Silver Hill.....	20c.	20c.	20c.	20c.	20c.	20c.	20c.
Silver King.....	20c.	20c.	20c.	20c.	20c.	20c.	20c.
So. Bulwer.....	1½	1½	1½	1½	1½	1½	1½
Summit.....	1½	1½	1½	1½	1½	1½	1½
Syndicate.....	21-32	21-32	21-32	21-32	21-32	21-32	21-32
Tioga.....	80c.	80c.	9-16	9-16	19-32	19-32	19-32
Tip Top.....	7¾	7¾	7¾	7	7	7	7
Trojan.....	7¾	7¾	7¾	7	7	7	7
Tuscaloosa.....	5-16	5-16	5-16	5-16	5-16	5-16	5-16
Union Con.....	21	21	21¾	21¼	21	20½	20½
Utah.....	8¾	8¾	8¾	8¾	8¾	8¾	8¾
Wales.....	34	34	34	34	34	34	34
Vel. Jacket.....	4.30	4.30	4¾	4¾	4	4	4

shortly, of a considerable number of mining speculators, who are now scattered throughout the mineral belt from Montana to Mexico, prospecting for mines. Arrangements have been made by them to secure properties of more or less promise, which are to be floated next fall and winter in the Eastern cities. The indications now are, that new companies will soon spring up by the dozen, with the usual list of prominent men as "directors" and sponsors, the usual glowing reports of "experts," and large promises of profits, dividends, and fortunes in the future. The public will be expected to take an interest in all these, and to put up its money at once.

The Commercial Herald of the 22d says :  
The mining share market is dull and stagnant, and it does look as if we needed a "bonanza" to revive every department of trade. When mining stocks were active in the past, no complaints of inactivity in any department of trade were heard—every thing was "booming," but now, with a flatness in the mining share market, we have a flatness in general trade. The development of a bonanza would unquestionably bring about a "boom," but the necessity of a boom on that basis is not so imperative as was formerly the case; for the channels of trade are gradually changing to a healthier and more legitimate course, not relying mainly upon the active or inactive condition of the mining stock market for the prosperity or depression of all other avenues of trade. We must, however, admit that, with the discovery of ore on the Comstock, would come more or less general prosperity on the Pacific coast.

The Chicago mining market continues dull. The Review is in favor of a change in the manner of working our mines. It says there are too many claims and too few mines, too much prospecting and not enough development.

Ophir opens to-day at \$6¼ against \$7 as reported in our last. The Ophir and Mexican mining companies have combined to run a cross-cut on the 1600-foot level of the Ophir Mine, to intersect the north branch of the Sutro Tunnel. The floor of the main Sutro Tunnel has been re-graded and laid with new rails for a distance of three and a half miles, preparatory to putting in locomotives operated by compressed air.

Union Consolidated is lower, opening to-day at



GENERAL MINING STOCKS.

Dividend Paying Mines.

Main table listing mining stocks with columns for Name and Location of Company, Feet on Vein, Capital Stock, Shares, Assessments, Dividends, and Highest and Lowest Prices per Share at which Sales were Made.

Non Dividend Mines.

Table listing non-dividend paying mining stocks with columns for Name and Location of Company, Feet on Vein, Capital Stock, Shares, Assessments, Dividends, and Highest and Lowest Prices per Share at which Sales were Made.

g. Gold. s. Silver. l. Lead. c. Copper. \* Non-Assessable. † Assessment paid. ‡ Ex dividend. Total shares sold during the week, 381,764.

\$20½, as against \$21½ a week ago. We append so much of the superintendent's report of the company's operations during the past year as may be of interest. The total product of the mine during the year was 30,019 tons of ore, which yielded \$1,174,803. The receipts during the past year amounted to \$1,327,385, of which \$1,094,325 was from bullion. The disbursements were \$1,273,607, leaving a cash balance of \$53,778. The superintendent concludes his report as follows: "The establishment of the boundary line between our ground and the Sierra Nevada demonstrated that the largest portion of the ore-body discovered in the Sierra Nevada incline, in the year 1878, lay within our lines. The ore extracted during the past year, the yield of which has enabled us to meet our proportion of the extraordinary expenses connected with the purchase, equipment, and sinking of the joint shaft, in addition to our ordinary expenses, came from the ore-body. The fact that this ore extends below the 2400 level, and the favorable indications shown on the 2500, as far as opened, give encouragement to hope that valuable discoveries will be made as the work of development progresses."

Yellow Jacket is lower. The cross-cuts which have been started east of the 2800 and 3000 levels of this mine are being run into an entirely unknown and unexplored region. It is thought that the indications for finding good ore are favorable. The following is a copy of the balance sheet submitted in the secretary's reports at the recent annual meeting of this company:

Assets.		
Real Estate.....		\$9,812.50
Stock on hand.....		3,444.42
Profit and loss.....		170,329.82
Cash on hand.....		986.65
Total.....		\$184,573.39
Liabilities.		
Assessment No. 37, partial.....		\$101,950.10
Agency Nevada Bank.....		81,946.54
Capital stock.....		676.75
Total.....		\$184,573.39

The cost of the new shaft for the year ending July 1st, 1880, was \$530,303.22, a total to present depth, 3025 feet, of \$1,516,204.99.

Savage showed quite an advance, opening at \$2¼, the best price for the week, and decidedly the best for some time past. The enhanced quotation of this stock was undoubtedly due to the improved prospects said to have been made on the 1300 level. At the recent annual meeting of this company, the disbursements for the fiscal year were stated as \$680,190; and the receipts, of course derived from assessments principally, were \$541,044.

Eureka Consolidated still declining, the closing quotations of yesterday at \$14¼ being the lowest price of the week. The usual progress of developments and output continue in this mine.

PHILADELPHIA MINING STOCKS.

The subjoined table shows the opening, highest, lowest, and final sales of all the mining stocks dealt in at the Philadelphia Stock Exchange, and at the Philadelphia Mining Exchange, for the four days ending the 28th inst.:

Stocks.	Open- ing.	High- est.	Low- est.	Final.	Sales Shares.
Amie.....	\$0.84	\$0.87	\$0.83	\$0.83	600
Argenta.....	.25	.25	.23	.24	2,300
Bodie.....	.15	.15	.15	.15	16,650
Buena.....	1.15	1.15	1.00	1.10	600
Bechtel.....	.80	.83	.75	.75	400
Belle Isle.....	.05	.05	.05	.05	1,900
Bodie Chief.....	.30	.31	.29	.31	1,700
Buckeye.....	.30	.31	.29	.31	1,700
California.....	.30	.31	.29	.31	1,700
Conquest.....	.21	.23	.21	.22	900
Con. Pacific.....	.06	.08	.05	.05	35,600
Con. Imperial.....	.21	.23	.21	.22	900
Dauntless.....	.06	.08	.05	.05	35,600
Dahlonega.....	.15	.15	.15	.15	1,000
Findley.....	.15	.15	.15	.15	1,000
Girard.....	.12	.12	.11	.11	900
Granville.....	.61	.61	.60	.60	300
Gold Placer.....	.50	.50	.50	.50	1,400
Great Eastern.....	1.20	1.20	1.20	1.20	100
Grand Union.....	.37	.37	.37	.37	100
Hukill.....	.28	.28	.24	.24	15,350
Independence.....	.65	.65	.55	.65	11,300
Iowa Gulch.....	.11	.12	.11	.12	1,900
Little Keystone.....	.71	.74	.70	.73	700
Lucerne.....	.30	.45	.28	.45	10,950
Magnolia.....	1.10	1.10	1.00	1.00	1,500
Orion.....	.44	.44	.31	.31	3,800
Rara Avis.....	1.45	1.50	1.45	1.50	200
So. Hite.....	.82	.82	.82	.82	200
Tioga.....	.82	.82	.82	.82	200
Number of sales.....					111,550

Coal Stocks.

Irregularity has been the principal feature of the week, and with prices alternately up and down, the

COAL STOCKS.

NAME OF COMPANY.	Capital Stock.	SHARES.		Last Dividend.	Rate per Ann.	Quotations of New York stocks are based on the equivalent of \$100. Philadelphia prices are quoted so much per share.												SALES.			
		No.	Par Val.			July 24.		July 26.		July 27.		July 28.		July 29.		July 30.					
		H.	L.			H.	L.	H.	L.	H.	L.	H.	L.	H.	L.						
Am. Coal Co.	1,500,000	60,000	25	Mo.	Y.	R't.	Per c't														
Buck Mt. Coal	100,000	100	25	Jan.	79	2	20	20½	20	20	20	20	20	20	20	20	20	20	14,000		
Col. C. & I. pr.	15,000,000	150,000	100	Jan.	79	2	19	18¾	19½	19½	19½	19	19	19	19	19	19	19	935		
Ches. & O. RR	10,000,000	100,000	100	Jan.	79	2	28	28	28	28	28	28	28	28	28	28	28	28	100		
Colo. Coal	500,000	5,000	100	Aug.	76	3	9	82¼	80¾	83	82¼	82¼	81¾	82	80¾	81¾	81¼	82¾	82	18,865	
D. L. & W. RR	20,000,000	200,000	100	July	76	2½	5	85¾	84¾	86	84¾	85¾	84¾	84¾	85¾	84¾	84¾	87¾	85½	114,315	
Lehigh C. & N	10,148,550	208,971	50	Sept	76	1½	5½	39½	39½	39½	39½	39½	39½	39½	39½	39½	39½	39½	39½	60,308	
Leh. V. Y. E. R	27,228,855	540,858	50	Sept	79	1	4	52	52	52	52	52	52	52	52	52	52	52	52	5,405	
Mary'd coal	4,100,000	44,000	100	Jan.	78	1½	1½														
Montauk C.I.	2,500,000	25,000	100	July	79	3½	7	+													
Morris & Es'x	15,000,000	300,000	50	July	79	3½	7	+	100%	100%	107½	106%	106%	106%	106%	105½	107	100%	3,910		
New Cen. C.I	5,000,000	50,000	100	Jan.	79	2	29	29	29	29	29	29	29	29	29	29	29	29	29	450	
S. J. C. R. R.	20,600,000	206,000	100	Apr.	78	2½	29	29	74¾	77¾	75¾	77¾	76¾	77¾	74¾	77	74¾	77	70¾	90,115	
N. Y. & S. Coal.	1,500,000	15,000	100	Oct.	79	3	10														
Penn. coal.....	5,000,000	100,000	50	Oct.	79	3	10														
Penn. R. L.....	68,870,200	337,404	50	Nov.	79	2½	10	55%	55%	55%	55%	55%	55%	55%	55%	55%	55%	55%	55%	100	
Ph. & K. R.R.*	34,278,175	685,583	50	Jan.	76	2¼	18	18¾	19¾	18¾	19	18¾	19	18¾	19	18¾	18	19½	19	49,741	
Spring Mt. C.I	1,500,000	30,000	50	Dec.	79	3½															27,305

\*Of the sales of this stock, 17,725 shares were sold at the Philadelphia Stock Exchange, and 9,670 at the New York Stock Exchange.

Total Sales..... 375,729

BOSTON MINING STOCKS.

NAME OF COMPANY.	Shares.	Par.	July 23.		July 24.		July 26.		July 27.		July 28.		July 29.		SALES.
			H.	L.	H.	L.	H.	L.	H.	L.	H.	L.			
Allouez, c..... Mich.	80,000	\$25			4¾		4¾							100	
Atlantic, c..... Me.	40,000	25			18									300	
Atlas..... Mich.															
Blue Hill, c..... Me.	50,000	10							3%					200	
Brunswick, c..... Me.			23¾											30	
Cal. & Hecla, c. Mich.	100,000	25							220					58	
Catalpa..... Colo.	300,000	10		19-16		19-16	1½	1½			17-16	1½		1,215	
Central, c..... Mich.	20,000	25													
Chrysolite..... Colo.															
Copper Falls, c. Mich.	20,000	50	12		12						13			220	
Copp'r Harbor, c. Mich.	20,000	25													
Cont'm't M. Co					1%									500	
Con. Hamp. M. Co															
Concord M. Co.															
Dana, c..... Mich.	20,000	25													
Douglas, c..... Me.	100,000	5													
Duncan, s..... Ont.	60,000	20													
Franklin, c..... Mich.	20,000	25			14¾		14¾	14¾	14¾		16	15		835	
Great Western..... Mich.	20,000	25													
Hanover..... Mich.	20,000	25													
Harshaw..... Ariz.	100,000	100	30		30½	30	35		35		35			1,220	
Humboldt, c..... Mich.	20,000	25													
Hungarian, c..... Mich.	20,000	25													
Huron..... Mich.			5											225	
International, s. Ont.	60,000	20							6						
Madison..... Mich.															
Manhattan, c..... Mich.	20,000	25													
Mesnard, c..... Mich.	20,000	25									2			100	
Minnesota, c..... Mich.	20,000	25													
National, c..... Mich.	20,000	25	2%	2%	2¾		2¾		2¾		+			1,180	
Orford..... Can.	50,000	20													
Osceola, c..... Mich.	40,000	25			40									120	
Pewabic, c..... Mich.	20,000	25			19						20¾	20¾		250	
Phoenix, c..... Mich.	20,000	50													
Pontiac, c..... Mich.	20,000	25													
Ridge, c..... Mich.	20,000	25	5%				5½		5½		6			295	
Rockland, c..... Mich.	20,000	25													
Quincy, c..... Mich.	40,000	25			24	27¾	28		30¼	29	32¾	32		760	
Silver Islet, s..... Mich.	40,000	25	30		28½	28								43	
So. Hite, g..... Cal.	100,000	25													
Star, c..... Mich.	20,000	25													
Superior..... Me.	50,000	10													
Sutro Tunnel..... Nev.	*	25													
Silver Nugget.....															
Union L. & C. Co. Mich.															
Washington, c. Mich.	20,000	25													
Waukeag..... Me.															
Winthrop..... Mich.															

c Copper. s. Silver. \* 2,000,000. † 2 13-16.

sales have amounted to 375,729 shares. The stocks, however, have, as a rule, gained strength, and today's prices compare favorably with those of a week ago. Delaware, Lackawanna & Western has absorbed the greater part of the dealings, the sales amounting to 114,305 shares, at prices fluctuating between \$84¼@87%. Delaware & Hudson has been but moderately active, recording sales of 18,865 shares at \$83@80%. The transactions in New Jersey Central have amounted to 90,115 shares at \$74¼@77½. Reading has sold to the extent of 9670 shares at prices ranging from \$18½ to \$19½. The dealings in the minor stocks have been moderate and pretty evenly distributed.

Copper and Silver Stocks.

Reported by C. H. SMITH, Commission Stock Broker, No. 15 Congress street, Room 3.

Boston, July 29. The market for copper stocks has been quite active the past week, and we have to note a decided improvement in prices, together with a general disposition on the part of operators to load up in anticipation of the coming boom. The rise in ingot in London has stimulated the market here, and the stocks of the producing mines are in quick demand at the advanced rates. The low-priced non-productive stocks are also beginning to feel the movement, and we anticipate an active campaign all along the line. The operations in silver stocks at the Board have been confined to a few specialties, but on the street there has been a good deal of activity in "San Pedro & Cañon del Agua," on the report that General Grant was to be presi-

dent of the company, and the stock, which had been selling at \$1¼@2, rapidly advanced to \$6¼@7, but subsequently declined to \$3¼@4, and closes \$4@5.

Calumet & Hecla steady at \$20.

Copper Falls advanced from \$12 to \$13¼, and closes \$13 bid.

Franklin advanced from \$14¼ to \$16½, and is in active demand at the latter price at the close.

Quincy also advanced from \$27¾ to \$32¾, but was a little off to-day, closing at \$32 bid.

Osceola advanced from \$19 to \$40.

Pewabic from \$19 to \$22, and closed \$21¾ bid, \$22 asked.

Allouez dull at \$4¼@4½.

Atlantic sold at \$18@18½, and closed \$18 bid.

Huroa advanced from \$4½ to \$6¼, at which it is offered.

Ridge also shows an advance from \$5 to \$6¾, closing \$6¼@6¾.

National advanced from \$2½ to \$3, and was offered at \$3 at the close.

Blue Hill is in better demand, and has advanced from \$3 to \$3¾.

Mesnard sold at \$2.

Star sold at \$1¾.



Miscellaneous Stocks and Quotations.

Sales and quotations of the stocks and bonds dealt in at New York, Philadelphia, and Baltimore, for the week ending the 29th inst., are given in the following tables. The Philadelphia quotations will have a \* affixed. The Baltimore quotations are indicated thus †

Table with columns: STOCKS, Par Value, High'st, Lowest, Closing, Sales: Shares. Includes entries for St. L., I. M. & S. R. Co., Cambria Iron Co., etc.

Table with columns: BONDS, Price, When Due, Int. Due, High'st, Lowest, Amount. Includes entries for D. L. & W., 7s, conv, M. & E., 1st con, 7s, etc.

Gas Stocks.

NEW YORK, Friday Evening, July 30. The stocks of the New York companies are strong and firmly held. Brooklyn stocks are all lower, in consequence of the great activity of the new company, in laying mains, putting in service pipes, etc.

66 shares Nassau Gas-Light Company of Brooklyn, \$25 each... 49 1/2
132 shares Brooklyn Gas-Light Company, \$25 each... 106
140 shares Northern Gas Light Company, \$50 each... 50

San Francisco.—The Commercial Herald says that the new Pacific Gas Co. of San Francisco is meeting with remarkable favor in every direction. Its propositions are published in such a straightforward business-like manner that great confidence is manifested on every hand.

Baltimore.—The Sun says: The Trustees of the People's Gas Company yesterday opened bids for \$200,000 Consolidated Gas Company's 6 per cent bonds, which were allotted to the former company under the terms of the consolidation. The bids aggregated \$841,000 at prices ranging from \$105 to \$108.53.

new stock have been rather too liberal, and the price has declined from \$88 a week ago to \$80 bid and \$87 asked. William Sinclair, Trustee of the Gas Light Company of Baltimore, will pay on demand a dividend of \$20 per share in cash to stockholders of record on 30th June last.

The following list of companies in New York and vicinity is corrected weekly by GEORGE H. PRENTISS, Broker and Dealer in Gas Stocks, No. 19 Broad street, New York. Quotations are based on the equivalent of \$100.

Table with columns: COMPANIES IN NEW YORK AND VICINITY, Capital Stock, Par, Rate per ann., Am. of last, Date of last, DIVIDENDS, QUOTATIONS, Bid, As'd. Includes entries for Mutual N. Y., N. York, Harlem, etc.

\* Changed from certificates to bonds, of \$1000 each; 6 per cent per annum.

THE BULLION MARKET.

DAILY RANGE OF SILVER IN LONDON AND NEW YORK, PER OZ

Table with columns: DATE, London, N. Y., DATE, London, N. Y. Includes entries for July 24, 25, 26, 27.

BULLION SHIPMENTS.

We give below a statement showing the latest published bullion shipments, in addition to those announced in our issue of July 24:

Table with columns: Shipments, Location, Amount. Includes entries for July 8, 7, Northern Belle, 12, Northern Belle, 12, Star, etc.

Table with columns: Date, Location, Amount. Includes entries for July 7-24, Tombstone M. and M. Co., 17-24, Tip-Top, etc.

(a) Worth from \$8 to \$12 per ton. (b) Received in Salt Lake City. (c) Shipped from Salt Lake City. (d) Received in this city.

ARIZONA.

Tombstone M. and M. Co.—A Tombstone paper says of the mines of this company: Before our next weekly issue, this company will have thirty stamps at work. During the month of June, the 10-stamp mill alone turned out \$60,000, the net bullion return from the ore being \$96, A dispatch from San Francisco, dated July 25th, says that the Tombstone mills have temporarily suspended work, owing to a break in their dam across the San Pedro, Globe.—During the week ended July 17th, there were nine bars of silver, valued at \$14,585, shipped from Globe City, Arizona, through Wells, Fargo & Co. Mack Morris.—The bullion shipments from the Mack Morris mine for July amount to \$11,400.

CALIFORNIA.

Bodie.—A dispatch from Bodie says that the Standard shipped during the week ending July 24th, 1044 tons; pulp assay, \$40.47 per ton; crude bullion, 4225 ounces; shipped to company, \$24,975.53. Bulwer shipped during same time, 465 tons, the average pulp assay being \$13.85. The Bodie Consolidated shipped during the week ending July 24th, \$7746. The ore averaged over \$78 per ton. The south drift in Mono from the east cross-cut is yielding ore assaying \$77 per ton. The North Hite and Yosemite report a daily ore production of 14 tons, worth \$40 per ton—a yield of \$560 gross. The San Francisco Bulletin says: The gold gravel mines of California are understood to be doing well. We hope soon to have returns from a number of these for the month of June.

COLORADO.

Leadville Output.—The following table, taken from the Leadville Circular of the 24th inst., gives the approximate daily output of the leading mines of the camp:

Table with columns: Mine Name, Tons, Location. Includes entries for Little Pittsburg, Chrysolite, Little Chief, etc.

The last reports from the Leadville smelters show the following furnaces in operation:

Table with columns: Furnace Name, Location. Includes entries for La Plata, California, Cummings & Finn, etc.

Leadville Democrat, July 23d: The average output of the Little Chief during the last week was about one hundred and ten tons per day. The shipments on Monday amounted to one hundred and thirty-three tons. No. 7 shaft, which has always produced very rich ore, is showing up some chlorides.

Clear Creek.—The Georgetown (Colo.) Miner of July 17th says that the Hulkhill sends daily to the Roberts Mill 30 tons of low-grade ore, and that the dressed ore contains nearly or quite \$100 per ton. It says that the Moose Mining and Smelting Company at Golden turned out \$37,500 worth of bullion in June. The Freeland is said to be producing nearly \$60,000 per month, of which about two thirds is profit. From 40 to 50 tons are shipped daily, 40 tons of the mill concentrations that are shipped being equal to about 115 tons of crude ore.

MONTANA.

A letter from Helena says that the works of the Alta-Montana Company, at Wickes, continue very successful in their operation, the daily product of bullion being 4500 pounds. A new 50-ton water jacket, which is erecting, will increase the daily product to 15,000 pounds.

NEVADA.

The San Francisco Bulletin of July 21st has the following mining items: The Alta mine has recently crushed 128 tons of ore, yielding \$1870. The Northern Belle mine is making regular shipments of bullion. The last was \$12,347. Late bullion shipments embrace \$4200 from the Paradise Valley mine on the 16th, and \$8239 from the Bodie mine. The Star mine, Cherry Creek, White Pine County, Nev., owned in San Francisco, produced for June, in bullion, \$24,244.37. The expenses were about \$22,000.

Tuscarora.—The Times-Review says: By August 1st, we are assured that all of the mills in the camp will be supplied with ore as follows: The Independence Navajo mill, with Belle Isle ore; the Lancaster mill with Argenita ore; the Grand Prize 20-stamp mill, 10 stamps with ore from the Grand Prize mine, and 10 with North Belle Isle ore. The De Fries mill will be employed to run Belle Isle tailings. We hear that there is a scheme on foot to bring these properties to New York.

Hills de.—The Hillside furnace, Bristol, Nev., is reported to be turning out 100 bars of base bullion per day. The mine is improving. No dividends, however, but Irish ones (assessments) are reported as yet.

Comstock.—During the week ended July 17th, the California mine raised 460 tons of ore, of average assays of \$27.61; bullion shipped, \$9,844. Consolidated Virginia raised 1215 tons, average assays, \$35. Northern Belle.—Northern Belle had produced \$60,528.70 up to July 17th.

OREGON.

The year's product of the Commer quartz mine, Baker

& Co., Oregon, owned by a private company formed of San Francisco and Boston parties, reports its product for the year ending June 30th to be about \$80,000.

UTAH.

**Stormont Mining Company's Production during July.**—According to the postal cards received from the secretary of this company, the production to July 27th has been as follows:

Fine bullion received at office in New York, 28 bars, worth \$45,215.41  
Telegraphic advice of shipment on July 27th, amounting to 7,000.00

Total \$52,215.41  
We do not know that the secretary has advised us of all the bullion produced. If he would number his reports, it would be more satisfactory.

**Ontario.**—Following is the bullion shipments from the Ontario for the two weeks ending July 16th:

July 3—Saturday	\$3,434.01
July 4—Sunday	3,738.87
July 5—Monday	5,961.14
July 6—Tuesday	4,395.73
July 7—Wednesday	5,107.12
July 8—Thursday	5,142.69
July 9—Friday	3,940.29
July 10—Saturday	6,582.57
July 11—Sunday	6,486.52
July 12—Monday	6,450.11
July 13—Tuesday	6,645.17
July 14—Wednesday	6,342.55
July 15—Thursday	9,069.69
July 16—Friday	5,771.33

Total \$79,097.79

MISCELLANEOUS.

**Bullion Receipts from the Mines to New York.**—The bullion received from the mines at the various offices in this city during the week ending with yesterday, as compiled from various sources, amounts to \$337,849.04, as against \$205,391.05 reported in our last.

**Germany's Conservatism on the Silver Question.**—A few days before its recent adjournment, the German Bundesrath rejected a petition for the restoration of the double standard. Now the Bank is again emitting silver thalers that had been withdrawn from circulation on the pretense that change is not plentiful enough. One of the first measures likely to be brought before the next Reichstag will be one raising the amount of silver change to the proportion of 12 marks a head.

The Paris Bourse says: There is no denying that the question of bi-metalism has made a decisive progress in Germany; but it is, perhaps, little known that Germany herself is a very large producer of the white metal, and is consequently more interested in the question than might appear from the statements of mono-metallists. Thirty years ago, the production, from 1848 to 1857 was 96,907 pounds—a quantity used for industrial purposes. The production in 1879 attained 332,548 pounds, against 331,334 in 1878. Some mines not having sent in their statements, the production may be estimated in round figures at 354,500 pounds. The depreciation of the white metal, calculated on this quantity, comes to 5,500,000 marks, and as the production since 1870 attained 2,881,224 pounds, Germany may be considered to have lost more than 20,000,000 marks. We need hardly add that the production of silver in Germany is not in the old silver mines of Clausthal, Mansfeld, and Freiberg (in Saxony), but chiefly in the lead and copper mines. The fact is, that Germany produces about twenty millions of lead per annum, and that the working expenses are chiefly defrayed by the silver the mineral contains.

**The Bodie District as a Bullion Producer.**—The Bulletin of July 19th says: The product of the mines at Bodie for June, as given by the Free Press, was as follows:

Standard Consolidated	\$165,170
Noonday and North Noonday	56,058
Bodie Consolidated	30,579
Bulwer Consolidated	13,469
Scattering	2,222

Total \$267,498

The heaviest yield of any single month last year was in June, when the total was \$302,886. The deposit in the Bodie mine was deceptive. The ore was unusually rich, but it did not hold out. The product of the company for the half-year ending June 30th, 1880, was \$1,414,533, against \$1,181,310 for the same period of 1879, an increase of \$233,223. Since the revival of the mining industry in 1877, the production has been, up to July 1st, or three years and a half, \$5,898,000.

Thus far, the Bodie District has developed only two dividend mines. The Standard commenced paying dividends in September, 1877, and has not missed a month since. The dividend paid by this mine on the 12th inst. nearly completes the third year of uninterrupted monthly disbursements to stockholders. In this interval it has paid out dividends aggregating \$1,875,000, and appears to be good for many more. The history of the Bodie mine has been more brilliant, but more erratic and unsatisfactory. It commenced paying dividends in August, 1878, at \$1 per share, but before the end of the month it paid two extra dividends of \$2 and \$5 per share respectively. With such an unwise beginning, it is no wonder that six months later dividends ceased for six months. They were then paid for eight consecutive months, first at the rate of \$1 per share, then 50 cents, and finally 25 cents per share. Following this snuffing of copper of dividends altogether came assessments. The dividend record of both mines to date is as follows:

	Bodie		Standard	
	No.	Amount.	No.	Amount.
1877	7	\$750,000	4	\$200,000
1878	6	350,000	12	600,000
1879	6	100,000	12	600,000
1880	3	100,000	7	475,000

Totals 16 \$1,200,000 35 \$1,875,000  
The last dividend of the Bodie mine was paid March 1st, 1880, and the last by the Standard July 12th, 1880. There has never been an assessment on the Standard mine, and only two on the Bodie, the same aggregating \$75,000, the last one having been levied in April, 1879. The Bodie stockholders have been treated to two stock dividends, the first one when the mine was divided by the creation of the Mono Mining Company, and the second one when the capital stock was doubled. The early stockholders have therefore received three shares for one, besides their proportion of the \$1,200,000 in dividends paid. The gross

bullion product of the Bodie since January 1st, 1877, and the dividends paid have been as follows:

Bullion	\$6,898,000
Dividends from two mines	3,075,000

Expenses and bullion on hand \$3,823,000  
Probably 45 per cent of the face value of the bullion of the whole district has been given to the Bodie and Standard stockholders. This is one way of looking at the results of the last three years and a half in this district. There is another and less favorable side, judged from the present stand-point. The finding of a good body of ore in any locality naturally leads to a search for other bodies. This involves expense, to meet which companies are formed and assessments are levied. The opening of the Standard mine has led to the formation of at least fifty more companies, all operating within a short radius of that mine. The full list of Bodie District mines is probably much larger. The Stock Report gives a list of fifty-one mines in that section, which have collected or levied assessments aggregating \$2,743,600. This amount must be added to the cost of developing the district as shown by the difference between the dividends actually paid and the amount of bullion actually produced, as follows:

Bullion	\$6,898,000
Assessments	2,743,600

Available money	\$9,641,000
Dividends	3,075,000

Labor and improvements \$6,566,600

As an offset for this outlay of \$9,641,000, stockholders have received about 32 per cent in cash during the past three and a half years, and have a large number of mines in various stages of development, besides three or four mills, a large quantity of hoisting-machinery, buildings, and miscellaneous property. On the whole, the expenditure has been more remunerative than is generally the case in small mining camps. The Standard mine is to-day selling at the rate of \$3,800,000. The Bodie is rated at \$500,000, and others from \$50,000 to \$500,000. What the outcome of these partially-developed claims will be, no one, of course, can predict with any degree of accuracy. It would be strange indeed if a district that has shown two such claims as the Bodie and Standard, and had yielded nearly \$7,000,000 in three and a half years, should not yet give to the world many more millions.

Exports of Gold and Silver from New York.

Week ending July 24	\$81,081.00
Corresponding week last year	107,100.00
Since Jan. 1	4,980,086.00
Corresponding period last year	11,380,878.00

Gold Interest Paid Out by the Treasurer.

Week ending July 24	\$522,732.91
Corresponding week last year	462,918.71
Since Jan. 1 this year	36,954,488.02
Corresponding period last year	39,264,904.67

**Mexican Dollars.**—The United States mint regulations are being revised, and will shortly be published. Among other features, it is found that under a provision of the Revised Statutes the one quarter, one eighth and one sixteenth parts of the Mexican silver pillar dollar are redeemable by the United States at 20, 10, and 5 cents respectively. It has been generally supposed that these coins were not redeemable by the United States.

**Gold Imports.**—The Public of yesterday says: Shipments of gold from Europe are talked of, not merely as probable but as having begun already. The rate of exchange does not strongly confirm the conclusion that bona fide shipments in considerable amount have yet been made, and the operation looks much as if it had been contrived with an eye-single to the price of stocks in New York. Yet there is good reason to believe that considerable imports of gold may not be far distant, and if it once becomes certain that \$10,000,000 will come, the market will probably act just as if \$75,000,000 were sure to follow. For about six weeks, Europe must live on breadstuffs mainly imported from this country, for stocks have been drawn very low. Shipments of gold within that time are not improbable, because it is already evident that very large deficiencies of grain must also be supplied in Europe during the coming season from the American crop.

The amount of gold cabled as on the way from London and Havre is \$800,000.

**Our Coin Balances.**—During the fiscal year ended June 30, 1880, the United States exported \$12,500,000 of coin and bullion, and imported from foreign countries \$85,500,000 of the same, making a net gain, over and above the productions of our own mines, of \$73,000,000 of coin and bullion for the year. The exports, exclusive of coin, were \$30,000,000, imports \$30,000,000, a "balance of trade," as the phrase goes, in our favor of \$170,000,000 over and above the coin and bullion balance.

**The Silver Question Again.**—WASHINGTON, July 27.—The transportation of silver is becoming a serious question in the Treasury Department. The Mint and Sub-Treasury in San Francisco are overflowing with silver coin, and an application is made for the transfer east of \$2,000,000. The cost of transporting this sum, at the rate charge by express companies and railroads, would be \$20,000, or 1 per cent. Silver bullion costs more in San Francisco than in Philadelphia, and yet the silver dollar can be used for circulation only in the Middle and Eastern States. The question of the mode in which this silver can be transported, and where it can be most easily stored, and not exceed the amount of the \$20,000 appropriated for vault room, is now under consideration by the Treasury Department.

The Treasury Department has ordered a small vault capable of holding four million standard dollars to be constructed for Philadelphia. This will afford some relief to the New York Sub-Treasury.

METALS.

NEW YORK, Friday Evening, July 30.

In the metals generally the signs of improvement mentioned in our last issue have been fully maintained, especially in iron, which we more particularly noticed elsewhere. There is a noticeable improvement in the tone of the markets on the other side the Atlantic, which has its natural effect in stiffening prices on this side. We now feel justified in looking forward to a healthy and legitimate fall business, which we hope will be, for the most part, at least, based on the requirements of the situation.

**Copper.**—This metal is firmer, sales having been made up to 18½c. per lbs., and 100,000 have changed hands at 19c. for delivery in August, September, and October. It is reported on the street that much larger transactions have taken place, but we were unable to obtain sufficiently accurate information to verify it. The market closes firm at 18½ to 18¾.

Our English advices by mail date up to July 20th.

July 14th. Cable from Valparaiso, with details of charters, gave quantity only 1900 tons; 1150 tons bars, ingots, 600 tons furnace material, England; 150 tons bars, France. Price, Valparaiso, \$19.40, parity Liverpool, £59¼, without commission either side.

Shipments:	1880.	1879.	1878.	1877.
January 1st to June 30th	Tons. 24,097	Tons. 24,317	Tons. 22,082	Tons. 24,482
June only	3,200	4,031	2,714	3,983

The London market was very irregular, g. o. bs. ranging from £61½ down to £60 cash, small sales.

July 15th. Market undecided. Sellers and buyers scarce at nominal quotations of £60 cash for ordinary brands.

July 16th. Market quiet, with sellers at close g. o. bs. at £60¼ usual cash terms.

July 19th. There was more inquiry, and cash parcels fetched £60¼ and £60½, a moderate quantity of forward stuff going at £61.

July 20th. A moderate business was done at from £60½ to £61 cash; £61½ to £62 extended prompts.

Australian unchanged, English firm at £35 to £66 for Tough Cake, £65 to £67 for Select, £70 to £71 for India Sheets. Yellow Metal Sheets, 6d. to 6¼d. per lb.

STATISTICS OF COPPER, LONDON, LIVERPOOL, SWANSEA, AND FRANCE.

July 1st to 15th.	
Imports.	Tons.
Deliveries.	Tons.

Fine foreign, chiefly Australian	210	355	London.
Chili Bars and Ingots	4 0	856	Liverpool
Chili In Ores and Regulus	Nil.	161	& Swansea

Totals, England 689 1,372

Fine foreign, chiefly American	Nil.	Nil.	France.
Chili Bars, Ingots, and Barrilla	500	485	
Tons	1,189	1,857	

Stocks.	
July 15th.	Tons.
June 30th.	Tons.

Fine foreign, chiefly Australian	5,982	6,118	London.
Chili Bars and Ingots	31,878	23,264	Liverpool
Chili In Ores and Regulus	1,075	1,236	& Swansea.

Totals, England 38,935 39,618

Fine foreign, chiefly American	633	633	France.
Chili Bars, Ingots, and Barrilla	4,556	4,541	
Tons	44,124	44,792	

Chili chartered (Mail and afloat)	9,909	10,125	
Telegram	3,710	2,800	
Tons	57,783	57,717	

Chili G. O. Bs.	£59¼	£59¼
Wallaroo Cake	73	72

Jan. 1st to July 15th.	
1880.	Tons.
1879.	Tons.
1878.	Tons.

Imports.	Chili	25,599	26,064	28,017
	Other foreign	5,877	9,441	7,264
Tons		31,476	36,105	35,281

Deliveries.	Chili	24,898	22,647	22,281
	Other foreign	4,709	8,495	5,818
Tons		29,607	31,142	28,099

By cable last night, Chili bars were quoted at £61 5s. against £62 the day before.

**Tin.**—This market has fairly held its own since our last. About 700 tons of spot and to arrive have changed hands at from 20½c. to 21¼c. We quote spot 21¼c. and 21½c. for futures. Market closes rather sellers than buyers at 21¼c. for spot and 21½c. for futures.

Our English advices are up to July 20th:

July 14th. The market on first change was somewhat erratic, and prices moved upward and downward very unexpectedly. On second change a large trade was done at 88@89½s. forward delivery, 87½s. cash, closing buyers at best.

July 15th. The latest quotations were 87½s. to 88½s. cash.

July 16th. Buyers offered 87s., sellers asking 88s. Some cash Banca was to be had at 87s.

July 19th. The statistics of this metal show that stocks in London and Holland have fallen from 13,318 tons on January 1st to 10,161 tons on July 1st; besides which 1000 tons of Australian, held privately in Holland, and not included in figures of January last, have also been absorbed by the trade. Since 16th instant only a few cash parcels have changed hands at 86½s. and 87s., cash.





**THE COAL TRADE REVIEW.**

**Anthracite.**

New York, Friday Evening, July 30.

The companies have agreed to continue the half-time suspension during the month of August. There was a strong feeling in favor of a two weeks' total suspension, but a minority objection overruled this. Had it been adopted, we think that its influence on buyers would have been much more marked. The public has witnessed much of half-time work, and yet seen an abundant supply of coal, and it is still unwilling to believe that all wants can not be supplied if the same policy be continued indefinitely. In this, however, there is likely to be some disappointment; but then there is the certainty that if the companies can secure the prevailing prices, they will work full time. This to the ordinary mind would mean a production twice as large as is now being furnished. It will be found, however, that, if the output on full time is increased fifty per cent it will be large. The mines will not be able to do proportionately nearly as much, while it will be found that the lack of transportation facilities will act largely in curtailing.

The time is rapidly approaching when many who have been holding off for lower prices will be compelled to come into the market to secure their winter's supply. In fact, there appears to be a movement among this class already. During the past week, there has been very much more buying and inquiry, and prices are better among that class of dealers who have been shading most. There is a decidedly better tone to the market than there has been for a long time past. The improvement in the iron trade is having a beneficial effect on coal.

The production of anthracite coal last week was 406,007 tons, as compared with 393,340 tons the previous week, and 552,593 tons the corresponding week of 1879. The total production from January 1st to July 24th was 11,509,290 tons, as against 13,898,662 tons for the like period of last year, showing a decrease this year of 2,389,372 tons.

Mr. John H. Jones furnishes the following statement of the Anthracite coal tonnage, correcting his statement published by us last week:

	June, 1880.	June, 1879.	Difference.
			Dec.
Phila. & R'g RR...	481,599.12	660,960.00	188,360.17
Lehigh Val. RR...	359,260.11	417,619.03	58,358.12
Cent. RR. of N. J.	270,832.10	326,208.04	55,375.14
Del. L. & W. RR.	269,195.01	348,581.10	79,386.09
Del. & H. Canal Co.	188,738.07	311,413.15	122,675.08
Pennsylvania RR.	156,907.18	168,981.18	10,074.00
Pennsylv'a Coal Co.	77,857.11	135,948.10	58,090.19
N. Y., L. E. & W. RR.	32,249.08	85,504.07	53,254.19
Total.....	1,836,040.18	2,462,217.16	625,576.18
	For Year 1880.	For Year 1879.	Difference.
			Dec.
Phila. & R'g RR...	2,632,230.18	3,401,024.13	768,793.15
Lehigh Val. RR...	1,920,901.04	2,014,840.01	93,938.17
Cent. RR. of N. J.	1,514,225.11	1,768,065.15	254,440.04
Del. L. & W. RR.	1,609,290.05	1,792,899.12	183,609.07
Del. & H. Canal Co.	1,269,936.07	1,537,281.16	267,345.09
Pennsylvania RR.	721,897.10	770,723.06	48,825.16
Pennsylv'a Coal Co.	473,691.15	678,237.15	204,546.00
N. Y., L. E. & W. RR.	184,941.06	214,314.06	29,373.06
Total.....	10,312,120.10	11,887,987.04	1,575,866.14

**Bituminous.**

This trade is still quiet, and without particular feature. Those doing a steamship trade note an improvement in the incidental demand. The production from both the Cumberland and Clearfield districts is well maintained.

A dispatch from Pittsburg, dated July 28th, says: A meeting of delegates from the river and railroad coal mines was held here to-day. Chairman Jones stated that the meeting had been called for the purpose of expressing an opinion which would take the responsibility of doing so off from his shoulders. He said that the Inter-State Association, whose convention was held here in March last, decided to strike for three or four different things in one day, something that could not well be done, and that he had answers to letters from different parts of Ohio which showed that men could not come out at the time appointed. "At Columbus," said he, "they decided to ratify the resolutions of the Inter-State convention, while the very next day in Hocking Valley, a meeting was held at which they decided not to abide by the resolutions. The main question of the meeting was, whether the miners of the Pittsburg district would abide by the decisions of the Inter-State Convention. The question was discussed with great earnestness for some time, when it was finally decided to appoint a committee, which subsequently reported a series of resolutions to the effect: that they defer the adoption of the Inter-State resolutions, but that they do not in the least abate their convictions that the screen system of weighing coal and monthly payments are just. These resolutions were adopted, as was also one that a five per cent. levy be ordered

on all the miners in the district for testing in the courts the Check Weighman law of 1874, allowing the miners to select their check weighmen, the bosses now refusing to allow them on "triple."

Messrs. Reno & Little, under date of Chicago, July 27th, say:

We have to report a very dull state of trade during the month. Last year in July a large business was done in the delivery of coal to families, and also by car-loads to the country trade. The stock of Anthracite coal now in the city is regarded as large. The receipts of all kinds of coal are fully two hundred and fifty thousand tons larger than for same time last year. There is beginning to be an uneasy feeling among buyers both in city and country; afraid to buy at present prices; fearing, yet hoping the price may decline, and afraid to put off buying lest the price may suddenly advance, but the result is—no coal selling. A change, an advance or decline, would set the machine in motion. An advance preferred.

RENO & LITTLE.

**New York.**

**Wholesale Prices of Bituminous Coal.**  
DOMESTIC GAS-COALS.

Per ton of 2240 lbs.	At the Shipping Ports.	Along-side at New York.
Westmoreland and Penn. ....	\$4.25	\$5.50
At Greenwich, Philadelphia .....	5.00	5.50
At S. Amboy .....	4.10	5.40
Kanawha at Richmond .....	3.75	5.85
Murphy Run, West Va., at Baltimore ..	3.75	5.70
Fairmount, West Va., " .....	3.75	6.00
Newburg Orrel, Md. " .....	3.75	7.00
Cannelton & Peytona Cannel, West Va. ....	6.00	10.00
" Splint " at Richmond .....	6.00	7.00
" Gas Coal at Richmond .....	4.00	5.65
MANUFACTURING AND STEAM COALS.		
Cumberland at G'n & Alexandria .....	3.75	5.50
Cumberland, at Baltimore .....	4.10	5.50
At mines, "Eureka" and "Franklin." ..	1.50	5.50
At Baltimore .....	4.25	5.50
At Philadelphia .....	4.25	5.50
At South Amboy .....	5.25	5.50
F. o. b.		
Retail Prices.		
Per ton of 2000 lbs.		
Anthracite.		
	G. & Egg.	Stove.
Pitston coal delivered .....	\$5.00	\$5.00
Lack. Coal. delivered below 59th St ..	5.00	5.00

	1880.	1879.
Total amount cleared ..	36,540,434.494	39,339,460.026

**STATISTICS OF COAL PRODUCTION.**

This is the only Report published that gives full and accurate returns of the production of our Anthracite mines.

Comparative statement for the week ending July 24th, and years from January 1st:

Tons of 2240 lbs.	1880.		1879.	
	Week.	Year.	Week.	Year.
<b>Wyoming Region.</b>				
D. & H. Canal Co. ....	53,176	1,582,302	84,497	1,781,947
D. L. & W. RR. Co. ....	61,242	1,776,955	81,919	1,983,190
Penn. Coal Co. ....	21,923	534,943	33,506	783,819
L. V. RR. Co. ....	20,325	539,574	15,432	536,857
P. & N. Y. RR. Co. ....	1,024	17,159	1,533	17,524
C. RR. of N. J. ....	28,517	800,297	43,299	1,006,554
Penn. Canal Co. ....	7,512	189,100	.....	182,920
<b>Lehigh Region.</b>	193,729	5,440,330	230,266	6,292,812
L. V. RR. Co. ....	58,553	1,654,831	70,985	1,770,088
C. RR. of N. J. ....	34,895	1,037,278	38,405	1,133,839
S. H. & W. B. RR. ....	.....	6,331	.....	13,435
<b>Schuylkill Region.</b>	93,448	2,698,440	109,304	2,917,362
P. & R. RR. Co. ....	90,125	2,955,923	153,794	3,907,337
Shamokin & Lykens Val. ....	19,106	392,251	28,116	672,573
<b>Sullivan Region.</b>	118,231	3,348,174	182,540	4,659,910
St. Line & Sul. RR. Co. ....	599	22,336	393	28,578
<b>Total .....</b>	<b>406,007</b>	<b>11,509,280</b>	<b>552,593</b>	<b>13,898,662</b>
Increase .....	146,586	2,389,382	.....	.....
Decrease .....	.....	.....	.....	.....
Total same time in 1875 .....	.....	7,760,920 tons.	.....	.....
" " " " 1876 .....	.....	8,123,134 "	.....	.....
" " " " 1877 .....	.....	11,136,021 "	.....	.....
" " " " 1878 .....	.....	8,498,437 "	.....	.....
" " " " 1879 .....	.....	13,898,662 "	.....	.....

The above table does not include the amount of coal consumed and sold at the mines, which is about six per cent of the whole production.

Belvidere Delaware Railroad Report for the week, and years ending July 24th:

	Week.	Year. 1880.	Year. 1879.
Coal for shipment at Coal Port (Trenton) .....	1,142	18,753	6,258
Coal for shipment at South Amboy .....	14,348	245,795	267,721
Coal for distribution .....	7,294	256,733	179,906
Coal for company's use .....	2,029	56,391	51,010

The increase in shipments of Cumberland Coal over the Cumberland Branch and Cumberland and Pennsylvania railroads amounts to 248,403 tons, as compared with the corresponding period in 1879.

Coals Cleared on the Canals of the State of New York for the week ending July 23d, and year from the opening of navigation:

Tons of 2000 lbs.	1880.		1879.	
	Week.	Year.	Week.	Year.
Anthracite .....	24,958	338,543	31,071	394,056
Bituminous .....	11,582	96,041	8,268	65,070
<b>Total amount cleared ..</b>	<b>36,540</b>	<b>434,494</b>	<b>39,339</b>	<b>460,026</b>

The Production of Bituminous Coal for the week ending July 24th was as follows:

Tons of 2240 lbs., unless otherwise designated.	Week.	Year.
<b>Cumberland Region, Md.</b>		
Tons of 2240 lbs. ....	39,768	1,144,865
<b>Barclay Region, Pa.</b>		
Barclay RR., tons of 2240 lbs. ....	6,791	117,928
<b>Broad Top Region, Pa.</b>		
Huntingdon & Broad Top RR. ....	2,308	113,445
*East Broad Top .....	629	40,793
<b>Clearfield Region, Pa.</b>		
*Snow Shoe .....	769	33,824
*Tyrone and Clearfield .....	42,772	787,071
<b>Alleghany Region, Pa.</b>		
*Pennsylvania RR. ....	4,043	191,453
<b>Pittsburg Region, Pa.</b>		
*West Penn RR. ....	5,249	152,595
*Southwest Penn. RR. ....	663	29,917
*Penn & Westmoreland gas-coal, Pa. RR. ....	14,765	597,668
*Pennsylvania RR. ....	10,792	297,740
*For the week ending July 21st.		

The Production of Coke for the week ending July 21st:

Tons of 2000 lbs.	Week.	Year.
Penn. RR. (Alleghany Region) .....	927	34,889
West Penn. RR. ....	1,136	49,975
Southwest Penn. RR. ....	19,360	597,308
Penn. & Westmoreland Region, Pa. RR. ....	2,241	73,273
Pittsburg, Penn. RR. ....	12,070	258,786
<b>Total .....</b>	<b>35,734</b>	<b>1,014,231</b>

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