

1881 + 2.

GEO. A. TREADWELL.

SILVER CITY

MINING AND MILLING COMPANY.

*Silver Mines*



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# SILVER CITY

# MINING AND MILLING COMPANY.

Organized January 25th, 1882,

Under the General Corporation Laws of the State of New York.

CAPITAL STOCK, - - - - - \$1.250,000.

*250,000 SHARES, PAR VALUE FIVE DOLLARS EACH.*

NON-ASSESSABLE.

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NEW YORK OFFICE, 115 BROADWAY.

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BANKERS AND CUSTODIANS OF COMPANY'S FUNDS,

KOUNTZ BROTHERS, 120 BROADWAY.

## OFFICERS.

GEN. GEO. B. McCLELLAN, - - - - - PRESIDENT.  
JOHN B. SCOTT, - - - - - VICE-PRESIDENT.  
WM. T. MERSEREAU, - - - - - TREASURER.

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## TRUSTEES.

GEN. GEO. B. McCLELLAN, - - - - - New York City.  
JOHN B. SCOTT, - - - - - Newark, N. J.  
BENJAMIN ROODHOUSE, - - - - - Carrollton, ILLS.  
President Carrollton Bank.  
CHARLES E. BIGELOW, - - - - - New York City.  
Bay State Shoe and Leather Co.  
WM. T. MERSEREAU, - - - - - New York City.  
W. T. & J. Mersereau, 321 Broadway, N. Y. and Newark, N. J.  
EDWARD R. JOHNES, - - - - - New York City.  
Johnes & Wilcox, 120 Broadway.  
WM. REMSEN, - - - - - New York City.  
115 Broadway.

# Silver City Mining and Milling Company.

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In submitting, for the consideration of investors, the facts set forth in the prospectus of the Silver City Mining and Milling Company, special attention is called to the efforts made by the inaugurators of the enterprise to afford a legitimate and profitable opportunity for the safe investment of capital.

Within the past few years a new era in the history of quartz mining has been inaugurated—basing the capitalization of a mine on the developed merits of the property—thereby insuring, not only a fair, but frequently a very large interest on the money invested.

This system has placed lode mining, where it, to-day, stands, as the great paramount productive industry of the country.

The lode property acquired by this company is the choice of the many valuable mines found in the extensive mineral field of New Mexico.

The selection of the property was made under the most favorable circumstances, so few representatives of capital cared to venture into the mining sections during the late Indian troubles, that a comparatively open field was offered to an enterprising man. After one year of careful examination of the many mining districts of this section, the present property was purchased.

The most profitable and permanent mining enterprises of the country are conducted on a basis of a lower grade, gold and silver ores occurring in large deposits, so situated as to afford the cheapest possible facilities for reduction.

Three full claims—1,500 feet in length by 600 in width each—known as the “Volcano,” “Old Timer” and “Campbellite”; the two former situate three quarters of a mile south west of Silver City, New Mexico; the latter about three miles southward.

These properties have been extensively developed, and are in proper shape for immediate active operations.

In connection with the mines, a quartz mill for the reduction of the ore, has been built by the company and is now completed and in running order.

The construction of this mill was under the supervision of a competent constructing engineer. It is of fifteen stamp capacity, and the equipment is complete in every detail to meet all the requirements of a legitimate standard of progress in the milling of ores.

An ample water right has been secured, which furnishes an excess above the requirement or all practical purposes, the year round. The entire cost of mill, with cost of acquisition of water right: with the introduction of water to the works, approximates closely to \$75,000.

Every requirement essential to the success of a highly profitable enterprise, has been intelligently filled under the most competent management.

The company is not offering to investors a property of *prospective* value.

It is offering three *well developed* mines, with abundance of ore for immediate operations on the dumps, with an immense developed reserve; a fifteen stamp mill first class in every respect, with complete assay outfit and all necessary appurtenances pertaining to a complete quartz mill; substantial buildings for offices.

The properties so situated as to afford every possible facility for cheap and easy reduction of the ore.

A property in condition—on the completion of the minor details—to enter the lists as a large and regular bullion producer.

The mines, mill, and all necessary appurtenances are paid for in full. The titles to the property have been thoroughly and competently investigated, and are indisputable.

The development of the mineral resources of New Mexico has been seriously retarded, heretofore, for want of railroad transportation, and the fact of its being the home of the restless Apache Indian.

These difficulties are now removed. The territory has, at present, ample rail communication; and the troublesome Indians are safely confined on reservations.

Under the more unfavorable conditions, only the very small and richer mines were worked, and at the cost of many lives. As a consequence the large deposits of lower grade ore were left untouched, until capital could feel assured of security.

Advantage has been taken of this fact, with the knowledge that the true wealth of New Mexico lies in these large ore bodies. Three of them have been secured by this company as the basis for their operations.

The company have embarked their private means liberally in the enterprise, having the fullest confidence themselves in the merit of the undertaking: and an opportunity is now offered capital seeking a safe investment to reap a share of the benefit.

The subjoined report on the property, prepared by Mr. Geo. E. Sill, a mining engineer



of very conservative opinions; also letters addressed to Gen. Geo. B. Mc. Clellan and J. B. Scott Esq., respectively President and Vice-President of the company, by Mr. John Scott to the former gentlemen and Messrs J. F. Cummings and Benj. Roodhouse to the latter can be read with interest by those wishing fuller information.

Topographical maps and drawings of the mining districts of south-western New Mexico, with the mines and reduction works of the company, with full details, can be seen at the company's office, No. 115 Broadway, New York.

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SILVER CITY N. M.  
Dec. 17th 1881.

GEN. GEO. B. McCLELLAN,  
New York City,

*Dear Sir* :—In accordance with the request of the gentlemen interested in the incorporation of the Silver City Mining and Milling Co., I have visited this section with the view of ascertaining the general character and resources of the country, and more particularly the extent and value of the property which the company contemplate purchasing. I find everything in a most satisfactory and prosperous condition. To-day, New Mexico, has the best record of any state or territory for the amount of money invested.

It is now attracting more attention and interest among Mining and Railroad men than any other part of our continent.

Its splendid agricultural and mineral resources have been long and generally known, but without railroad transportation—the country destroyed by Indians, and with a comparatively undeveloped territory during past years, it has, heretofore attracted little or no capital.

Now, however, that railroads are traversing the agricultural and mining regions, and the long and terrible reign of the indian depredators has been practically ended, New Mexico is fast coming to be regarded with great favor by capitalists.

Recent developments demonstrate beyond a doubt that this is the coming country, and that the richest silver and copper mines of the world are found in the southern portion of the Territory.

The most productive and best developed mining districts of the territory appear to be those situate in Grant County—being Silver and chloride Flats, adjacent to Silver City, Lone Mountain, Georgetown, Lake Valley and Santa Rita, as the principal producers.

Timber for mining and other purposes is abundant throughout the country.

All of the property included in the contemplated purchase, I find in the immediate vicinity of Silver City—the county seat of Grant County—which place is accessible by daily stage communication with Deming—a station at the junction of the A. T. & S. F. R. R. and the S. P. R. R., distant fifty miles southward.

The property consists of the “Volcano”, “Old Timer” and “Campbellite” mines, for description of which, see accompanying reports.

An elegant and new, fifteen stamp silver mill, perfect and complete in all its appointments, with an excess of steam power to run, at least, five more stamps. Fifty acres of valuable land on which the mill is situated.

A commodious house—well furnished for superintendent’s dwelling and offices. Assay office and outfit complete.

An ample water right, known as the “Whitehill Ditch”, controlling the entire drainage of the vicinity.

I have secured the services of Messrs. Geo. E. Sill Mining Engineer and J. F. Cummings an experienced practical miner to examine the property. Their reports are herewith submitted, and in which I fully concur.

In conclusion I would say, that from careful observation, I find that all the mines at this place which have been worked with any degree of economy or system, have yielded handsome returns.

The climate is favorable for outdoor operations the entire year.

Extensive and valuable deposits of coal exist in southern New Mexico, which on the completion of the present projected system of railroads, will be made available as a factor in the reduction of ores.

When capital intelligently and economically directed finds its way here, with the completion of the projected railways, an enormous increase must take place in mineral and agricultural values.

Very Truly Yours

JOHN B. SCOTT.

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New York, January 10th, 1882.

JOHN B. SCOTT, Esq.,

*Vice-President Silver City Mining and Milling Company,*

Dear Sir : Agreeably with your request, I have examined the mining properties of the



Silver City Mining and Milling Company, and submit the following data as the result of my observations.

In examining a mining property, with a view of determining either its present intrinsic value, or its probable future production, the following important points should be considered separately: The geology of the country, the nature of the deposits, the character of the ore found, the facilities for its extraction and reduction.

I find the property to consist of three full claims—each 1500 by 600 feet in length and breadth.

Two of them—the “Old Timer” and “Volcano”—lying parallel and adjacent to each other, situate in “Silver Flat” mining district, about one-half mile southwest of the incorporate limits of Silver City, “The Campbellite” about three miles southward from the former.

The general topographical features of the country in this immediate vicinity do not differ materially from any of the mining districts of southern New Mexico and Arizona.

The entire extent of country mentioned, being a series of detached mountain ranges, with small foot-hill system. This fact, in connection with the geological formation, can be better observed by reference to the tracings and chart furnished with this report.

On examination we find the group of hills comprised in this district to be, in the main, composed of various modifications of granitic rocks.

Traversing this older rock in a northerly and southerly direction, is found a belt of highly metamorphic limestone, tilted at right angles with its normal position; slate dykes, some twenty feet in width, intervene on either side of the lime, at the points of contact with the granite rock.

That these geological conditions are favorable for the occupancy of large mineral deposits, no reasonable doubt can exist with the evidence of the good results obtained by actual explorations. The great ore bodies of the famous “Tough Nut” mine of Tombstone, Arizona, the immense deposit of the “Copper Queen” of the same territory, the great “Eureka” mines of Nevada, all occur where the conditions are precisely similar to this formation.

The advanced state of development of these properties of the Silver City company more fully confirms this opinion.

From the appearance of the numerous outcrops of mineral visible on the surface, this whole body of limestone must be considered one mineral-bearing zone.

In examining now the “Volcano” and the “Old Timer”—the mines of your company—we find included in the area of the ground claimed, three distinct veins, possessing in

their strike a remarkable degree of parallelism, all three boldly cropping out above the surface the entire length of the claims—1,500 feet—and traceable for hundreds of feet beyond the limits of either end.

They appear regular in “strike,” and have the same trend as the formation of the enclosing walls.

Whether these mines will prove to be what is commonly termed “true fissure veins,” or to be a succession of large deposits, a variety of opinions seem to exist. I am inclined, however, to believe the latter to be their true nature, and certainly the more desirable of the two, for several obvious reasons, principally for the facility with which the ore can be extracted, and the long and indefinite period for their exhaustion.

As a rule, the outcrop of a mine, by which too many are deceived, does not necessarily indicate the quality of ore underneath, or the position it occupies; but in this case, where we find the enormous amount of mineralized matter forced to the surface through the fissures of the rock, we must reasonably expect to find a correspondingly larger body at the source of its origin below.

What may, at one time, have been considered a theory in this matter, has been practically demonstrated, through the medium of the pick and drill, to be now a tangible and visible reality.

The theory of the Leadville deposits, now generally accepted, that when the enclosing limestone becomes sufficiently saturated with silica so as to form a hard bottom, or contact as reached with the underlying harder rock, depressions or inequalities of the surface form basins for the deposition of ore deposits, will probably find an analogy here.

No such depth has, as yet, been attained.

Fine analysis of the limestone occurring within the limits of the “Old Timer” and “Volcano” ground show silica from 10.41 to 28.96 per cent.

Passing through the centre of the “Old Timer” we find, as before stated, a strong outcrop of varying width the entire length of the claim.

Near the north end ten shafts have been sunk across the outcrop at right angles with the vein, exposing a solid body of ore 180 feet in width to an average depth of 20 feet.

From this point the vein alternately narrows and widens, developed at intervals by eight more shafts, varying from five to twenty feet in depth.

The “Volcano”—the adjoining claim to the west—is also fully developed its full length

by seven shafts the same average depth as the former. The outcrop—all mineral—across the centre of the vein measuring thirty-six feet.

Midway between these two large lodes, a third outcrop appears of equal importance with the former. This is also thoroughly prospected the entire 1,500 feet by twelve shafts; the main shaft being down forty feet. A cross-cut through the outcrop near the centre of the vein, shows a continuous ore body 90 feet in width.

The principal working shaft situate near the centre of the "Old Timer," is now sunk to a depth of 210 feet. Two other shafts also are sunk on this line of outcrop, one 90 feet in depth, 150 feet south of main shaft, the other 55 feet deep, 500 feet north.

A level 230 feet in length runs northward from the bottom of the 90 foot shaft, taps the main shaft at same depth and continues 80 feet beyond.

The work is all well timbered, and affords good ventilation.

I find, in all, thirty-nine shafts and cross-cuts, showing every pound of matter removed to be ore and mineralized matter.

The ground, without further exploration, presents a solid basis for the production of bullion on an extensive scale.

A longitudinal section is shown in your drawings, showing the present developed ore reserve and its relation to the underground workings—main shaft and connections—in all 545 feet.

The "Campbellite" mine is surrounded by the same general features as the "Old Timer" and Volcano, but is less favored in point of development.

We find abundant evidences of the mineral character of the ground on which it is located from the occasional mineral outcrop, and the "float" or detached vein matter scattered on the surface.

Commencing at the northern boundary of the "Campbellite," and extending for 1500 feet we find the ground occupied by the "Cosette" mine. This property is regarded as one of the most valuable in the Territory. The developments having shown large ore bodies of grade to be very profitably worked.

These two properties are practically one and the same series of deposits, and it is only a matter of further development to determine their extent.

The general conclusions arrived at regarding the mines are the result of careful examination, aided very materially by the extended development and geologic conditions, they being the exact counterpart of the formation carrying the great deposits of Nevada and Arizona. With this assistance I have encountered comparatively little difficulty in forming my estimate.



I might add that these deposits referred to are literally represented by this property in New Mexico.

The ore on the surface found as float and in the outcrop is the dominant character of all the surface ores found on the leading mines of southern New Mexico and Arizona—chlorides associated with iron and manganese as the base—occurring in a matrix of pure quartz. Occasional bodies of high grade gold ores have been met with in the underground workings.

As depth is attained, the chloride in the ore increases, the iron and manganese almost entirely disappearing. Nothing so far has appeared, as a constituent, to prevent reduction by the simplest known process.

The whole mass of ore now on the various dumps—estimated to be about two thousand tons—will probably work \$40 per ton, very safely estimated at \$35 per ton. By sorting, much better results could however, be obtained.

I would suggest, however, with the facilities at your command, that the whole output be worked, as careful sampling has fully established the working value of the whole to be not less than \$35 per ton.

The gangue or vein matter always associated with ores is so highly mineralized that it is all included in the estimated value of the ore, and must be so considered in treating it. Unless this property proves the only exception on record, you can undoubtedly expect much higher grade ore at depth beyond the influence of the oxydising and solvent properties of the atmosphere and water.

As the matter now stands, a value of \$35.00 per ton is practically a high grade ore, when your facilities for its reduction are considered.

I find from the center of the mining claims, the “Volcano” and “Old Timer” to the ore veins at the mill, the distance to be 1226 yards, or three fourths of a mile. From the “Campbellite” to mill about three and one-half miles following the present wagon road.

The ground traversed in both cases, affording a smooth and easy grade for either wagon road or tramway.

The maximum cost of transporting the ore from any part of the “Volcano” or “Old Timer” mines to the mill should not exceed 25 cents per ton, the cost of extracting from the mine \$2.50 per ton, the cost of milling \$3.50 per ton. Add 20 per cent. to these amounts, \$1.25, for any possible contingencies, making a total cost of \$7.50 per ton of 2,000 pounds for extraction and treatment, leaving a net profit of \$27.50 per ton.

Add 50 cents per ton for transportation on ores from the “Campbellite”,

Twenty tons each twenty-four hours is the minimum fifteen stamps should crush of this ore.

This would produce a daily net profit of \$550.00.

These estimates are based on a practical experience in the reduction of ores during the past twenty years. The cost of labor, fuel, and mining material has all been carefully considered.

In conclusion, I would suggest the erection of fifteen more stamps at an early date. Your ore reserve is now largely in excess of your capacity for treatment. The yield, from the development necessary to properly open the property, will fully meet the daily demands of the mill. Increased capacity for reduction will soon be a necessity for working the property fully up to its merits.

Yours truly,

GEO. E. SILL, M. E.

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J. B. SCOTT, Esq.,

New York City.

DEAR SIR:—In compliance with your request, I have examined the properties purchased by the Silver City Mining and Milling Co., and have also made a special examination of the mining districts in the vicinity of Silver City.

I find two of the mines included in the property of the company of the "Volcano" and "Old Timer" situated in Silver Flat mining district about three-fourths of a mile southwest of the town of Silver City.

The district occupies a system of low hills, entirely independent of the larger detached mountain ranges incidental to this section of country. An extensive dike of limestone traverses the system conformably with the trend, northerly and southerly, the whole area so occupied appears to be mineralized to a greater or less extent, and is almost entirely covered by locations.

I find a vast amount of work performed, most of it in the rudest possible manner.

I find upon inquiry that the early prospectors and native population dug wherever a deposit of rich ore was found near the surface, and worked their product in arastras and crude adobe furnaces. Simple as these methods of mining and reduction were, the populous and well built city of Silver City came into existence from the result.

With the present late introduction of systematic methods of mining, a new era has been inaugurated in the history of mining in this district.



I find on the "Old Timer" and "Volcano" three outcrops composed of quartz, quartzite and, occasionally, blended with modifications of lime; these constitute the surface indication of the existence of underlying mineral. Being no theorist, I am unprepared to state the exact nature of the deposits, but sufficient evidences present themselves to satisfy me of the existence of ore, in not only profitable quantities but bodies of immense magnitude.

These outcrops have been quite thoroughly prospected along their entire surface, by a series of shallow working, from two to thirty feet in depth, simply gathered in search of rich deposits.

The regular workings, inaugurated last year, consists of three well timbered shafts Nos. 1, 2 and 3, at depths, respectively, of 90, 210 and 55 feet.

A level commencing from the bottom of shaft No. 1 is driven northward 230 feet, passing through shaft No. 2. No definite or even approximate idea can be formed as to the width of the ore at present depths; the entire work being in ore, without crosscuts to determine width.

My samples of ore from these properties, gave by assay, very varying results—a valuation in gold and silver from \$40 to \$70 per ton of 2,000 pounds.

I am very firmly under the impression that the entire ore, particularly at the bottom of the present working, will average by mill process fully \$40 per ton.

I find the ore to be perfectly free, the silver occurring in the form of chloride, and such of the gold as is visible to the eye bright and clean.

I estimate the ore on the various dumps at about 1,800 tons, no necessity exists, at present, for estimating the developed reserve underground; it is sufficient to say that it is largely in excess of your capacity for treatment for an indefinite period.

Work necessary for continued exploration should furnish sufficient ore for present mill capacity without stoping reserve.

The wagon road from these mines to the mill is in excellent condition for heavy quartz hauling. The mill, distant from the mines between one-half and three-fourths of a mile, is in perfect order for immediate operations.

It is entirely new, all of the machinery is made of the best material, and of the most approved modern pattern. Its construction, particularly the battery foundation, pan and settler framing, in point of excellence, is unexcelled in any quartz mill I have seen. The shafting is in perfect line and firmly set.

I find by calculating the relative power developed by the engine under ordinary conditions, with the power required for moving the present machinery, an excess fully adequate for

an increase of five more stamps with necessary pans and settlers. You will undoubtedly require at an early date additional mill facilities, at least double your present capacity of fifteen stamps, judging from the appearance of your mining properties.

Your water right is ample, and the supply is largely in excess of any possible use.

The "Campbellite" mine, situated about three miles southeasterly from the mill, belongs to an entire different lode system from the former.

What has been said of "Silver Flat" district applies equally as well to this series of deposits, so far as the mines are concerned. The ore is probably higher grade, associated occasionally with silver lead carbonates.

Where I have no preference myself, several competent authorities are of the opinion that an equal and intelligent development bestowed on this property will result in showing a better mining district than exists in Silver Flat.

This opinion is based principally on the good results obtained by the development of the "Cosette" mine, which is a part and parcel of the same deposit forming the "Campbellite."

I would suggest that this property be immediately and actively developed. There is no reasonable doubt of excellent results.

In visiting the surrounding mining districts, notably the Santa Rita, Burros, Lone Mountain and Georgetown I find the work of developing mines and construction of reduction works pushed with all possible rapidity. A vast quantity of ore is being taken out for shipment by individual and associated labor on mines not capitalized.

I will conclude by saying that I find the properties, in direct question by personal and careful examination, far more valuable as the basis for a successful mining enterprise, than the statements made to me regarding them previous to my examination.

Very Respectfully,

J. F. CUMMINGS.

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CARROLLTON BANK, Carrollton, Ill.,  
December 24th 1881.

JOHN B. SCOTT, Esq.,  
New York City :

*Dear Sir:*—Having accepted your invitation to accompany you to New Mexico with a view of examining properties, the purchase of which is contemplated by the Silver City

Mining and Milling Co., my observations were such as to thoroughly satisfy me of the merit of your enterprise.

I have no hesitancy in saying that the condition and prospects of the property fully warrant all the statements made by yourself, Messrs. Sill and Cummings, in your reports, and accept with pleasure your proposition to become interested with you as a member, and in the management of the company.

Truly Yours,

BENJ. ROODHOUSE.









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