

# Park City Hills Yield Horde of Treasure

## PARK CITY'S PRODUCTION FOR 1909.

The production of ore from Park City during the year was up to the usual standard. The old properties have been shipping steadily throughout the year and the estimated tonnage of the district is 77,600 tons. A rough estimate is made of the various shippers to the end of 1909, based on the amount of ore shipped up to Nov. 15. The Silver King has since put in a new cable on the aerial tramway and increased its shipments.

The Grasslie Chemical company has been handling the dump and tailings of the Daly Judge mine. Charles Moore, Guyman and Wilson, and Sutton and Hansen have secured all their shipments from the tailings from the various mines in this district. The Adirondack Mining company shipped a small amount by way of Heber and the Iowa Copper has been sending its ore down Little Cottonwood to Sandy, so that no record of their shipments has been obtained. The estimate is based upon the last information obtainable. The following is the production of the district:

NAME.	POUNDS.
Daly West	41,484,000
Daly Judge	34,093,000
Silver King	54,889,000
Little Bell	2,503,000
American Flag	2,507,000
Charles Moore	851,000
Sutton and Hansen	44,000
Guyman and Wilson	422,000
Grasslie Chemical company	17,260,000
Iowa Copper	100,000
Adirondack	50,000
Total	155,293,000

PARK CITY, the great natural home of wealth producers, contributed more than a million dollars in dividends for the year 1909. To be exact, this great silver-copper and gold camp distributed \$1,144,500 to stockholders in the paying mines. Besides that many lessers made a comfortable income from the year's work. Several of the old properties were worked principally by lessees during the year.

A new dividend payer was added from the district during the year and this was the Little Bell, which during the month was able to announce a dividend of \$15,000. The great Silver King mine continued to hand out its treasure and during the year distributed dividends to the extent of \$937,500, making \$1,500,000 in dividends since the company was reorganized as the Silver King Consolidated Mines company. The Daly West mine, which in its existence has contributed more than \$6,000,000 to its shareholders, was again on the dividend list this year and gave \$162,000 to its owners.

The Silver King mine continued extensive development work throughout the year and now has enough ore blocked out for many years to come. With but few exceptions the company continued a steady shipment of ore during the year. One of the changes at the mine was the turning over to Mr. Augustus Heinze the ores from the property. Nearly two years ago when Mr. Heinze became interested in the property of the company, he secured a contract with the company for the shipment of its ores.

At the same time it is said he intended to enter into the smelting business more extensively. On account of conditions that arose in the east, the general depression of the market and other things, Mr. Heinze did not build another smelter as was expected. Since the year the Silver King has been receiving the ore and diverting it to the American Smelting & Refining plant at Murray. The contract runs for 10 years.

### ACTIVITY INCREASING.

Activity in the Park City district has been increasing, but more noticeably during the latter part of the year. A number of important strikes were made and there was never a time when the future of Park City looked better.

Among the things promised for the year 1910 is a great tunnel from Snake Creek, which will develop the west end of the district, drain the various properties, afford a means of developing at depth, give an excellent avenue of transportation, and be the means in the future of solving the very problem of transportation and drainage for the great camp of Alta.

A man who has been most instrumental in the starting of this great enterprise is George W. Lamborne, manager of the Daly Judge mine. For a long time he has been figuring on the feasibility of the plan and his ideas

have been put into action. Mr. Lamborne, with "Chile" Jesse Knight, the Wizard of Finance, and a number of other mining men, are now putting the plans into operation.

This giant tunnel will be the longest in the state and present plans contemplate it being 14,000 feet in length. This does not take in the various laterals that will be run from the tunnel to various properties, which have either become a part of the Snake Creek Tunnel & Power company, secured concessions. The tunnel will be 6 feet 6 inches high and 9 feet wide. It will be double tracked and electrically equipped throughout. Detailed specifications have been issued and bids made for the work. A water course, three feet deep and three and a half feet wide, will be run the entire length of the tunnel. This trench will be able to care for an enormous flow of water and this can be used for power purposes as well as for irrigation.

### WILL EXPLORE DISTRICT.

The tunnel means a new era for the mining of the district, as it will explore to great depth a little known part of the country. In some places it will attain a depth of 4,000 feet. The Cottonwood district will also be benefited by this tunnel.

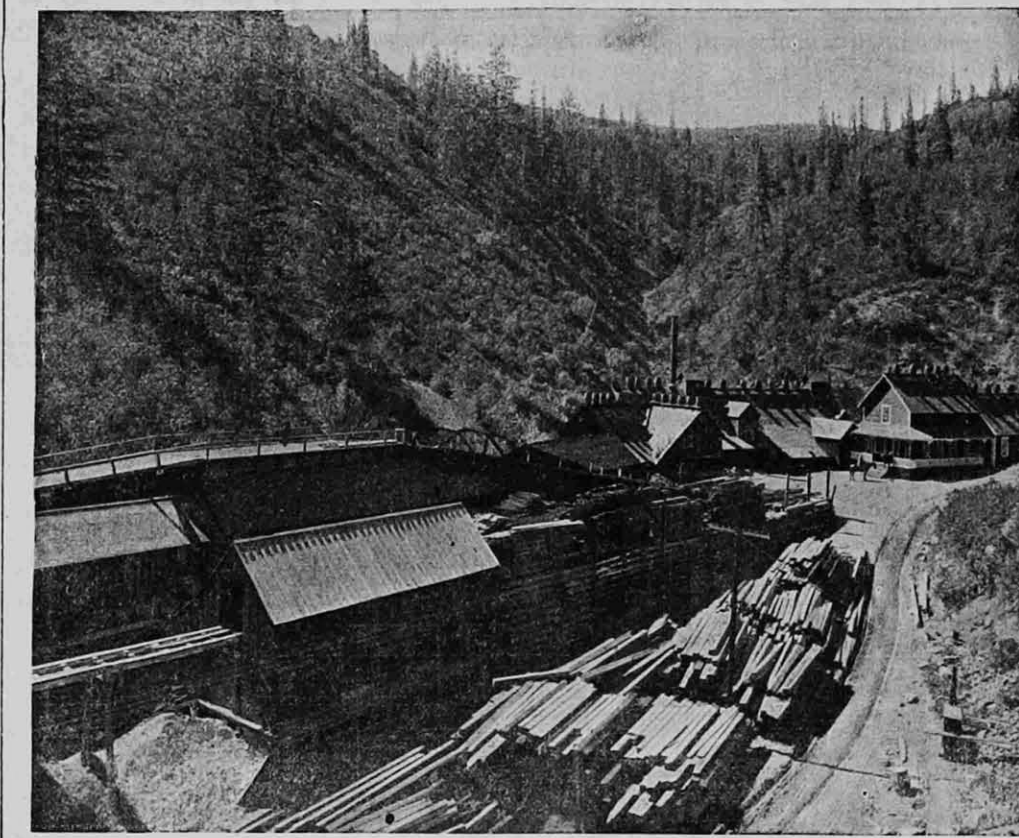
It is expected that the tunnel will require about two years in building and will cost about \$1,000,000. The company has already filed articles of incorporation in Delaware. The tunnel will open up the Daly Judge property at a depth of from 1,300 to 2,000 feet. More properties have shown activity in the Park City district this year than in many years. Of course, there have been some set backs. Scarcely a camp has gone a year without some trouble. This year the Wabash reached a place where it was unable to control the flow of water, and as a result was obliged to close down. It had reached an interesting stage when the management was confident of finding a commercial ore. The company has been re-financed. It is declared, and a connection will be made with the Ontario drain tunnel, which will carry the water of the district.

Early in the year the shaft was burned out at the Keystone, and with it went the shaft house. The loss of this equipment was a great setback to the company, which had also reached a very promising stage in its development.

### AT TREASURE HILL.

Utah Treasure Hill, which is owned principally by John Derr and Jesse Knight, has continued active development work throughout the year. This fact the company has developed no commercial ore, but although some excellent showings of ore have been found, work is being continued and the prospects are that this property will be put into a paying mine before another year rolls around.

Two properties that have been worked to considerable extent and have bright futures before them are Iowa Copper and Adirondack. They have made sev-



BUILDINGS AT MOUTH OF DALY JUDGE TUNNEL.

eral shipments during the year and are developing a little known section of the district.

A strike of considerable importance was made during the year by the Silver King Consolidated, and it made its first shipment of ore. The Ontario was worked by lessees, who did considerable shipping.

The New York mine was closed down for several months on account of water. It again became active early in the summer and has continued to sink its shaft to depth. Some ore was found at the Copper Apex and it has been quite active. The South Dakota company has been working on the sinking of its shaft. The American Flag was one of the steady shippers and the Little Bell early in the year began sending its ores to the market.

A new company to make its appearance in the district was the Thor Mining company. It owns 22 claims in the west end of the district and can be developed by the Snake Creek tunnel, it is said.

### THE AMERICAN FLAG.

A PROMISING property in a promising neighborhood is the American Flag mine, with an area of more than 300 acres, all patented and largely virgin ground, located in the very heart of the big producing section of Park City. Adjacent to this property are the Silver King, Ontario, Daly West and others that have produced more than \$100,000,000 and with a dividend record of more than \$50,000,000. Little has ever been heard of the American Flag and the management has continued to push operations. During this time a large amount of development work has been done. In a number of places the company has made progress of this regular shipments of ore are being made, and a record of 100 consecutive shipments of ore shows an average of \$30 a ton. The Park City camp is indeed for its lead silver ores, but the American Flag ore carry good values in gold—the principal values being gold and silver—and cause this mine to be referred to as the only gold mine in Park City.

In equipment this property ranks among the best in the district, having all the necessary buildings, steam power, steel frame hoist, and a double compartment shaft operating two

cages to the 1,100 foot level. Although the ore shipped from the mine has been small, it is believed that with greater depth the ore will be much better. The ores carry some values in lead and copper, and at a little greater depth, from all indications, the sulphide ores will be found in abundance, these being the ores which generally in this district produce the greatest values and largest tonnage. It is apparent that the great values of the American Flag mine are beneath the present workings.

Each level from the 400 to the 1,100, is open and has been explored for a few hundred feet from the shaft. Ore appears on each level from which shipments have been made, and in addition to the shipping grade of ore that has been mined in the course of developing a large tonnage of milling ore has been opened up. It has been estimated that there is now available sufficient ore to keep a 100-ton mill supplied for three years.

### WILL BEGIN SINKING.

The bottom of the shaft is about 60 feet below the 1,100-foot level, at which point further sinking was necessarily suspended on account of encountering water resulting from the caving of the adjacent territory. The tunnel is again open and the water is gradually receding, but not sufficiently as yet to permit further sinking of the shaft. It is now proposed to lose no more time than is necessary for the solving the water problem by the caving of the water with the drain tunnel or by pumping facilities.

Since organization the company has doubled its area and has increased its capitalization from 500,000 shares of a par value of \$1 to 1,000,000 shares at \$1 each. The increase was made in the treasury, further improvements that are planned. These are the erection of a mill, the securing of greater depth in the property, and an energetic campaign of development.

George H. Rathman, a banker and business man of Sioux City, Iowa, is president and treasurer of the company. William M. Curtis, vice president, is the company's attorney. George G. Brooks, a banker of Scranton, Pa., and A. E. Payne, of Holman, Pa., and C. C. Salt Lake, compose the directorate.

### THE DALY JUDGE.

AMONG the Park City properties that have pushed work during the year and made it count in adding to its resources was the Daly Judge, which opened up no less than three new ore bodies along the famous Ontario & Daly fissure, added considerably to its drain tunnel, opened up a fine body of ore on the back vein and increased its reserve in the treasury.

The work has been in charge of General Manager George W. Lamborne, and it is due to his efforts that the property is now in its present excellent condition. The property consists of about 1,000 acres along Bonanza Flat and only a small part of the territory has thus far been explored. On account of the ground in the Ontario & Daly fissure being of a caving nature and hard to handle, the drain tunnel on the 1,200 foot level of the property has been run along the side of the vein. This is the main drain tunnel and in connection with it the company has solved to a great extent the water problem. The Daly Judge company has found that by draining a fissure, or water course at sufficient depth to relieve the pressure, it can rid itself of the water below that point. This company has demonstrated that the water at lower levels will only be seepage, when the pressure is relieved and the water diverted.

During the past year the drain tunnel has been extended 2,500 feet, and has been instrumental in opening up three ore bodies. At various intervals along the tunnel, cross cuts have been made to the vein and explored it. In the 2,500 feet some 10 crosscuts were made and in three of these ore was found. In two of the crosscuts a good milling grade of ore was found, while in the third, which unfortunately happens to be the smallest, a fine grade of shipping ore was encountered.

### BIG ORE BODY.

One of the greatest strikes made this year in the property was the encountering of ore of a shipping grade in a winze off the 1,400 foot level and in the back vein. The winze was started down in ore about 20 feet from the vein and continued in ore for more

than 75 feet. Exploration work since carried on proves this one of the best ore bodies yet found in the mine and it has every indication of proving to be the greatest. This ore body has been practically proven for a distance of 200 feet along the vein. During the past 30 days, from 15 to 25 tons of ore a day have been taken out of this ore body. It is probable that this ore body is at least 700 feet long.

The company is now installing a large air compressor which will more than double the present capacity of the mine. It will be operated by electricity secured from the Knight power house at Snake Creek.

During the year the company has gradually accumulated a greater reserve in its treasury. It has been making some money throughout the year in spite of the great amount of development work carried on. The company now has about \$225,000 in the treasury.

Three distinct fissures traverse the property and they are about 700 feet apart. A. have been more or less productive. The veins are known as the Ontario & Daly, Bedded and Back veins.

### SNAKE CREEK TUNNEL.

One of the greatest improvements that the company will participate in during the coming year will be the big Snake Creek tunnel which will drain and develop the west end of the property, which is all virgin ground. The western part of the company's estate is an enormous territory.

### THE DALY WEST.

Most rapid progress has been made by the Daly-West Mining company during the past year and dead work which has been lagging for years has been put through with dispatch.

On account of the caving of the Ontario tunnel, dead work at the Daly-West was delayed until a great amount of dead work was crowded into one year. Although it has been a heavy expense, profitable results have been obtained.

One of the greatest pieces of development accomplished this year was the sinking of a winze from the 1,550 level to the 1,700 foot level. The winze was started down on the dip of the vein and the entire distance of 202 feet, being in ore of an excellent milling grade throughout. Along this vein on the 1,700 foot level, which has been connected with the shaft, 600 feet of drifting has been done and nearly the entire distance has been in ore of a fine milling grade. In places there have been streaks of shipping ore and there is considerable that could be marketed. In some places the ore

body has been cresscut for 20 feet before getting both walls.

### SINKING ANOTHER WINZE.

A winze is now being sunk below the 1,700 foot level and on the ore body. Although the winze has gone down over 20 feet, it is still in ore of a much better grade. A great deal of the ore is of a high class.

The cutting out of the shaft to the tunnel level will be completed shortly and open up the mine to the 2,100 foot level. The management is also contemplating the sinking of a winze to catch the vein.

Exploration work is being carried on on the 400 level of the Quincy and the 900 foot level of the Daly West and excellent progress is being made. Milling ore can still be taken out of the drifts on the 900 foot level.

All the development work below the 1,550 foot level has been very satisfactory and the mine is now being put into shape where if favorable results are obtained, the tonnage will be increased very rapidly.

The company now has in its employ at the mill and the mine 260 men. A second shift of the silver. This remarkable record has been secured by the careful attention Mr. Sherman has given the work and the designing of special machinery for it.

### CAPITALIZATION.

This company is capitalized at 150,000 shares at \$20 each. The total dividends paid to date are \$6,033,000. The officers are: J. E. Bamberger, president; H. G. McMillan, vice president; J. E. Barnett, secretary; W. S. McCormick, treasurer. The directors are: J. E. Bamberger, John Derr, W. S. McCormick, H. G. McMillan and F. J. Hagenbarth.

### THE MARYSVALE DISTRICT.

In and about Marysville in Platte county there has been some activity in mining this year, but nothing to compare with what it has been in the past. This once much-talked-of country has not been active for close to a decade, but still there is much of importance in the mines of the district.

The Deer Trail property was worked throughout the year and a large body of good gold ore was blocked out. This property has been the most active in the district. At the Log Cabin group the Gold Development company, Philadelphia, Pa., concern, has been most active during the year. A small force has also been operating at the Glen Eyrie mine owned by Milan Packard of Springfield, Mo. Mr. Packard also did considerable work on his Gold Bullion mine in the same district. The Beaver Hill property was taken over during the year by a number of Salt Lake men. The Outzen group was also actively worked during the year.

## THE Sioux Consolidated Mining Company

Capital, 1,000,000 Shares  
par value each - \$1.00

Treasury Stock not issued  
\$254,611

The Company owns the following claims in East Tintic:

ED STOKES, JUSTICE,  
SIOUX, MIDDLE MAN,  
BILL SCHULER, PHEBE S.

The Phebe S. claim adjoins the Colorado on the north and Iron Blossom on the south.

REED SMOOT, President.  
THOMAS R. CUTLER, Vice. Prest.  
J. T. FARRER,  
C. E. LOOSE,  
GEORGE M. SMOOT,

Directors.

J. T. FARRER, Secretary and Treasurer.  
C. E. LOOSE, Manager.

### OFFICE OF THE COMPANY PROVO, UTAH

The Sioux Consolidated Mining Company has passed through varied experiences during the past twenty years, and whilst considerable ore had been extracted in its early history in the upper workings, it was not until the Colorado uncovered ore in its lower level that it was supposed that any such ore bodies existed at depth.

A reorganization was effected in July, 1907, and the company proceeded to sink a shaft on its Phebe S. claim adjoining the Colorado, ore being found at a depth of 350 feet in the new shaft, since which the production of the mine has steadily increased.

The first dividend was paid October 20th, 1908, since which time the company has paid 93 cents in dividends per share. Of recent date there have been opened up some new ore bodies which give promise of permanency. From present production there are in sight many dividends.

## Yerington--The Great Garner House of Riches

THE year 1910 will see greater activity in the Yerington district, Nevada, than ever before. The new railroad will be completed early in the year, a new smelter will be built and several mines will be in a position to ship ore, and will start on an era of production. In many ways the district has a brighter future than ever before and the coming year is the most promising in its history.

Throughout the year development work has been progressing and a great tonnage of ore has been blocked out. The Mason Valley mine has been developed during the year two distinct ore bodies in parallel fissures. By means of this the company has added thousands of tons of ore to its already large reserve.

The development work has brought to light with more certainty many of the geological conditions there. It is now confidently believed that the mineralizing action in the district was through fissures that have cut through the line stone formation, and which was accompanied by the intrusion of certain porphyry dikes. For this reason it has been found that as soon as the oxidized zone has been worked through primary sulphides are encountered, which run the highest of most any other camp.

One of the problems which the district is now endeavoring to solve is a means of separating a gangue which is of almost equal weight with the metal. The Mason Valley company is now engaged upon this work and is now collecting data on its results, as there is no precedent known in mining. It has been necessary to roast the ore and concentrate it by a dry process. The success of this operation is now assured.

### MASON VALLEY.

The Mason Valley is believed to have at least 1,000,000 tons of ore running 42 per cent. The first large quantity of concentrating ore. The mine also has an enormous quantity of self fluxing ore and there is also a great body of ore running from 10 to 20 per cent copper.

This property will have the cheapest method of mining of any property in the district, as the caving system can be used for everything above the 400 foot or tunnel level. The property is excellently equipped with machinery and buildings.

The company has an ideal spot for a tramway to the railroad and it could also be used as a means of developing power. It is declared that the company is fast being put into shape for extraction. As the ore runs high in line and iron it will afford an excellent smelting product.

A site for a smelting plant has been

secured by this company at Wabaska and grading and other improvements have already started.

For many months past the Malachite property has been pushing development work. This company has been profitable to a great extent by the experience of others. It has a three compartment shaft, a good hoisting plant and is cutting at this time. The company has 2,000 feet of the ore zone and a present has developed to a depth of 300 feet.

Western Nevada has a large body of sulphide ore and a greater part of the year the company has been increasing its tonnage. The property is well equipped and ably managed. It has not reached the stage of being a mine yet, but it has all the earmarks of being one of the big properties of the district.

### BUTTE AND YERRINGTON.

Among the promising little properties of the district is the Butte & Yerington, which is owned by a number of Butte people. This property adjoins the Mason Valley and the Malachite. A spur from the Mason Valley ore body, or a parallel fissure, cuts through the property in thousands of dollars in improvements. The company is at present engaged in the building of a railroad that will care for the agricultural and mining interests of that section of the country. This railroad will be finished early in 1910 and an era of production from the various mines in the district will begin. The building of a custom smelter in the district is one of the things that will be accomplished within the next year.

Development at the Nevada Douglas mine has been confined mostly to the Ludwig property, where an ore body has been developed for 650 feet in length, 60 feet in width, and more than 100 feet in depth. The body has been opened up during the year between the 550 and 650 foot levels. It is a sulphide and carries 61.9 per cent copper.

During the past few months the company has been engaged in driving a two compartment main incline from the lower levels to the surface. This is partly along the dip of the vein and is in high grade ore from the 200 foot level to the 550 foot level. The incline is 700 feet in length and half the face at the bottom is in copper ore that carries 16.67 per cent of the red metal.

### WELL EQUIPPED.

The property is equipped with a 40 horsepower gasoline engine, air compressor and six drills. A 500 foot tunnel also opens up the property and between the tunnel level and the surface considerable ore has been blocked out. It is the intention of the company to ship this ore to the smelter at Carson canyon as soon as it is completed. This will probably be sent April 1.

The Blue Stone property owned by

Col. J. E. Delamar has probably the greatest ore body developed. It is asserted that this property has millions of tons of 3 per cent copper ore blocked out.

Some very encouraging results are being obtained at the New Valley Mines company property. This company is controlled by Edgar Meyer of New York and is along the same belt as the Nevada Douglas and Ludwig mines. But little work has been done on this property, and Mr. Meyer is making arrangements for extensive development work during the coming year.

But little has been done this year on the McConnell property, which is owned by Goldfield people. At this property is the oldest shaft in the district and considerable good ore has been found there.

### The Nevada Douglas.

Work has been advancing with giant strides in the Yerington or Mason district in Nevada, where the Nevada Douglas Copper company has been putting in thousands of dollars in improvements. The company is at present engaged in the building of a railroad that will care for the agricultural and mining interests of that section of the country. This railroad will be finished early in 1910 and an era of production from the various mines in the district will begin. The building of a custom smelter in the district is one of the things that will be accomplished within the next year.

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### HAS BIG RESERVE.

Engineers after a careful examination have estimated that the reserves in this part of the mine are over 400,000 tons of ore carrying 5.1 per cent copper. About one-third of this is oxidized ore, little of which is in the form of malachite, chrysocolla, and cuprite. The lower workings are in what appears to be the permanent sul-

phide zone carrying a good percentage of iron and a lime stone gangue which constitute a very desirable fluxing material.

The incline is equipped with two compartments and has a hoisting plant capable of about 1,000 tons of ore a day. The mine is being put into shape for production and will be sending out ore as soon as the railroad now being constructed to the mine is completed and the smelting facilities are provided.

The Nevada Copper Belt railroad is part of the plans of the Nevada Douglas. This road leaves the Tonopah Pass and runs south to the Wabaska and goes out through Mason Pass to the Yerington and Mason valley country.

### COURSE OF ROAD.

Inasmuch as there was three or four miles of 3 per cent grade to be cared for if the line was run direct to the mine and but little other business could be obtained in adopting this route, the Nevada Copper Belt Railroad company was organized for the purpose of accommodating the mining and agricultural sections of both Smith and Mason valleys, as well as the Nevada Douglas itself. In order to accomplish this and get a 1 per cent grade and at the same time accommodate available traffic, a surveyed line 36 miles in length extending from Wabaska to Yerington, Mason, Norfolk, Smith Valley and Nevada Douglas mine was adopted. Construction work began the middle of September on what is commonly called the first section of road into the Mason district. This section is 11 miles long and has been practically completed. The grade is now in for the entire district and the laying of rails to Mason City should be finished to this time.

Stations are being built at Yerington and Mason. Locomotives, box cars and flat cars for the local haul have been purchased. A gasoline motor car for passenger service is now on the way.

The smelting throats which the railroad passes is very fertile and there is an abundance of water. The two valleys have a population of something over 5,000 persons and there are 12,000 acres of irrigated lands, with 230,000 more that can be irrigated if the waters of the Walker river are properly stored.

### SECTION COMPLETE.

While the first section of the road is practically complete, the grading of the second section is being carried on at a rapid rate; material is arriving on the ground and work is being rapidly pushed ahead. It is the intention of the company to complete the line through to the mines of the Nevada Douglas not later than the beginning of the year 1910.

Immediately following the completion

of the railroad, plans for the building of an up-to-date smelter are to be carried out, unless a more profitable deal should be made with other parties having a plant in the field. The plans of the company for the coming year are the completion of the road, the placing of the mine in shape for heavy production and the erection of a smelting plant.

The equipment at the mine is among the best. It is provided with two 30 horsepower compressors and fine hoisting machinery. From the company's springs, three miles from the mine, water is pumped through a pipe line to supply the camp.

Another source of revenue that can be utilized by the company is the gypsum vein in the mine. This is found lying alongside of the Ludwig vein. The gypsum vein is 3,000 feet long and 500 feet wide and has a depth of 400 feet. The material is in grade and 99 per cent pure gypsum. This alone is a big resource for the company and will be productive of a good revenue.

### LARGE HOLDINGS.

The territory of the Nevada Douglas consists of 33 claims, totaling about 700 acres. The officers of the company are A. J. Orem, president; V. Rice, treasurer; C. B. Oliver, secretary, and W. C. Orem, manager. The directors of the company are: A. J. Orem, William P. Lyman, Boston; James G. Berryhill, Des Moines, Ia.; V. V. Rice, Duncan MacViech, J. J. Coram, James H. Mays and W. C. Orem, all of Salt Lake. The other director was the late Judge H. P. Henderson.

### RELATIVE HARDNESS OF PRECIOUS STONES.

The relative hardness of various stones is easily ascertained by testing the power of one stone to make scratches on another. If a diamond is rubbed with one of the points of a topaz, the topaz point is blunted and the mark which will be seen on the face of the diamond is only the dust of the topaz, which can be brushed off with the finger. But if the topaz is rubbed against the diamond the latter is unaltered and the surface of the former is marked with a scratch which can be removed only by further polishing. It is on the basis of this process of comparison that a scale of comparative hardness has been formed represented by 10 substances, of which diamond is the highest and graphite the lowest in the scale. It is a curious fact that these two extremes of the scale, the brilliant and hard diamond and soft black graphite, are both chemically the same substance—pure carbon—Jewelers' Circular.