

**RAILROAD EARNINGS**

Of the U. P., C. P. and N. P. Railroads for the Year Ending June 30, 1881.

UNION PACIFIC.	
Gross earnings.....	\$22,765,752
Operating expenses.....	11,474,910
Net earnings.....	\$11,290,842
Total number of miles operated.....	1,819
CENTRAL PACIFIC.	
Gross earnings.....	\$22,893,344
Operating expenses.....	13,592,594
Net earnings.....	9,300,849
Total number of miles operated.....	2,164
NORTHERN PACIFIC.	
Gross earnings.....	\$2,931,892
Operating expenses.....	1,946,157
Net earnings.....	985,735
Number of miles operated.....	754
Net earnings of the three roads.....	\$21,667,327.

**BULLION OUTPUT OF BUTTE,**  
As Shown by the Books of the Pacific Express Company for the Year 1881.

	WEIGHT.	VALUE.
January.....	8,411	\$1,335,82
February.....	11,257	112,400,35
March.....	13,037	131,483,01
April.....	12,837	124,292,24
May.....	11,738	106,599,47
June.....	10,469	95,988,93
July.....	9,873	98,613,41
August.....	13,573	129,969,17
September.....	9,015	78,529,11
October.....	11,037	94,239,28
November.....	9,951	82,491,13
December.....	10,611	94,050,14
Total.....	131,787	\$1,229,180,00

To this amount must be added \$500,000 which were shipped through other sources. The output of the smelters is not given in the above table. We have no data upon which to base its value, but it is reasonable to suppose that it will bring the grand total up to \$3,000,000 as the product of the mines of Butte for the year 1881.

**List of Mills, Smelters and Aeras-tras in Butte and Vicinity.**

Alice—new mill.....	60	stamps
Alice—old mill.....	20	"
Moulton.....	40	"
Silver Bow.....	30	"
Dexter.....	15	"
Lexington.....	10	"
Centennial.....	10	"
Gagnon.....	10	"
Burlington.....	10	"
Clipper.....	10	"
Grove Gulch.....	5	"
McMinn's.....	1	stamp
Total.....	221	stamps

SMELTERS.		CAPACITY.	
Montana Copper company.....	50	tons	
Colorado and Montana.....	40	"	
Parrot.....	80	"	
Bell.....	50	"	
Total daily capacity.....	220	tons	

**ARASTRAS.**  
Supremant's. Smith & Kessler's.  
In addition to the above the Lexington company has in course of construction a new 40-stamp mill. Also the Sheridan company has contracted for the building of a 40-stamp mill.

The Utah and Northern brought 45,787,992 pounds of freight into the Territory and took out 7,500,000 pounds during the year 1881.

Three million, five hundred thousand pounds of ore and matte and two million pounds of bullion were shipped out of Montana during the year 1881, by the Utah and Northern railway.

E. L. BONNER & CO. are the heavy

**THE CATARACT MINING DISTRICT.**

**Its Extent and General Character—Some of the Principal Mines, and the Developments Thereon and What They Yield.**

BY A. J. ELDER.

Some time in the year 1862, or soon after the discovery of the Bannack mines, a party of Bannack prospectors made their way across the Deer Lodge pass of the Rocky Mountains, thence via Butte recrossed the same, and descended into the canyon of the Boulder river, following that stream down to the mouth of Cataract creek. Here they pitched their tents and soon made a discovery of rich placer ground, which has ever since been known by old timers as the "Old Bar." They worked the bar in the crude way of mining of that day, until their "grab" gave out, when they retraced their steps for a fresh supply. It will be remembered that this occurred before the discovery of Alder Gulch, and long before that of Last Chance. The "Old Bar" afterwards passed into the hands of the Stuart brothers and Reece Anderson, who built houses at the mouth of the creek, moved their families into them and worked the bar extensively and successfully for some years.

When the quartz mania of 1864 struck the Territory the McErwin brothers made some discoveries on the banks of the Cataract, about two and a half miles above its mouth. They found very good ore, but having no way to utilize it, and the excitement dying out, they soon abandoned the leads and engaged in placer mining and other pursuits that brought in ready money.

For some years after this there was no prospecting done except for placer mines—a few companies working ground successfully here and there throughout the district; but in the fall of 1873, a company under the leadership of Zach Thompson, discovered the Big Medicine, Susie Brown, Mt. Thompson and other leads, which getting noised about, soon brought other prospectors into the field, and many leads were discovered and located.

In the summer of 1879, one Smith, an old California and Colorado prospector, discovered the Mantle Lode. This led to the first regular stampede to the district, hundreds of old prospectors rushing in from all parts of the Pacific Coast. In the fall of that year the district was regularly organized, the Boulder river being in the center, dividing it north and south. It embraces an area of about 19 miles square, its western limits being within less than 20 miles of Butte, and, (if I may be permitted to digress, it may be of interest to your merchants to know that Butte can be the emporium of this soon to be great mining district, if the road through the Park be kept in proper repair.

In the spring of 1880, John P. Lawson and Jack Allport purchased the Boulder prospect of Brown and Hathaway, and immediately put on a force of men to develop it. The mine is located east of Pole Mountain, one of the highest points in the District, and west of Basin creek. Cataract and Basin creeks, two of the largest tributaries of the Boulder, enter the latter stream about the center of the district, about one mile apart. Up to this time the mouth of Cataract had been selected as the place to build the town of the district, a "dead-fall" having already been established there. But when Lawson and Allport

commenced operations the latter continued around the mouth of Basin, and quite a town was rapidly built up, dignified by the name of Basin City. In the meantime the prospectors were at work, and many new lodes were discovered and located and some of the older locations being developed. Over 400 lodes have been recorded.

The formation of the district is principally granite, gneiss, and immense dykes of porphyry and quartzite; and on the higher mountains back from the streams trap overlays all. As has been said, over four hundred lodes in this district have been placed on record. In the small space allotted to me in your Holiday paper I can only refer to a few of them and to those few but briefly. The following are among the leading claims:

**BOULDER.**

located on the west bank of Basin creek, is owned by the Boulder Gold and Silver Mining Co., organized at Logansport, Indiana, J. P. Lawson, superintendent. The developments consist of three shafts 155, 115 and 75 feet respectively. From these shafts 400 feet of levels have been run. Average width of vein, five feet. The average assay of the ore is about 40 ounces in gold and silver. The company has a 10-stamp gold mill, run by water, and about 4,000 tons of ore have been worked, yielding \$1,500 in gold to the ton. I understand that this company intend running a tunnel next summer in connection with Caplice & Hammer, who own an extension of the mine, that will be 1100 feet long and will tap the mine at a depth of 550 feet. They also expect to erect a 40-stamp silver mill at the mouth of the tunnel. I learn that Professor Clayton made a report on this mine, and owing to its great altitude above the river placed the water level at a depth of 300 feet. Among the other claims on the west side of Basin, on which considerable work has been done, are the Union, Highland, Clipper, Gib and Hopeful.

**BUSTER.**

is located on the east bank of Basin, and is owned by Mike O'Donnell & Co. It has one shaft 80 feet deep. The ore, like that of the Boulder, is of a reddish color, made so by the red oxide of iron. Considerable ore from this mine has been worked at the one-stamp gold mill in Basin, and the average yield was \$26 per ton in gold. The average assay value, however, was much larger. On the east side of Cataract Creek there is a basin, formed by the divide between that Creek and High Ore gulch, and the long circular sweep of the divide between Big Timber Gulch and the Boulder River and the high mountains that set in on the north. A number of ravines and gulches cut through the basin some of which have been worked for 12 years past. They have yielded, and did so only this last season, as high as \$20 per day to the man. A series of lodes cross the basin, from east to west, at intervals of 100 feet or more, for a distance of over two miles, or to where the trap overlays the granite on the high mountains to the north. These lodes or veins seem to increase in width as you ascend the mountains to the north, and the most southerly lode of the series, lying along and adjoining the trap, is perhaps the largest in the whole district. One of the lowest or most southerly of the whole series is the

**MANTLE.**

owned by S. T. Hauser & Co. Cataract creek cuts through the center of the lode. The developments consist of a tunnel, commencing above high water, and running east and on the vein a distance of nearly 300 feet. At the end of and have the Lowest Prices in the Ter

the tunnel a shaft has been sunk 30 feet deep, making the depth attained below the surface about 225 feet. There is from five to eight feet of quartz, in which there is a very rich vein of sulphurets of iron and lead, from six to twelve inches wide. They have also struck this rich vein in a tunnel commenced on the west side of Cataract creek. The company has built no works yet, but has a fine office, blacksmith shop, boarding house, etc., near the creek.

**THE ROCK OF AGES.**

supposed to be an extension of the Mantle on the west, belongs to Hark Estes, McDermott & Co. It runs up and into the steep mountain on the west side of Cataract. It is developed by a shaft near its eastern end, 50 feet deep, exposing a small but very rich vein of gold-bearing quartz. Over 20 tons, taken from this shaft, worked by the one-stamp mill at Basin, yielded \$80 to the ton, in gold. The Black estate owns an interest, and as soon as that estate is settled, work on the mine will be resumed.

**INDEPENDENCE.**

an old location, running parallel to and about 100 feet north of the Mantle, and owned by Riley & Hauser. The development consists of a shaft 61 feet deep, exposing a vein of free gold-bearing quartz 4 feet wide.

**MARTIN MAGINNIS.**

an old location under a new name, owned by Cook & Elder. There are two shafts, 24 and 39 feet deep. The lode is 6 feet wide, in which there are three separate veins of pay ore, one being very rich. For a depth of about 20 feet, the gangue consists of granite, but below that depth talc seems to take the place of the granite, and the pay veins to approach each other. This is a very promising lode, and if it has anything like the luck of the illustrious individual it is named after, it will make a fortune for its owners.

**NABOB.**

is an extension of the Maginnis on the east, and is owned by Cole Saunders and Sam Mackey. The developments consist of one shaft 49 feet deep, and a number of small shafts exposing the vein and ore nearly the entire length of the lode. It is about the same width of the Maginnis, and the ore about the same character. Some of it has been hauled to Butte and worked, giving satisfactory returns.

**THE BOSTON.**

runs parallel to and about 350 feet north of the Maginnis, is one of the oldest discoveries in the basin, and owned by Tom Harper, Jim Riley and Lee W. Foster. It is developed by a shaft 40 feet deep and a tunnel tapping the shaft near the bottom, both shaft and tunnel showing a fine body of ore.

**BIG MEDICINE, MOHAWK AND SUSIE BROWN.**

a group lying in less than 100 feet of each other, owned by Elder, Poore & Thompson. Big Medicine is developed by a shaft 70 feet deep, exposing a large body of ore from the surface to the bottom of the shaft. To a depth of 50 feet the ore samples from 26 to 30 ounces in silver; in all below that depth runs much higher. Six hundred feet west another lode is exposed by a tunnel. The Mohawk shows 7 feet of low grade quartz. The Susie Brown runs diagonally to the Mohawk, and apparently enters the latter near the center of the claim. There are a number of shafts upon it, sunk more to determine the course of the vein than for development, all of these showing up a large body of galena ore, carrying 67 per cent. of lead and 60 ounces in silver. The theory of the owners is, that a large body of lead ore will be found at the point of intersection. The highly stained body of quartz in the Mohawk, east of the junction, seems to confirm that theory.

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