

of the beef stock shipped back from Montana, the average is but twenty." The Mandan *Pioneer* also speaks of this westward movement as follows: "Yesterday morning a very large herd of cattle passed through the city, headed by a "prairie schooner," and escorted by several gentlemen with little ponies and prodigious whips. Apparently the world at large has about concluded that the empire of prairies west of the Big Muddy is the Eldorado for American stock raisers. Trainload after trainload of the bovine species, during the spring and summer, have passed through on the Northern Pacific railroad westward bound. It might seem to some people that stock ought to be going east and not west, but it is a fact that the prairies of Dakota, the Bad Lands of the Little Missouri and the valleys of Montana, are being stocked by vast herds of cattle and sheep shipped from the east and driven from the south. Many stories are told of the large fortunes made in a few years by men who started with scarcely any capital. Grazing is much more profitable here than in most parts of the United States, for the reason that very little, if any, feed is required, besides what can be had on the range. The sweet, nutritious grass peculiar to this country retains its many virtues after it is dried up by the August sun, so that in the winter it answers the place of well-cured hay."

## MINING.

The rich ores of the Sterling district, Montana, have attracted the attention of capitalists, and a smelter is to be erected immediately.

A ledge has been discovered near Moose creek ferry, some thirty miles from Missoula, which gives a large assay of silver and carries a high per cent. of lead.

The product of the Lexington mine, at Butte City, for the first six months of 1883, was \$638,548. July 1, a dividend of 1,100,000 francs was paid in Paris to the lucky stockholders.

Considerable activity is now being displayed in the Tidal Wave district, Montana. A smelter and quartz mill are being erected. The Tidal Wave mine was recently sold to Salt Lake parties for \$40,000, and other properties are being examined by capitalists with a view to purchasing.

Prospectors are at work upon the coal beds near Wilhoit Springs, Clackamas county, Oregon. A rough survey has been made of a railroad route from Portland by way of the Clackamas, and it is thought that a narrow gauge road can be constructed for \$5,000 per mile.

About one year ago copper was discovered in Baker county, Oregon, and two companies, one from Seattle and one from Walla Walla, spent considerable money in prospecting the principal lode. It was found to be equal in richness to any yet discovered. The claims have been consolidated, and the Lake Superior Calumet Mining Co. has paid \$100,000 for a one-fifth interest, conditioned upon the fact that the veins are true and unbroken at a lower depth, which fact can be demonstrated by an outlay of \$5,000.

The Maiden district, in Meagher county, Montana, is one of the richest in that territory, and will be very prominent in a short time. The

town of Maiden contains a population of about 500, and the surrounding hills are covered with quartz ledges making an excellent showing in gold and silver. The chief properties now being developed are the Oro Cache and Collar, while the North Star, St. Paul, Silver Tip, Great Eastern, Ore Eagle, Spotted Horse, Scoville, Keystone, Bamboo Chief, Snuggler, Montana No. 2, Texas Box and a great many others are making a splendid showing. There are also some placer mines that are yielding well. Great confidence is felt in the future of this district by those familiar with the character and extent of the quartz leads.

New discoveries of coal have been made in Gallatin county, Montana, about sixty-five miles east of Helena and four miles from the Northern Pacific railroad, to which railroads can be easily laid. The principal vein has been uncovered to a length of 3,630 feet. At a depth of 34 feet a coal deposit is found four feet in width. The second vein, at a depth of fourteen feet, shows a body of three and one-half feet in width, and the third layer, at a similar depth, one foot. The first and second veins are separate about twelve feet, and the second and third about ten feet, their incline indicating that the three will merge into one solid body as depth is reached. The result of an assay shows the coal to be bituminous and of a good quality. For coking it is excellent, giving 75-35, the best yet found in the territory.

The Castle mountains, in Montana, which have hitherto been noted only for their grand caverns, jagged cliffs and picturesque scenery, are about to prove a rich mining district. Immense belts of iron and some copper have long been known to exist in their recesses, but they have never attracted much attention. The late development of the Rip Van Winkle is attracting prospectors, and we confidently expect to see a rich camp developed in a short time. Already several leads in the vicinity have been located. The formation is first-class. It is lime, slate, granite, dolomites and porphyry, and since it is almost entirely unprospected, we may expect some big finds to be made at an early day, now that prospecting in that region is about to begin in earnest.—*Hubbardman*.

On the morning of the fourth of July a special train of thirty-six cars left Helena loaded with 1,200,000 pounds of bullion from the Gregory mine. The precious freight was consigned to the refining works at Newark, N. J. This is but the first of the great bullion shipments that will now be constantly made from Montana by the Northern Pacific. The *Helena Herald* says: "With the Gregory Reduction Works increased to the capacity projected, a round 1,000,000 pounds of bullion freight will be in readiness monthly for the Northern Pacific trains eastward. Add to this the output of the Wickes Works, enlarged and improved as is this year intended, and the estimated monthly product to be moved from Helena to the Atlantic seaboard will fall little if any short of 1,800,000 pounds, and may reach a round 2,000,000 pounds. Just as soon as the Red Mountain district is made accessible and its boundless ore bodies converted into bullion, we shall be prepared to double the figures and keep the railroad going daily with train load after train load of metal freightage."

A one-third interest in the Chestnut coal mine, in Gallatin county, Montana, has been sold for \$15,000, and the Bozeman Coal Co. has been incorporated to work the mine on an extensive scale. This company has entered into a contract with the Northern Pacific Coal Company to furnish the company with 25,000 tons of coal and the entire product of the mine for five years. Bozeman, Helena and other Montana towns will be supplied with coal, arrangements to that end having been perfected. At the mine, nine miles east of Bozeman, a station for passengers and freight, and a telegraph office, will be put up at once. The Bozeman Coal Company has entered into a contract with experienced coal miners, who will take charge of the mine, and a large force is at once to be put to work in extracting the coal. The Northern Pacific Company take the entire output, including the slack, and when a sufficient amount of the screenings shall accumulate, works will be erected and the manufacture of coke engaged in. This is the beginning of what will be a great industry in that territory in a few years, as many valuable coal beds have been discovered in the vicinity of the Northern Pacific road.

The Washington mining district is situated in the north-western part of Washington county, Idaho. It is four miles from Snake river and about fifty from Baker City, Oregon, its natural trading point. Mineral City is the name of the camp. The first discovery was made some two years ago, since when many locations have been made. Some of the ledges have been quite extensively prospected, and make a splendid showing of silver and copper. A lack of capital has been a great drawback, but recently several investments have been made by San Francisco and Salt Lake parties, and other properties are being examined by capitalists who desire to invest. The locations that have been prospected to any extent are the Daniel Boone, Egan, Minnesota Chief, Lady Bank, Postage, Kit Carson, Muldoon, Black Hawk, Neptune, Galesburg. There are scores of promising claims not yet developed enough to demonstrate their value. The district has been as yet but partially prospected, and there are good chances to find claims or to purchase one for a small sum from those who own several and have not the money to develop them. Wood, water and feed are to be had in abundance, and capital is all that is needed to place this district among the first in Idaho.

Mace Chapman, who has lately returned from a tour of inspection in the Snake river country, says that Snake river is the most extensive mining region known. A strip of country several miles wide and three or four hundred miles long will pay from \$5 to \$15 per day to the man by the new process which is being adopted. The machinery is simple and cheap and requires but one man to attend to it. It is estimated that this vast area will pay \$1,600 per acre, say two miles wide and 300 miles long; 348,000 acres; at \$1,600 per acre this would yield \$614,400,000. Two miles may be too large an estimate in the width, but we are satisfied that the workable ground extends from the lower canyon to the head waters of the river, a distance of nearly 800 miles. The gold is there and only requires capital and energy to obtain it. Where there are springs or small streams putting in, the water is easily obtained,