

The placer gravels of the Charleston District extend for miles along the Bruneau River. They consist mainly of well-rounded pebbles derived from rather coarsely crystalline rhyolite, which is one of the principal rocks of the District, and smaller amounts of quartzite and granite pebbles. In places these gravels are 50 feet thick, and often rest upon a light yellow clay of decomposed tuff, which may indicate the bottom of the gravel beds. A long period of erosion and working over by earlier streams is indicated by the well-rounded character of the gravels. The placers of the Mountain City District, 35 miles to the northeast, appear to be of similar origin.

In 1907, a Utah company, at a cost of \$25,000, built a ditch several miles in length around the south slope of the mountains in order to bring water from a tributary of 76 Creek for use in hydraulicking the gravels in the Badger Creek area. The tributary normally carries but little water, and it is reported that water flowed through the ditch for a short time only during one season.

In the spring of 1932, a Denver group obtained an option on the Prunty Ranch, which is traversed by the Bruneau River and Badger Creek. Considerable prospecting was done and it was estimated that the gravel contained an average of 75 cents worth of gold per cubic yard. For some unknown reason this prospecting was not followed by any extensive development of the placer ground.

In recent years, during the spring and summer seasons, from 5 to 30 men have been engaged in placer mining in Pennsylvania, Union, and Dry Gulches. Most of this work is done by small-scale sluicing when water is available. One of these sluicing operations is shown in figure 20. The average yield per man by such small-scale operations is less than wages. The gold recovered is quite fine.

GOLD BASIN DISTRICT

The Gold Basin or Rowland District is in north central Elko County, about four miles from the Idaho-Nevada boundary line.

Small-scale placer operations have been carried on intermittently in the District for a number of years. In 1931, A. S. Longwill treated a small amount of gravel on the north fork of the Bruneau River. The gravel is reported to have yielded less than \$1 per cubic yard. Water for sluicing was impounded in a small reservoir. The District has never produced any appreciable amount of placer gold.

ISLAND MOUNTAIN DISTRICT

The Island Mountain or Gold Creek District is at Island Mountain in the vicinity of Gold Creek in north Elko County, 75 miles north of Elko and about 25 miles south of the Idaho-Nevada State line. The District derives its name from an isolated mountain that rises over 1,000 feet above the surrounding terrain. The average elevation of the District is nearly 8,000 feet above sea level.

The placers of Island Mountain were discovered by Penrod, Rouselle, and Newton in 1873. They soon became one of the most prominent placer areas in the State and attained a large

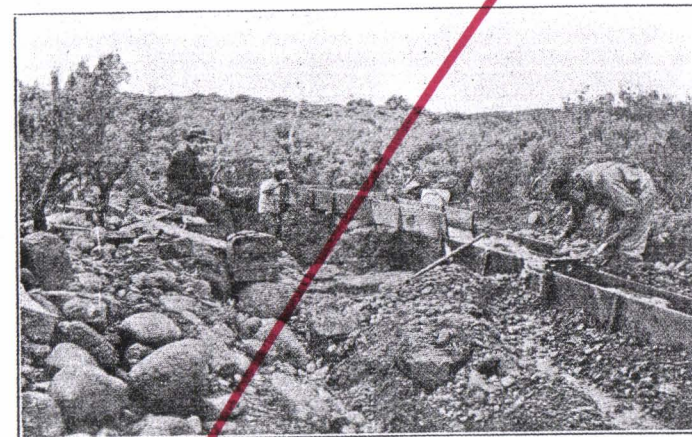


Figure 20. Sluicing near the mouth of Union Gulch, Charleston District.

production. The first operations were confined largely to sluicing, but in subsequent years a large investment was made in ditches and a pipe line to bring in water for the operation of hydraulic giants. A ditch was constructed from the Owyhee River for a distance of five miles and 2,500 feet of pipe line installed, which brought the water to the placer ground under a head of 300 feet. Water for hydraulicking was available for only a few months each year, but considerable gold was recovered. In addition, a large amount of panning and rock-ing was done by individuals in the early days. According to an early report of the State mineralogist for Nevada,¹³ a number of Chinese and Americans worked the claims on Hope Gulch

¹³Stretch, R. H., Biennial Report of the State Mineralogist, State of Nevada, 1873, pp. 27, 28.