

that meets their requirements. The mineral wealth of Lemhi County, like many sections of the west, was first known through its placer discoveries. Since 1866 there has not been a year but what Lemhi County has produced gold. For the first few years after 1866, the rush for placer gold was on; towns sprung up over night, and many sections, today with a few cabins, were then thriving towns. Such mining towns last as long as the placer gold is being mined from the rich pay streaks, but are short lived. This stage of mining Lemhi county has gone through with. To give exact figures of the output of the placers is impossible, as the gold was used as a medium of exchange, carried to all points in the west, and some is thought to have reached China, as many of the leases were taken by Chinamen. At that time no record was kept by the government, and the opinion of those who lived in the camps and knew of the production places the recovery of gold from Leesburg, Big Creek, Moose Creek and adjoining sections from \$15,000,000 to \$40,000,000. The old workings were very rich, and due to the cost of supplies, the price of labor and the

ed in the primitive manner of shoveling into the sluice boxes, then equipped for hydraulicing, and today is being operated by one of the most perfect dredges in the world. On Geertson Creek, the agricultural value of the land has been more sought after. On Bohannon Creek we find both sides claiming the land. However, much money has been spent to equip this large tract with hydraulic means of working the ground, and for the past twenty years it has been a steady producer, and is today still worked. To the North of Salmon, down the Salmon River, we find all the bars in the river contain placer gold, and in many cases they are being worked by small sluices and the rocker each year. In the Gibbonsville section quite a little gold has been recovered from the placers, and the ground is being worked by hydraulic method today. Many stories have been set afloat about the wonderful richness of the bars along the Salmon River, and in the past year an eastern company has equipped several boats with supplies and have commenced to give the entire lower river section a thorough prospecting, also to work several bars already prospected. Much of the large area

monazite, ilmenite, chromite and zircon. At the junction of Moyer and Big Creeks, stream tin is found in the placer ground.

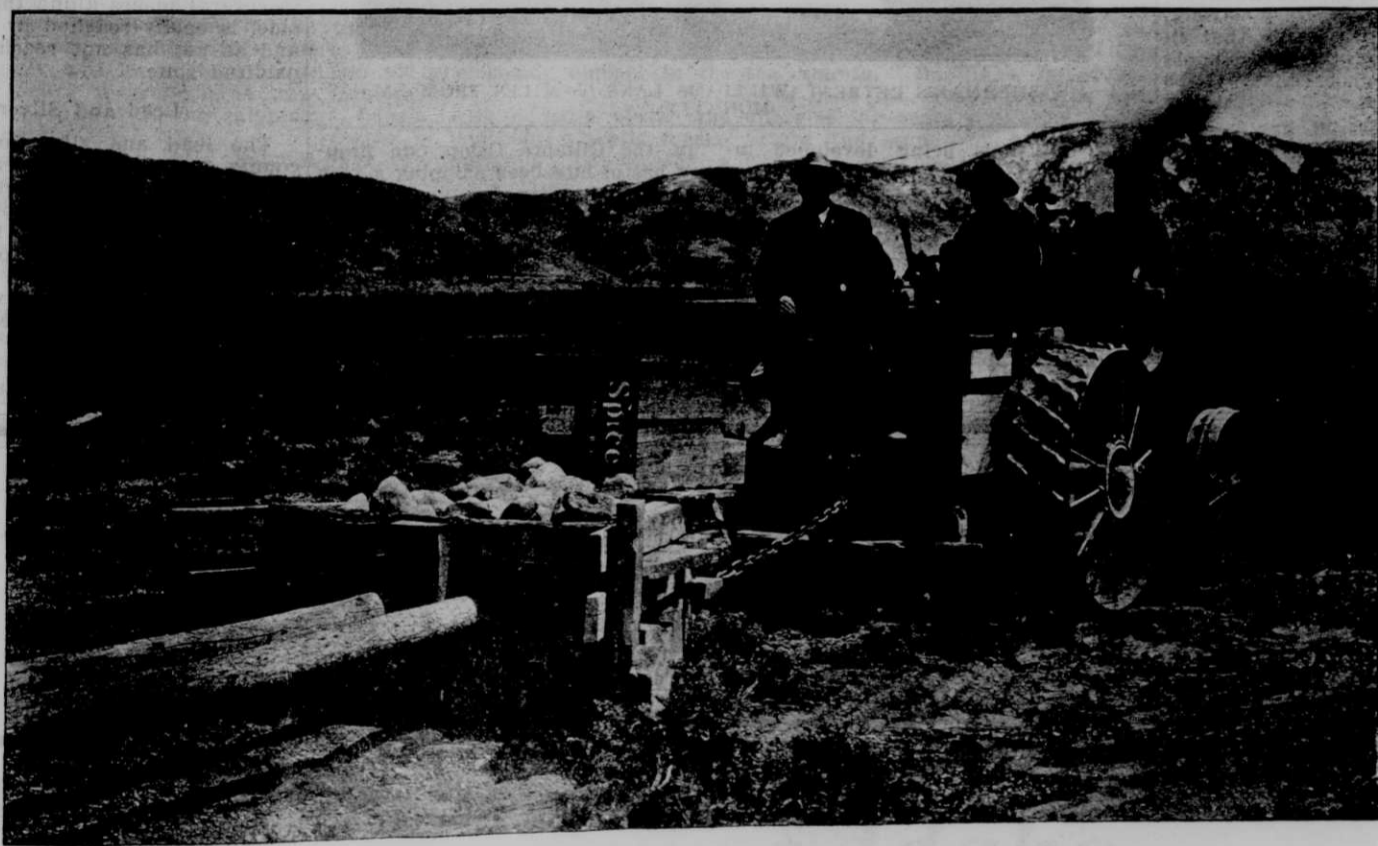
From the other placer sections we have no detailed report on the contents of the black sand.

Quartz Mining.

As soon as the early excitement of the placer discoveries had subsided, prospecting for gold in the mountains was commenced. Many rich bodies of ore have been found, and much rich ore packed by pack trains to market. The prospecting has not proven fruitless, but has proven that not one gold section is found in the county, but that the entire county contains veins carrying good values in gold. As in the case of placer mining in the early days of the country, the production of the county has not been kept, but conservative mining men place same close to \$10,000,000. Comparatively speaking, very little deep mining has been done in the county, but what has been done shows that the values in the ore GO DOWN. Many mines were equipped with mills for treating oxidized ores, and have found that the ores turned base close to the surface and the mills as lava beds are found in some lo-

calities. Gold is found in every section of the county, being mined today in the Main Ridge, Gibbonsville, Ulysses, Shoup, Leesburg, Arnett Creek, Yellow Jacket, Forney, Leesburg Range, Pahsimaroi Range and Gilmore sections of the county.

Along the Main Range we find gold in both contact and fissure veins in schists, quartzites and porphyry formations. Some of the richest ore in the county is coming from this range and the finest specimens of free gold are in the quartz. Generally some one of the copper ores is found associated with the gold, and the surface croppings will generally show the green copper stain (malachite). In some cases a little galena in bunches is found with the ore, in which case the silver values are also good. All the ores found in the Main Ridge carry silver, and in a few cases the ores are especially rich in silver. No particular section of the range need be singled out, as the veins are found from the summit of the peaks to the base of the mountains. From the ores as found on the surface, one would be led to predict that below the oxidized zone he would find both pyrite



CLEARING SAGEBRUSH NEAR THE NEW TOWN OF LEADORE, IDAHO.

methods then in use only the rich pay streaks could be mined. In the rush to handle the most ground possible in a day, a large part of the fine gold went over with the tailings, and in some cases a part of the quick, so today we find that all the old tailings pan gold and amalgam. Like other placer camps these old tailings will be handled again, but this time by the dredge. As would be expected the rims and poorer ground were left behind. Since that time up to the present date part of this ground has been worked by the prospectors, but many square miles of rims, virgin ground, and old tailings are awaiting the thorough prospecting of a dredging company. It is the opinion of the old time miners in these camps that as much gold remains in the placers as was ever taken out in the placers of Lemhi county. On Kirtley, Geertson and Bohannon Creeks, all to the east of Salmon, placer gold has been recovered for many years past. Kirtley Creek was first work-

covered by placers is open for entry today, and that located or patented may be leased on a royalty basis, or is open for bond and lease to those who will give the ground a thorough prospecting. Due to this fact, many prospectors in Lemhi County find their "Grub Stake" assured. The much sought after "Mother Lode," whence came the gold in the placers, has never been discovered, so the field is open to all. With the ground partly worked out, Lemhi county today offers a fine field to the dredging companies to give the many camps a thorough test, and many, no doubt, will show a good margin to work on. The question of Black Sand has not been given the consideration due it. Some samples of the sand from the Leesburg District were sent to the Government Experimental Plant at the Portland Exposition in 1905. The returns may be found in the U. S. G. S. Mineral Resources of the U. S. for 1905. These show that they contain gold,

equipped would not save the gold. The county has had its day of WILD CAT MINING, and in the past few years mining has been taken from this stage and placed upon a more business like footing. The change has had the effect of placing more confidence in those who come into the country and has let the prospector know that when he offers his property to the public he must expect a most thorough examination. Large sections of the country have been only run over by the prospectors and, where the ground has been located, surface cuts and shallow shafts represent the work done. The valleys are sedimentary in origin, sandstone, limestone and conglomerate extending over the foothills to the mountains proper, and in some cases the limestone extending to the tops of the highest peaks. The mountains are formed of granite, quartzite, schists, gneiss, rhyolite, porphyry and shales, cut by dikes of dacite, porphyry and syenite. In the southern part of the county

and chalcoprite. In the Gibbonsville District we find several mines with a record of production in the years gone by, with several thousand feet of development work. This section has several stamp mills and one cyanide plant. The gold is found in pyritic ores and the question of treatment has kept the district from producing in the past few years. At present, under the new management, the district is again in the list of producers. In the Shoup country the ores are also base in character, as soon as any depth is reached. Here we find several properties well developed with large ore reserves in sight, but owned by outside parties who have seen fit to let the properties lie idle in the past few years. With the greatly reduced rates on concentrate shipments, these properties will, no doubt, in the near future receive more attention. Many promising prospects are found in this section and several are being work-