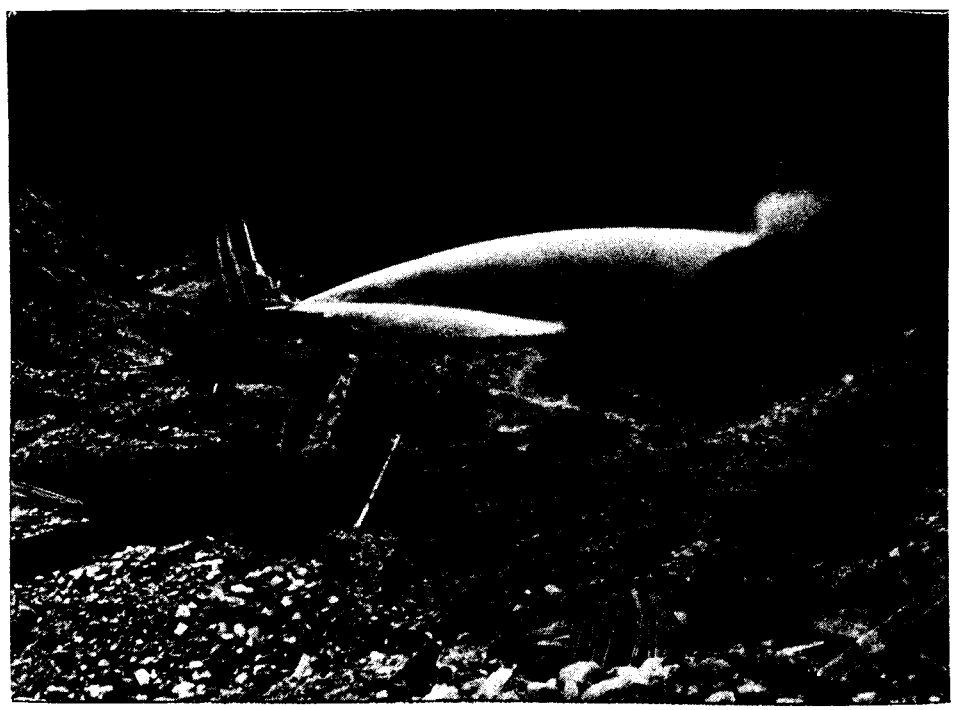
The value of this quantity of auriferous gravel is estimated by the U. S. Engineers, and others employed by the Government for making such estimates, at five hundred and fifty-two million six hundred and sixty-five thousand dollars. The capital invested in the Central California hydraulic region above referred to, including the purchase cost of mining properties, water supply systems, hydraulic plant and other equipments, amounts to one hundred millions of dollars. (See report of Secretary of War U. S. Engineers, 1891, Vol. II., Part V., page 2990).

If the eight and seven-tenths cent gravel in the North Bloomfield mine, in California, produced a net profit of four hundred and eleven thousand five hundred and eighty-nine dollars and twenty-seven cents out of a gross product of one million four hundred and thirty-five thousand six hundred and eighty dollars and forty-seven cents (see page 134, ninth annual report California State Mineralogist), it is certainly safe to assume (the cost of mining being about the same), that the twenty-seven and three-tenths cent gravel in the Consolidated Cariboo Hydraulic Mining Company's property can be relied upon to yield profits equal to about seventy per cent. of the gross product.

The Consolidated Cariboo Hydraulic Mining Company's water supply system, as now completed, consists of thirty-three miles of well constructed canals, having a capacity for delivering at the mine five thousand miners' inches of water under a head of four hundred and twenty feet. (A miner's inch is 2,160 cubic feet, the quantity of water discharged in twenty-four hours, under a head of seven inches, through an opening one-half inch wide by two inches high, made in a board two inches thick). The sources of supply are at Bootjack Lake and Polleys Lake, about nineteen miles distant, and Morehead Lake, ten miles distant from the company's mines at Bullion. All the above-named lakes have been converted into efficient storage reservoirs by the construction of substantial dams across their outlets. These reservoirs have an aggregate capacity for storing one billion and sixteen million cubic feet of water, which is equal to four hundred and seventy thousand three hundred and seventy miners' inches of water. This storage supply is greatly augmented by the waters of Dancing Bill Gulch and other streams tributary to the main canals between the storage reservoirs and the mines, and ensures a supply, varying with the precipitation, of from three to five thousand miners' inches of water throughout the mining season of six to seven months.

The water supply system also includes two pooling reservoirs, located on Blackjack Gulch. One of these reservoirs is at the delivery end of the main South Fork canal from Polleys Lake, and the other at the delivery end of the Morehead Canal. They are utilized for pooling the early spring freshet water required for use in the hydraulic pits at the opening of the season, and assist materially in the economical use of water at the mine.

The camp equipment of the water supply system consists of twelve substantial cabins for the reservoir tenders and water tenders operating along the line of the main canals.



Giants on Floor of Pit No. 1.

The company's water supply can be increased two thousand miners' inches when desired, by utilizing the waters of Little Lake and Long Lake, for opening and exploiting an hydraulic pit at the outlet of the Little Lake channel near the mouth of Morehead Creek, and can be increased by ten thousand inches or more, if desired, by the extension of the main canals to control additional available watershed.

The mine equipment consists of a portable hydraulic plant of four lines of thirty inch and twenty-two inch riveted steel pipes, aggregating six thousand feet; six No. 8 hydraulic giants, with deflecting nozzles; varying from six to ten inches in diameter; one steam power hoisting and pumping engine for sink-