

Hydraulic Mining of Early Canyon Days Described

by Jim Roberts

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Always interesting to the great majority here are the stories connected with mines and mining operations of the early days of California. Although not generally known, we had here, at our very door, all of the historic background that follows a gold rush.

During the years between the late 50s and 1890, the East Fork of the San Gabriel was the scene of intensive placer mining, in which hundreds of Indians, Mexicans and Chinese were busily engaged in working the gravel banks and stream bed in quest of the elusive nuggets, whose origin up to the present time has been a source of speculation. In fact many still dream of the possibilities of locating the "mother lode" of the San Gabriel canyon.

Mining activities were not confined to the primitive gold pan and sluice box. At times, miners displaced considerable gold, having struck rich deposits, and these strikes kept interest at a high pitch.

It was between 1860 and 1870 that Henry C. Roberts and William Ferguson began preparations to work the gold-bearing gravel benches high above the stream bed by hydraulic process. This necessitated the diverting of sufficient water for this purpose for miles above the points of location and the mountain slopes were precipitous and the work difficult.

No local surveyor or civil engineer in those days could be found to undertake the task of establishing a grade for a conduit, owing to the ruggedness of the route necessary. However, after many months of tempting remuneration, the services of an English engineer, whose name was Sam Hawley, were secured and the survey started. In those days, the instruments now universally used in establishing grades and lines such as a theodolite, were practically unknown here.

Wooden Tram Used

Hawley used what was known as a "tram" to secure his gradient and a triangle for perpendiculars. For the benefit of those who do not know what a tram is, it is best described as being made of wood in the shape of a capital "A." The cross piece is so constructed that a space is left for a spirit level, and the position of the drop of mercury indicates the pitch or grade.

This crude instrument, no doubt, would seem sufficient on ordinarily level ground, but to the average layman - and perhaps to some of our present day engineers - the crossing of precipitous parts of grades and canyons and boring tunnels without an error in grade seems incredulous.

Proofs of the hazards and skill are still evident in several places in the East Fork, and the steel-rods inserted by drilling into bedrock while suspended by ropes attest to the ability of Engineer Hawley and his assistants.

In the course of time, two conduits carrying water were in full operation, one going to a reservoir on the Cecil-Graham claim, owned by Roberts, and the other being on the north side of the river and supplying water for the claims owned by William Ferguson.

Indians Got It First -

These two placer claims operated by the hydraulic process were worked for several years with varying success. It finally became evident that the Indian and Mexican placer miners - or "gambuncinos" as they were called - had years before taken out the richest gravel by the simpler process of boring small holes into the pay gravel and having the squaws carry the dirt to the stream to wash it.

My recollection is that in about 1873, nearly 100 Chinese and Mexicans were employed on the Cecil-Graham claim. An offer of \$250,000 was bid for this claim, but a true miner desires to get his money out of the ground and therein was the refusal of this princely offer. Subsequent operations were conducted at a loss and finally the work was discontinued.

Many interesting incidents arose from the mining fever acquired by those who were giving their energies and, lives in pursuit of the precious metals so securely hidden from the vision of man, and away from pleasant climatic conditions and surroundings. One interesting incident may be cited to show in a measure how some miners are losers before they get a chance to play their hand.

Buell's Famous Fiasco -

During the time that the Roberts and Ferguson hydraulic mines were in full operation, another intrepid miner made his appearance. This was Dave Buell, who also craved a chance at hydraulic mining. Buell was somewhat handicapped for the reason that he could not secure water from the East Fork stream, so after some months, he decided to convey the water to his claim from the North Fork. Taking water from this source was quite feasible and he engaged Hawley to survey out the conduit for water with his trusty tram.

But about the time that all arrangements for machinery, pipe and lumber were completed, along came a dapper young fellow who introduced himself as a hydraulic engineer and asked for the job of surveying the ditch line. This young man had with him a beautiful new transit, together with compasses and other paraphernalia, and he swept Buell off his feet. Inasmuch as Hawley was indifferent as to whether or not he did the work, Buell gave the young man- whose name was Simpson - the position of chief engineer, and work, was started.

Hawley, with his little wooden tram had intended to follow the contour of the mountain from the intake to the mining location, but Simpson, arguing with his modern scientific

instruments, claimed that he could bore a 700-foot tunnel as part of the conduit, thereby doing the work more accurately, quickly and economically.

Where's the Water? -

The job was duly started and completed as far as the conduit-was concerned. Great preparations were made for the opening of the works and visions of unlimited nuggets of gold crowded Buell's mind. Then the intake gates were opened and watchful waiting was the order of the day. But night fell and still no trace of water had appeared. Buell betook himself along the conduit and walked through a dry tunnel. A few hundred feet from the upper portal he heard the sound of rushing waters and he discovered that Simpson had lost the grade and had flown the Canyon. Buell himself went broke on the deal and left for Mexico.

From the beautiful highway leading to Crystal Lake, just after passing the Flood Control camp, you can look across the Canyon today and see the remains of the ditch which never contained the intended water, which broke Dave Buell, and which made a fugitive out of an ambitious young engineer with his shining new instruments.