THE YUKON GOLD DIGGERS

OPPOSITE

A view north up Eldorado Creek Yukon Territory in 1898 showing the many mining claims. The location was destined to be called Grank Forks at the juntion of Bonanza Creek, Upper Bonanza and Eldorado Creek. Belinda Mulroney's partially built two-storey log hotel, called the Magnet, appears to be partially built in the lower left-hand side while a second, smaller eatery complete with a large sign, appears on the hillside to the right centre of the photograph. French Gulch and French Hill are the mining activities on the sidehill at the top of the image. Note that the valley is almost devoid of any trees. Eldorado was the richest creek in the Klondike watershed.

UNIVERSITY OF WASHINGTON DIGITAL COLLECTION #HEG792
BY ERIC A. HEGG

"Buckets were made of whipsawn lumber, and if this was not available, of split shakes, square, but wider at the top than the bottom. A heavy rope was used for the bucket handle and windlass cable. In outlaying places where rope could not be bought, caribou or moose hide was braided into a rope and used"—Walter R. Hamilton's 'The Yukon Story'. This bucket was found in the restored cabin of Jack London, the ficton writer who is best remembered as the author of 'The Call of the Wild' and 'White Fang'. These windlass buckets, used for bringing the paydirt to the surface by hand, were of the 1.5 cubic foot capacity while the self-dump buckets, made of medal, had approximately a 10 cubic foot capacity.

Early days of placer gold mining in the Yukon differed greatly from the milder climates of both California and British Columbia. In the far north the ground remained permanently frozen, not unlike concrete, from surface to bedrock in the deep narrow valley floors and had to be thawed in order to recover the gold. The methology of extracting the gold from the frozen ground changed dramatically over the years.

For the first few years the miners' first challenges, except on some of the higher benches, were to thaw through the overburden and then through the gravel to bedrock. This was not unlike mining in the Cariboo except that the problem was the frozen ground. Walter R. Hamilton, the author of 'The Yukon Story' and a sourdough of Dawson City, summed it up best. "When a miner selected a place to sink a shaft, he cut wood, usually spruce growing along the valley, and started a fire covering a space of about four square feet. This fire was carefully replenished until his experience told him the thawing had reached that fire's limit. The ashes and thawed earth were then shoveled out and another fire started. This was repeated until the gravel and eventually bedrock were reached."

"If a man was prospecting alone, hoisting was slow and difficult as, when a bucket was filled he had to climb a ladder out of the shaft, hoist and empty the bucket and lower it back into the shaft and again descend to the bottom unless he was ingenious enough to devise a way of self-dumping clear of the shaft."

"If possible two or more men worked together, and a windlass was erected at the surface. Buckets were made of whipsawn lumber, and if this was not available, of split shakes, square, but wider at the top than the bottom. A heavy rope was used for the bucket handle and windlass cable. In outlaying places where rope could not be bought, caribou of moose hide was braded into a rope and used."

"If panning proved that the gravel contained enough pay to warrant drifting (thawing and digging horizontally from the shaft) this was continued in any desired direction where a pay streak was sought or found." The drifts went out from the bottom of the shaft much like the spokes of a wheel. Sometimes, in paydirt that was 5 or more feet deep, the opening at the foot of the shaft was enlarged to where a man could stand up to shovel paydirt into the buckets.

THE KLONDIKE ROCKER

Pay-dirt was panned for testing and then placed in the tray at the head of the rocker that was operated by the left hand. The tin dipper in the right hand was used to constantly supply water to the mixtures. Slats of wood served as riffles lower down to catch the course gold and near the outlet was a tin sheet smeared with quick silver that attracted and held the very fine gold.

DAWSON CITY MUSEUM

"The frozen muck roof above the drift, unless the space was very wide and heat from the thawing fires effected it and created danger of falling, seldom needed timbering or shoring."

"The gravel was hoisted to the surface and piled as a dump during the winter months. As the dump became large, a horizontal cable was used, and a block and tackle, and the buckets transferred to this and dumped where needed."

When several miners worked together a barrel and winch were used at shafts that had been enlarged to a 3′ by 6′ rectangle and two men would operate the winch (one on each side) to being up the heavier and larger buckets filled with paydirt. With necessity being the mother of engenuity, miners soon came up with the idea of using a boulder in one of the buckets to offet the weight of the buckets of paydirt being brought to the surface. The system worked much like a counter-weight in an elevator. This system freed up one man—and when the bucket of paydirt and the bucket with the boulder weighed the same—resulted in an easy task for the lone man at the top of shaft on the windlass.

Joe Boyle and his group arrived in Dawson City in August of 1897 where Joe immediately went to work for Swiftwater Bill. A dispatch from Victoria announced the arrival there of the richest party that had yet come out of the Klondike District. "It is captained by Joe Boyle, the youngest son of Charley Boyle of Woodstock, Ontario, the trainer of Seagram's racing stable. Boyle had struck it rich. He is partner in four of the richest claims on earth. Of the wealth of the party of twenty-five brought back, a low estimate is $30,000 in dust and one million and a half in drafts and green backs". The Klondike group owned beteen them at least $12,000,000. Boyle and his party

"The first mining machinery to arrive in the Klondike were wood-fired boilers with iron pipes, one to two inches in diameter, with 'header' and 'steam points'. The pipes were connected to the boiler and coupled so as to extend down the shaft from the tent boiler house, and when coupled were wrapped with rolls of woolen or hair fabric for insulation against the frost. These pipes were projected horizontally, from the bottom of the shaft, to the part of the frozen gravel wall where the thawing was being carried out. A cross pipe was coupled onto the end of this pipe, and the desired number of steel points were attached to this 'header' by rubber hose. Each point had a square pointed nose, with holes pointing backwards at its rear 'shoulder' so as to allow steam to escape into the frozen ground, and at the other end, beyond the hose coupling, a head that could be (gently) pounded with a mallet, to drive the 'point' into the frozen gravel face. One person with heavy leather-laced woolen mittens held the pipe while another gently pounded the head until the 'point' was worked into the gravel as it thawed sufficiently the ground around it.

"The steam was kept on during the night and the ground gradually thawed to a distance of four or five feet around each 'point'. In the morning the steam was cut off and the equipment removed to permit the day's operations."

The men that worked at the bottom of the shaft

The 1902 Dawson City Golden Cleanup Edition described an elevator type shaft that was used in the gold fields. During the winter of 1900-1901 William Northrup, a New Yorker, began the operation of a second group of claims on American Gulch and Oro Fino Hill. The mine was operated through a 10-foot by 15-foot shaft that went 90 feet deep. The shaft was divided into two compartments each having a 10-foot by 7.5-foot separate elevator capable of carrying two wheelbarrows loaded with pay dirt to the surface. As one elevator ascended the other descended and the lift of ninety feet was made in fifteen seconds. The mine was equipped with a 35-horsepower boiler of the locomotive type and a double cylinder reversible hoisting engine. The mines record was the hoisting of 1,325 wheelbarrow loads of pay dirt in a ten-hour shift. From the mouth of the shaft the wheelbarrows were easily wheeled over bunkers that fed the pay dirt directly into sluice boxes. The water for the sluicing was obtained from Bonanza Creek where a pumping plant had been installed. A 40-horsepower boiler furnished steam to a .....

Page 12 – three gravity trams extend from the level of these tunnels a distance of about 300 feet down to the level of the sluice boxes near the foot of the hill.....Five thousand feet of steel tracks are laid in the tunnels and cross-cuts, and the immense cars of dirt brought down from the four tunnels go hurrying down the mountain side to be dumped into immense hoppers from which it is fed directly into the sluice boxes. No steam power was needed for propulsion anywhere in the mine since all the work was accomplished by zip lines by gravity. The mines on the hillsides often had to purchase dumping grounds for their tailings and debris in the gulches. The water

The above two nuggets, from the Barker claim, weighed 106 and 101.5 grams respectively.

The above nugget, from the Black Hills claim, weighed 31.3 grams.

A nugget from the Kirkland claim.

COURTESY KLONDIKE NUGGET AND IVORY SHOP LTD. DAWSON CITY, YUKON

THE KEITH & WILSON MINE ON FRENCH HILL, YUKON TERRITORY, 1898

Gold was sometimes found on hillsides where creeks had once flowed. The man on the right stands at the windlass ready to crank up buckets of paydirt that get shovelled into the rocker being worked by the man on the left. Since there is only one bucket being lowered and raised—and one length of rope—the shaft is very likely quite shalllow. With the deeper and larger more rectangular shafts, two buckets are used. The one fartest from the man on the crank is filled with a small boulder to offset the bucket with the paydirt—much like the counter weight in an elevator or dumb waiter. One deep 10′ x 15′ shaft was divided into two 7.5′ x 10′ platforms for the raising of two whwwlharrows at a time to the surface. The elevator was so efficient that the 90-foot trip from the bedrock to the surface could be achieved in just ninety seconds.

Trees on both sides of French Gulch have been stripped bare to be used as cribbing for the shafts, fuel for the stoves in the tents, brush to be positioned in the shaft to help thaw the permafrost down to the bedrock—and as fuel for the boilers used for thawing. Bundles of brush can be seen stockpilled on the opposite hilllside—the largest being neatly framed by the windlass. The tents in which the men live are just over the knoll and in the lower right-hand side of the photo. A white horse with a saddle is visible on the opposite hillside to be used to transport brush to the the claims on the valley floor. It would appear that the trees have been cut down all the way up to the Dome.

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MINING CLAIM NO. 2 ABOVE BONANZA, CREEK, YUKON TERRITORY CIRCA 1898

A tent town for the most exciting gold exploration in history takes place on Bonanza Creek. Initially miners lived in large tents with a sheet-iron stove with a telescoped stovepit. Use use of lumber of sluices, cribbing, and fires for their stoves very quickly depleted the sidehills of any trees. The mining activity totally devastated the spawning beds that had been used by salmon since time immemorial.

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NO 17 ELDORADO LOOKING UP FRENCH GULCH
HEGGIE PH. DAWSON, Y.T.
53.