

MINING ON THE KLONDIKE.*

METHOD OF "FIRING," ALSO OF THAWING BY STEAM,
AND DESCRIPTION OF MINING METHODS USED.

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INFORMATION received from an Indian in the spring of 1896 led one, George Carmack, a pioneer in the Northwest Territory, to prospect a tributary of the Troandye river for gold. His labours were rewarded by its discovery on a stream subsequently named Bonanza creek, about thirteen miles distant in a southerly direction from what is now known as Dawson, estimated elevation 1,012 feet above sea level, distance from St. Michael's on Behring sea, via Yukon river, is about 1,800 miles, Yukon territory.

The Troandye (Indian name) river, now corrupted to Klondike, enters the Yukon river fifteen miles above Fort Reliance. It is a swift, shallow and clear stream, flowing over a bed of coarse gravel about 175 yards wide at its mouth. Its length is still unknown, though prospectors have ascended it fully one hundred miles, the last twenty miles flowing between low-wooded mountains which descend to the very edge of the stream. The district drained by it above the point where Hunker creek joins (12 miles above Dawson) is a "terra incognita" to the miner. The valley beyond broadens into a plain, and farther on the mountains converge to the stream.

The gold-bearing tributaries of the Klondike rise toward the east and debouche on its southerly side in the following order:

1. Bonanza creek (about 23 miles long) joins the river one and a half miles above the junction of the Klondike and the Yukon.
2. Quigley creek (five or six miles long) debouches about 3½ miles above the mouth of Bonanza.
3. Three miles farther up stream, Bear creek, 12 miles long, empties.
4. Four miles beyond Bear creek is Hunker creek, about 20 miles in length.
5. Slate creek (approximately 12 miles long) meets the Klondike 14 miles above the mouth of Hunker.

Beyond Slate creek, 14 or 15 miles, is the confluence of "Too Much Gold" creek and the river, and between "Too Much Gold" and "All Gold" creek, which is 10 miles beyond "Too Much Gold" and the Klondike, the river forks. The first mentioned creek is estimated to be about 23 miles in length and the latter to exceed 20 miles. The grades of all the creeks are very light. The widths of the creek bottom from rim to rim, vary in the several tributaries. Bonanza creek has been estimated to be from 300 to 1,200 feet — averaging less than 700 feet, and Eldorado creek, a tributary of Bonanza creek, eight miles long, is between hills from 200 to 800 feet apart at their base.

Eldorado creek, the scene of the subsequent gold discoveries, joins Bonanza creek at Grand Forks, about one-half mile above Carmack's Bonanza discovery.

Indian River Division.—Dominion creek, Sulphur creek, Quartz creek, and other tributaries of Indian river, all within 45 miles of the mouth of the Klondike, though situated in the Indian River division of the Yukon district, are considered a part of the Klondike gold

fields. (Vid. Appeal of the Yukon miners of the Dominion. Pub. Ottawa, 1898, which gives a most interesting account of the condition of mining affairs in the Provisional district of Yukon).

The published accounts of the richness of Eldorado and Bonanza creek placers caused the "rush" from all parts of the world to this country during '97 and '98.

Mineral Resources.—The mineral resources of this "Land of Northern Lights and Midnight Sun," with the exception of a small area around Dawson (outside of a radius of 50 miles the country is unknown) are still undeveloped, owing to the severity of winters and the difficulties of summer travelling.

Seasons.—June, July, August and September are called the summer months and all the others are included in winter. In mid-winter day is only four hours long, and in mid-summer there are twenty-four hours daylight. The temperature ranges from 95 degrees Fahrenheit in the shade in the latter season to 70 degrees below zero in the winter, a lower temperature than that recorded by Nansen in Greenland, or his recent Polar explorations.



STARTING A SHAFT IN THE KLONDIKE.

Road Trails.—No roads existed in the Yukon Territory, not even in Dawson. Mere zigzag lines through "muck" and water indicated the summer trails. The surface of the ground is covered with moss under which, where undisturbed, the soil is frozen to bed rock at all seasons. The water from melting snows, rains and springs, partially absorbed by the moss, drains through the creeks into rivers which flow to the sea.

Muck.—The soil underlying the moss, locally called "muck" is composed of the lighter silts, clay and sand, constituting a thick bed overlying the auriferous gravels. Surplus waters collect under the moss forming immense pools and quagmires. These bogs or swamps, through which "the traveller flounders painfully" are scattered over plateaux and along the flanks and on the ridges of the highest ranges.

Travel.—The prospector carrying on his back his tools, food and blankets, travels slowly and the work is so laborious "that only strong men dare attempt it and few succeed in getting far from Dawson." No supply station existed nearer than Dawson, and on a thirty-mile tramp a man could pack but a very limited food supply, consequently work has been necessarily limited.

Winter Temperatures.—In winter, travel over these vast solitudes of snow-covered stretches is not inviting.

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