

engineer of the Grand Trunk Railway, George L. Burrows, Saginaw, Mich., president of the Niagara Falls International Bridge Company; T. R. Merritt, St. Catharines, president, secretary and treasurer of the Niagara Falls Suspension Bridge Company, of Canada, these two companies being owners of the new bridge; L. L. Buck, of New York, the designing engineer, who had charge of the test; R. S. Buck, resident engineer, who supervised the construction of the bridge; J. B. Frame, Harrisburg, Pa., superintendent of the Pennsylvania Steel Company; Thomas R. Reynolds, the superintendent of the bridge companies; and Ross Mackenzie, Toronto.

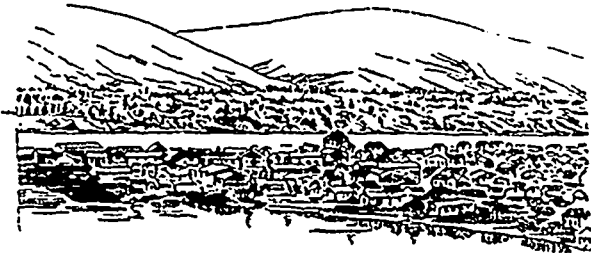
The formal opening of the bridge will not take place for a month or so, when it is hoped that Sir Charles Rivers Wilson, president of the G.T.R., will be able to be present.

### BRITISH YUKON MINING REGIONS.

A SKETCH OF THE GREAT CANADIAN EL Dorado OF THE NORTH.

Although the fabulous finds of gold in the placer diggings of the streams and rivers tributary to the Canadian Yukon have only now begun to send a wave of excitement over the civilized world, the existence of rich gold finds there is not a discovery of to-day. For sixteen years or more gold has been mined along the Yukon and its tributaries, and, while the principal mining camps in the early days were in the American territory of Alaska, as long ago as 1887 we have official reports of extensive placer mines on the Canadian side, in which even then 300 miners were at work. The first official investigation of that region was undertaken by direction of the late Hon. Thos. White, then Minister of the Interior, who sent an exploring expedition, under Dr. G. M. Dawson and Wm. Ogilvie, the former one of the ablest geologists, and the latter one of the most skilful and courageous surveyors ever employed by the Dominion Government, and the value of whose technical skill is heightened so much by modesty and integrity.

Their explorations laid a healthy foundation for the developments which have since taken place in the Canadian Yukon region. As long ago as 1840 Campbell was commissioned by Sir George Simpson, of the Hudson Bay Co., to explore the Upper Liard. He traversed a part of the Pelly River Valley, and seven years later Fort Yukon, at the mouth of the Porcupine River, was established by the Hudson Bay Co., under A. H. Murray. In 1848 Campbell erected Fort Selkirk, which, however, was plundered by the Indians in 1852, and is now in ruins. In 1869 the Hudson Bay officers were expelled from Fort Yukon, which was found to be in American territory, and moved their trading post to Kampart House, but in 1890 it was found that this also was a few miles within the United States territory, and they were compelled to shift twenty miles up the Porcupine River. For many years, dating from 1873, private trading was carried on, chiefly by two traders named Harper and McQuestion, who had a partnership for some years. Har-

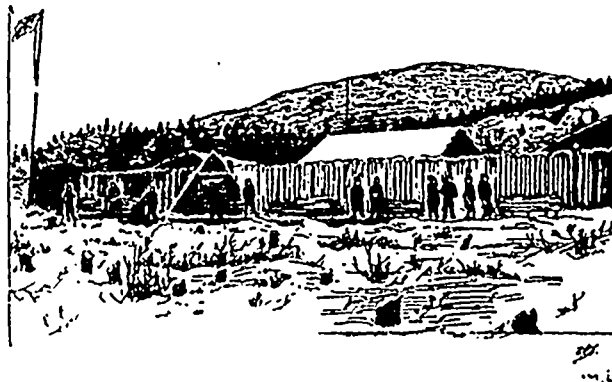


FORTY MILE CAMP.—FROM A PHOTOGRAPH.

per is now at Fort Selkirk, and McQuestion is employed by the Alaska Commercial Co., at Circle City. For some years the trading by corporations in Alaskan territory has been largely a monopoly possessed by the Alaska Commercial Co., who may be called the Hudson Bay Company of the U.S. But in 1892 a Chicago corporation, known as the North American Transportation and Trading Company, started a line of steamers trading to Alaska. From dealing in furs and other northern produce, these and private corporations have become large carriers of passengers and freight for the mining regions. And so rapidly have developments taken place that transportation by rail from British Columbia and the North-West Territories, and even from Ontario via Hudson Bay, west across the McKenzie basin to Yukon, are now problems that require early solution in the handling of traffic.

In 1894 the Canadian Mounted Police appeared on the scene of the placer diggings of the Upper Yukon, and estab-

lished a post at Fort Cudahy, at the confluence of the Forty Mile Creek and Yukon River, under Inspectors Constantine and Strickland. By this date it was estimated that one thousand men were employed in mining there, and that the miners had taken out \$300,000 from the Forty Mile Creek. At that time it appeared that the finds were chiefly in streams having their sources in United States territory, but as prospecting proceeded farther up the Yukon and tributary streams it was found that still richer diggings were found in the beds of rivers and streams wholly within Canadian territory. The inspectors estimated that there were 1,400 miles of streams in this district, in all of which gold could be found in paying quantities, and an old Swedish miner, who had been in California and British Columbia in the days of placer digging, said to one of the Government officials: "I never saw a country where there was so much gold, and so evenly distributed." This remark was made in 1887. One stream after another was prospected, and



FRONT OF NORTH-WEST MOUNTED POLICE POST—"WOOD-FATIGUE"  
DAY—WINTER SCENE—YUKON.

as fresh miners came in the area of discovery widened till creeks and streams almost by the score could be mapped out. When the enormous finds on the Klondike and Eldorado Creek became noised abroad these streams, nearly all of which would yield a good return for the miners' labor, were deserted until Dawson City, the centre of distribution of supplies for the Klondike, was estimated to have a population of from three to four thousand miners at the beginning of this year.

No doubt many of the stories of big finds are exaggerated, but we have before us a variety of evidence sufficient to show that, making due allowance for these exaggerations, the placer gold mines of the Klondike and other streams of the Canadian Yukon are the richest ever discovered in the world, and if this unprecedented richness exists in these alluvial deposits the quartz rock from which these golden grains have been washed must be equally unprecedented. The sources from which these river washings have come have naturally not yet attracted the miners in this inhospitable clime. For while such astonishing results can be obtained by simply washing the river sand with primitive appliances, they have not seen the necessity of attempting to bring up machinery for quartz mining, where transportation and living are so enormously high.

It should be mentioned, however, that the official reports of Dr. Dawson and Mr. Ogilvie show the existence of at least the beginnings of these gold-bearing quartz beds. In June, 1896, they found samples of quartz in a hill called Cone Hill, in the valley of the Forty Mile River, which assayed better than the celebrated Tre-dwell mine on the coast of Alaska, and the whole hill appeared to contain gold. A ledge of quartz was afterwards discovered on Twelve Mile Creek (the Chandidu), which appeared to be richer even than that of Cone Hill.

The question next in importance to that of the gold itself is the amount and convenience of fuel supply, and it seems a providential combination of the bounties of nature that the coal seams have been discovered which show beyond question that extensive mines of coal exist in the very midst of this wonderful gold mining tract. In fact the Canadian Yukon is another Transvaal, only on a still vaster scale. In the Transvaal the large deposits of coal that were found within convenient distance by rail of the Witwaters Rand field made that country what it is to-day. In 1887 Johannesburg was a Boer farm. Now it is a city of over 70,000 inhabitants, and the mines are equipped with the most scientific machinery known in the history of mining. The climate of the Yukon district may prevent its development from running on parallel lines with the