

the railway company has opened one of the best snow roads in the world. It was made by sending team after team through the snow drifts, packing down the snow until the hard bed rose above the level of the snow field & was thus swept clear by the wind. It is staked with saplings on both sides & can be followed in the darkest night or severest storm. Log Cabin, the Canadian custom house & mounted police station, is 12 miles from the summit & boundary, & is also at the end of the White Pass series of lakes, Summit, Middle & Shallow. The former trail from Log Cabin to Bennett was difficult both winter & summer, as it passed over a high & rocky divide, winding steeply up & down along the slopes. The new railway trail was opened by cutting down trees, grubbing out stumps, blasting away boulders, packing down snow drifts, and is a beautiful & model road. Freight carried to the summit by the railway is there transferred to double bob four-horse sleds with wide runners, & each such sled can be loaded with half a ton. Three or four of the freighting firms have formed a through freight line in connection with the railway, & through bills of lading are issued. A big freighters' camp is established near Log Cabin half way between the summit & Bennett, & each morning except Sunday (for the mounted police will not allow freighting on Sunday), teams start in both directions, thus giving the horses 10 miles of load down grade, & 10 miles empty.

The railway hauls to the summit of the pass for 1c. a pound, or one-half of the toll authorized by U.S. Secretary Bliss for the privilege of dragging one's own freight over the toll road. The freighters carry for 2 cents a pound from the summit to Bennett. The expenses of the round trip are about \$20; receipts under best conditions, which are the exception, may amount to \$200. If there were a sufficient quantity of freight there would be a bonanza in the business for a freighter with 10 or more four-horse teams. As it is, the freighters alternate between excessive earnings & inability to pay their teamsters or other bills, none of them being organizations with large capital. The snow trail is not in good condition until Feb., & begins to soften the latter part of April. The lakes are deep & well warmed during the long summer days, but in early winter the first sharp frost covers them with a thin crust of ice. On this a blanket of snow falls, which delays further freezing & presses the thin ice below the water, so that beneath the snow there is oftentimes slush 2 or 3 ft. deep. Horses & men break through the upper snow, & the resulting wetting is dangerous with the thermometer 20° or more below zero & the wind blowing.

The railway is a great example of engineering & constructive skill. It would have been a great feat to grade 40 miles & build twenty over a similar rocky pass under the most favorable conditions, but this work was done in seven months, in a region without laborers, 1,000 miles from supplies, 3,000 to 4,000 miles from rolling mills & car shops, & against fearful climatic conditions. Day after day fresh snow drifted over the road-bed & day after day it had to be shovelled off, sometimes to a depth of 6 to 8 ft. Supplies, bridge timbers, fire-wood even, for the enormous camps had to be carried over almost impassable snow trails. There were days when men could not work on account of the storms or the intense cold, but they had to be fed & warmed.

The road begins on deep water, a mile from Skagway. A shelf is blasted along the face of the cliff, & this beginning is typical of the 20 miles to the summit. High above the valley, on a maximum grade almost the whole distance, the road sweeps around two different forks of the Skagway River, adding 6 miles to its length, but making it possible to reach the summit of 2,885 ft. without switch back. It has, however, been questioned by able engineers whether this was the best loca-

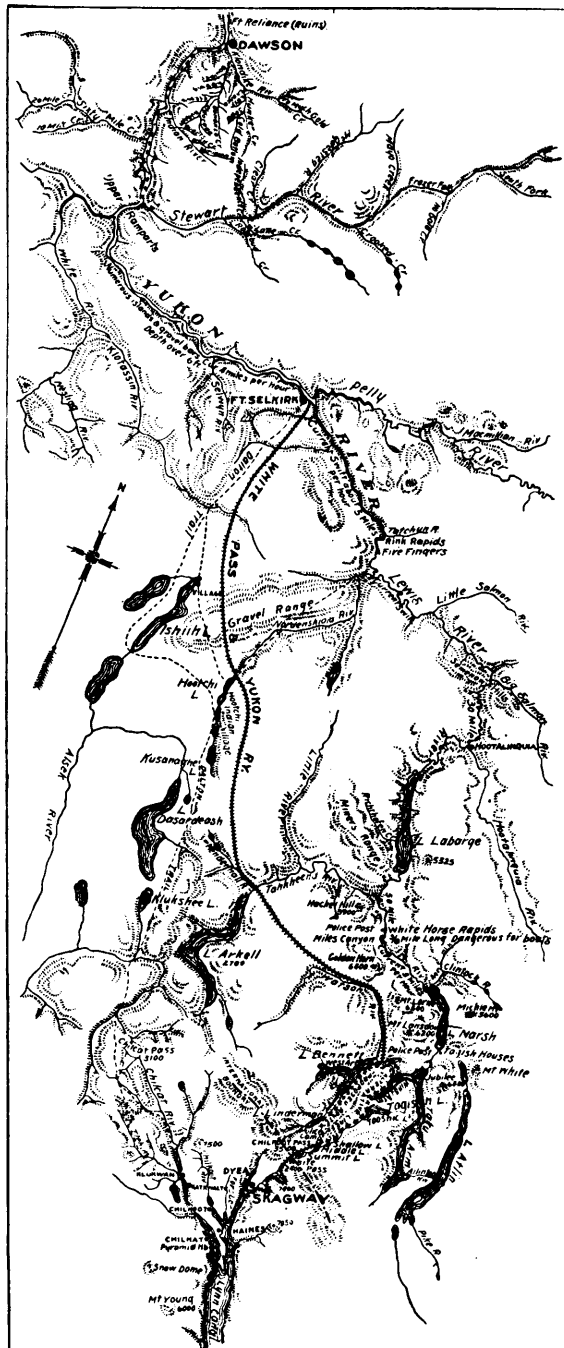
the coming city of Alaska, & thus ended the race between the older Indian Dyea & the younger U.S. city. It will do more. It will change the freight route to Dawson from an up-river to a down-river movement. Even this year barges to carry 20 tons can be bought at Bennett for \$300, or competent men will contract to deliver freight with their own barges for 4c. a pound to Dawson. Contracts are now being made from Seattle & Tacoma, from Victoria & Vancouver to Dawson via the White Pass for \$160 a ton, or 8c. a pound. This through rate may fall to 6c. when the railway reaches Bennett. Even 8c. is lower than the rates hitherto charged by the long mouth-of-the-Yukon route. Passenger travel will all take the shorter road & freight will inevitably follow passengers.

Another & more serious result of the completion of this railway to the summit is the inevitable diversion of a trade thus far almost exclusively in U. S. hands to Canadian points & houses. Last year the high duties imposed by the Canadians were fully off-set by the extortionate charges made for bonding & conveying Canadian goods through the U.S. strip. This year the railway furnishes the bond for a nominal charge, & ships Canadian goods in bonded cars, delivering either at summit of pass, in British territory, or at Log Cabin or Bennett. It is not possible for U.S. merchants to stand 30% duty & also the Canadian custom house delays, annoyances & extortions at Log Cabin. Last year United Statesers made these annoyances an off-set for a 30% duty, but hereafter the Canadians are protected by both duty & annoyances, & even if U.S. meats & hardware are taken to the Yukon they will enter Canada elsewhere & go through in bond. Happily, however, this possible loss of Klondike trade will be more than offset by the very sensational discoveries of gold made near the shores of Bering Sea, at Golovin Bay & Cape Nome. The climate at these points is comparatively mild, they are most easily accessible by boat for five months in the year & the region is described by those who know it as an Arctic paradise.

The Klondike madness is past. In two short years the savage trail with a dozen Indian packers has been replaced with transportation facilities with a capacity exceeding the requirements of the Yukon basin for years to come. This excess will stimulate further developments. The country offers the widest field, for it is inexhaustibly rich. Nowhere else as on this gold trail has the genius of engineers wrought such beneficent and rapid change in so short a time. The evolution from hunter's path to railroad, through the intermediate steps of pilgrim path, mule trail, wagon road, was 2,000 years in making in the St. Gotthard Pass, the great high road between the most civilized portion of the ancient world & of the mediæval world, the road that led from the gloomy north to the rich south, rich in treasures, in food, in spiritual tradition & comfort.

Two short years as against 2,000 have evolved the same succession of improvements on the highway over the White Pass back to a north, hideous in climate, without history, without sentiment, without food, but abounding in gold.—Engineering Magazine.

The wife of Dr. J. A. Hutchinson, Chief Medical Officer of the G.T.R., died in Montreal Sept. 5, suddenly.



ROUTE OF THE WHITE PASS AND YUKON RAILWAY.

tion. The strata dip from east to west, & the other side of the valley would give a stable instead of unstable ledge. The west side is also the sunny and protected side, freer from ice & snow, but on this side a switch back could not have been avoided. The road is narrow gauge, but the road bed & construction are adapted for standard gauge. It is one of the most solid & substantial road beds in America.

This railway has already made Skagway