

route it is over 4,000 miles to Dawson, 2,700 miles of North Pacific Ocean to St. Michaels, & about 1,500 miles of treacherous river touching the Arctic circle, with bars at mouth & elsewhere. Boats are limited to a 3 ft. draft, & the river mouth is open but 3 months in the year. The extent of the transportation delusion is evidenced by the increase of steamboats on the lower Yukon from scarce a dozen in 1897 to 110 by the summer of 1898. These boats represented capital. The gold seekers went the other way & the only real rivalry that there has ever been for a permanent Yukon route is between Dyea & Skagway, between the Chilkoot & White passes. When the rush began, one of these was an Indian path, the other nothing, but what it lacked in merit Skagway made up in boisterous advertising. The Indian village at Dyea developed into a town, the U.S. speculation on the Skagway flats was platted & the city of Skagway started. It first succeeded in building a wharf to deep water & this was the beginning of its supremacy, because it became easier & safer to land there. Beyond the landing this trail was utterly unfit for travel, but the first arrivals were too busy pushing on to warn those who might follow, & both town boomers & steamer lines assured ticket buyers that whatever might have been true last week, now the trail was indeed open.

Above its delta, the Skagway River, a mountain torrent, occupies nearly the whole width of the valley. The mountains rise steeply on each side & every spot that is not washed bare of earth is overgrown with heavy timber. If in rare places the river has a shore, it is covered with boulders & loose rock, either terminal or lateral moraines of the former Skagway glacier, or the result of landslides. For 10 miles from the sea, the fall of the Skagway River is not rapid but above the last fork, the stream rushing down from the summit of the White Pass is a rocky torrent, in a deep canyon bed. The rise in the last four miles below the divide is about 2,000 ft. Over 12,000

people landed at Skagway in the first year after the rush, or between Aug., 1897 & July, 1898. Most of these unfortunates crossed the pass dozens of times carrying their goods in relays, a man load at a time, a slow way of transporting a ton or two of supplies a distance of 30 miles over almost impassable trails. Most of the packing was done on man back & extraordinary loads were carried. One of the Indians on Chilkoot carried in one load 247 lbs. over the summit, & on the whole, nothing is so generally efficient as a man. Dogs were fitted with pack saddles & given loads of 10 to 30 lbs., & this was worth while, at 60c. a pound. Goats were used, rafts, canoes, rough boats, any & everything that could be impressed into service. Horses were shipped to Skagway by the hundred, & there, on the worst trail in the world, they died also by hundreds, but during this first summer a horse was not able to carry as much as a man. It was the packers, the owners of the horse trains who made the first trail, for the gold seekers had no time to join in any "good road movement," but the packers organized, instituted compulsory service & by the spring of 1898 had succeeded in opening a very fair bridle path, making this trail from this time on essentially a horse trail, & thus scoring a second triumph over Dyea. The horses between Skagway & Bennett each carried 250 lbs. besides feed for the round trip of 4 days.

Six to seven horses or mules made a string under the care of one man, the driver riding on an extra animal, sometimes in front, often behind. Rates for packing fell to 20¢ & then to 12c. a pound & fortunes were made, & squandered, in the business. Six horses carried 1,500 lbs. of net freight & earned gross \$180 to \$300. Expenses for a round trip were \$40 in wages, \$12 hotel bills, \$25 for horse feed, \$20 wear & tear & \$15 toll, making a total of \$112. Some packers who had 40 to 50 horses on the trail put in their own boarding camps, thus reducing expenses, & the most energetic & successful & reliable earned for several months over \$1,000 a day net on an investment of \$2,000 to \$3,000. One energetic man interviewed the arriving Klondikers at Seattle, contracted to deliver their freight at Bennett, required a part payment in cash, used the cash to buy his horses & pack-saddles & went north on the same steamer with his customers & fulfilled his contract.

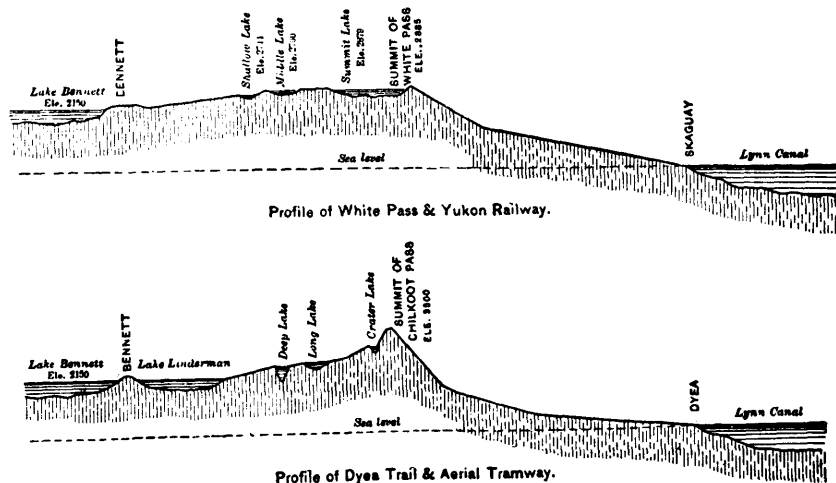
But the enormous amount of freight going to Dawson by way of the passes, nearly 20,000 tons, prompted G. M. Brackett, an experienced & energetic railway contractor, to begin a wagon road from Skagway to the summit. He started early in the fall of 1897 and pushed the work with great energy, hoping to be ready for the great spring rush, but in this he was disappointed. The remoteness of the region, with mails 10 days apart, labor,

Mr. Brackett had built his wagon road without authority & there was indeed no time to wait for it, as the U.S. Government is always several years behind requirements in frontier matters. Very great friction developed between the wagon road company & the packers. The latter drove their pack horses up the frozen bed of the river & thus avoided the new road, but Brackett completed a short piece of road around which it was impossible to go and there he erected his first toll gate. While the struggle was going on in Alaska Brackett was not idle in Washington & secured the passage of a resolution by Congress giving the Secretary of the Interior jurisdiction over Alaskan roads with authority to grant toll privileges. From the Secretary of the Interior Brackett obtained authority to levy a toll of 2c a pound on all freight, \$10 on each wagon, \$1 on each foot passenger, horse, sheep, dog or other animal. These rates were excessive. This wagon road, owing to its heavy grades, was none of the best. In building it Mr. Brackett had in many places simply improved the previously existing trail made by the packers themselves. The road was only built for 11 miles, yet without proper investigation, without any comprehension of the actual conditions or of the equities, the privilege was granted to levy prohibitive tolls on all the enormous traffic using this pass. There was not even any possibility of appeal, as no court

had any jurisdiction over tolls placed by act of Congress at the discretion of the Secretary of the Interior. The wagon road, however, experienced difficulties. The Chilkoot Pass route had not been idle, & from the first as a man pack route it had been preferred to the White Pass because shorter, with better approaches & with more direct waterways to the head of Yukon navigation. The first improvement on this pass was made when a horse whim was anchored at the summit of Chilkoot, & by this means loads of over a ton could be hauled up on sleds, thus putting this route far ahead of the Skagway trail for heavy

freight as well as for single loads. After the first season the horse gave way to a gasoline engine, his last act being to wind his own successor to the top. The gold seekers could drag their own loads on sleds to the foot of the summit, there turn them over to the whim, be hauled up, coast down the other side & go on their way rejoicing over the frozen lakes & smooth trail to Bennett.

In Aug., 1897, work was started on the Chilkoot R.R. & Transportation Co., on the Alaska R.R. & Transportation Co., & on the Dyea Klondike Transportation Co., all three of them aerial cable trams. These three were ultimately consolidated into the Chilkoot Pass route, & but one line finished in April, 1898. A large force of men was kept busy all winter, but very little beyond shoveling snow was accomplished from Dec. 10, 1897, to Mar. 15, 1898. The tram begins 9 miles from Dyea at Canyon City, to which place a wagon road is almost without grade. There are 2 loops, 1 from Canyon City to Sheep Camp, 4 miles, & the other from Sheep Camp over the summit, & $\frac{1}{4}$ mile down the other side. This loop is $4\frac{1}{4}$ miles long. The trolley automatically switches from one loop to the other, & the load is limited to 400 lbs., generally carried in boxes 40 x 20 x 24 ins. With its level wagon road & these trams in operation, the Dyea trail should & could have beaten its rival Skagway as to rates, but it



climatic & financial difficulties all combined to prevent rapid work. Nevertheless Mr. Brackett succeeded in building an excellent road for about 10 miles, marring it however, and from an engineering point of view ruining it, by the fearful grade over Porcupine Hill, a grade so steep that 2 horses with a single sled loaded with only 400 lbs. could scarcely climb it coming towards Skagway. Going down this same hill sled runners are generally wrapped with heavy chains, in addition to the very effective automatic brakes used on all Skagway sleds. This brake consists of 2 sharp steel prongs bolted underneath the back end of the shafts & pointing downwards. When the horse pulls these are lifted off the ground or snow, but when on a down grade, the sled runs forward on to the shafts & presses the prongs deep into the ice or snow. Another effective form of brake is a dragging hook, bolted loosely through the back end of the runners. Ordinarily it is turned up & rests on top of the runner, but on down grades it is turned down so that the sharp end of the hook sticks into the runners' track. On this hook the driver will stand, and thus hold almost any load. In Jan., 1899, a 4 horse double bob sled, not being equipped with these brakes, rushed the teams down the steep grade of Porcupine Hill & forced the leaders over the precipice, several hundred feet to the river below.