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AND THE
KLONDIKE

THE
GOLD FIELDS
AND HOW TO
REACH THEM

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SUPPLIES FOR ONE MAN FOR ONE YEAR.

<table>
<thead>
<tr>
<th>Item</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 lbs Beans, white, colored</td>
<td>$.75</td>
</tr>
<tr>
<td>300 lbs Flour, best family</td>
<td>4.00</td>
</tr>
<tr>
<td>50 lbs Corn meal</td>
<td>.90</td>
</tr>
<tr>
<td>100 lbs Bacon, extra smoked and canned</td>
<td>10.50</td>
</tr>
<tr>
<td>50 lbs Granulated Sugar</td>
<td>2.75</td>
</tr>
<tr>
<td>10 lbs Tea, best uncolored</td>
<td>4.00</td>
</tr>
<tr>
<td>40 lbs R. &amp; O. Java and Mocha Coffee</td>
<td>9.00</td>
</tr>
<tr>
<td>15 lbs Dried Peaches, Evap</td>
<td>1.30</td>
</tr>
<tr>
<td>15 lbs Dried Cotta, Evap</td>
<td>1.20</td>
</tr>
<tr>
<td>25 lbs Dried Apples, Evap</td>
<td>1.50</td>
</tr>
<tr>
<td>30 lbs Salt</td>
<td>.25</td>
</tr>
<tr>
<td>1 lb Black Pepper</td>
<td>.25</td>
</tr>
<tr>
<td>1/2 lb Red Pepper</td>
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</tr>
<tr>
<td>10 lbs Baking Powder</td>
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<tr>
<td>15 lbs Rice</td>
<td>.30</td>
</tr>
<tr>
<td>10 lbs Soap, Merino Bar</td>
<td>.50</td>
</tr>
<tr>
<td>2 Plates (granite steel)</td>
<td>.30</td>
</tr>
<tr>
<td>2 Camp Kettles</td>
<td>.35</td>
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<tr>
<td>2 Cups (granite steel)</td>
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</tr>
<tr>
<td>1 Fry Pan</td>
<td>.30</td>
</tr>
<tr>
<td>2 Knives and Forks</td>
<td>.35</td>
</tr>
<tr>
<td>1 Sauce Pan (granite steel)</td>
<td>.35</td>
</tr>
<tr>
<td>1 Bread Bake Pan</td>
<td>.35</td>
</tr>
<tr>
<td>1 Camp Coffee Pot</td>
<td>.40</td>
</tr>
<tr>
<td>2 Teaspoons</td>
<td>.15</td>
</tr>
<tr>
<td>2 Tablespoons</td>
<td>.25</td>
</tr>
<tr>
<td>2 Whipsaws and Handles</td>
<td>.75</td>
</tr>
<tr>
<td>3 Miners' Shovels</td>
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<tr>
<td>3 Miners' Pikes and Handles</td>
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<tr>
<td>1 Gold Pan</td>
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<tr>
<td>1 Rachet Brace</td>
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</tr>
<tr>
<td>1 Extension Bit</td>
<td>1.50</td>
</tr>
<tr>
<td>1 Draw Knife</td>
<td>1.00</td>
</tr>
<tr>
<td>1 Whetstone</td>
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CONTINUATION ON NEXT PAGE.
## Jones, He Pays The Freight

<table>
<thead>
<tr>
<th>Item Description</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1 lb Mustard</td>
<td>.25</td>
</tr>
<tr>
<td>2 gross of Matches, packed in tin</td>
<td>.65</td>
</tr>
<tr>
<td>10 lbs Dried Green Peppers</td>
<td>.40</td>
</tr>
<tr>
<td>15 lbs Dried Green Corn</td>
<td>1.20</td>
</tr>
<tr>
<td>25 lbs Evaporated Potatoes</td>
<td>2.50</td>
</tr>
<tr>
<td>10 lbs Evaporated Onions</td>
<td>4.00</td>
</tr>
<tr>
<td>2 doz (16) Corn Beef</td>
<td>2.00</td>
</tr>
<tr>
<td>1 doz Condensed Milk</td>
<td>1.25</td>
</tr>
<tr>
<td>10 lbs Pilot Bread, square</td>
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</tr>
<tr>
<td>1 Box Candles (150)</td>
<td>1.25</td>
</tr>
<tr>
<td>10 lbs Summer Sausage</td>
<td>2.00</td>
</tr>
<tr>
<td>2 doz (4 oz) Beef Extract</td>
<td>5.00</td>
</tr>
<tr>
<td>10 lbs Flannel</td>
<td>.90</td>
</tr>
<tr>
<td>1 Cobbler Repair, Outfit</td>
<td>1.25</td>
</tr>
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</table>

### CLOTHING

<table>
<thead>
<tr>
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<tr>
<td>6 Pr Heavy, All-Wool Socks</td>
<td>1.75</td>
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<tr>
<td>2 Pr Heavy, German Alaska Socks, ($1.50)</td>
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</tr>
<tr>
<td>2 Pair (10-ir) All-Wool Blankets, ($0.90)</td>
<td>1.80</td>
</tr>
<tr>
<td>1 Fleece - Lined Rubber Blanket, 60x61</td>
<td>2.75</td>
</tr>
<tr>
<td>1 Heavy Mackinaw Coat</td>
<td>3.00</td>
</tr>
<tr>
<td>3 Pr Heavy Overalls (50c)</td>
<td>.80</td>
</tr>
<tr>
<td>2 Extra Heavy, Blue Flannel Overshirts, ($2.25)</td>
<td>4.50</td>
</tr>
<tr>
<td>3 Suits Extra Heavy, Red Flannel Underwear ($3.50)</td>
<td>7.00</td>
</tr>
<tr>
<td>3 Pr Felt Boots (76c)</td>
<td>1.50</td>
</tr>
</tbody>
</table>

The above list may be changed to suit your views. We give quantity and list of goods that experience shows are required. Everything is packed to take up the least possible space, in waterproof duck bags, for which we charge 50 cents each. It requires about 10 50-pound bags to pack the above outfit. Prices quoted are based on present market values which we do not expect to change much, if any.

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Alaska and the Klondike....

The New Gold Fields

How to Reach Them

HARRY L. WELLS
PORTLAND, OREGON
1897
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Chapter I

History and Government

During the fifty years immediately following the discovery of America, Spain gained a firm and lasting foothold in the New World. By the middle of the sixteenth century she had conquered and colonized every portion of the two continents inhabited by wealthy and semi-civilized nations, and was enjoying from her new possessions a revenue almost fabulous in its amount.

In 1513 Balboa crossed the isthmus of Darién and discovered the South Sea, and in 1530 Magellan passed through the straits at the extremity of South America and entered the Pacific. In a few years the two oceans were found to be the same body of water, but it was several centuries before the Pacific was known to extend so far north as it actually does, for no sail was spread upon those northern waters.

When Cortes completed the subjugation of Mexico, he at once constructed vessels on the west coast for the exploration of the Pacific, of whose vast expanse he had not the slightest conception. His plan was to coast northward and westward until he reached the Indies. In 1500 Jasper Cortereal had entered Hudson's bay through the straits he called "Anian," and when the South sea was discovered a few years later it was taken for granted that Hudson's bay was the same body of water and that the straits of Anian was a northern passage from the Atlantic to the South sea, similar to the one discovered a little later by Magellan. This error was not exploded for nearly three centuries, and it was due to the persistent efforts of several nations to locate this passage that Alaska was finally settled and colonized. Cortereal's error was as soon discovered, but one Maldonado claimed a little later, when the great width of North America was more fully realized, to have sailed in an open North sea 300 miles and then to have passed through the straits of Anian directly into the South sea. Though this alleged voyage was undoubtedly a myth, it kept the maritime nations of the earth in an intermittent quest for the much-desired passage for two centuries and a half.

It was to find and locate definitely this mythical passage that Cortes planned to skirt the mainland to the Indies, having no idea whatever of the great width of the Pacific ocean. His plans were suddenly changed by orders from his sovereign, the powerful Charles V., to sail directly across to the Indies. These orders were the result of the success of the Portuguese in establishing profitable trade and colonies in the Indies by the way of Cape of Good Hope. After several unsuccessful expeditions across the Pacific, the Philippine islands were subdued, and in a few years an enormous revenue as derived from this new
dependency. As a result, the Northern ocean was neglected for two centuries by Spain, with the exception of an occasional small expedition, the most venturesome of which reached no farther than the coast of Oregon. Spain claimed exclusive jurisdiction of the entire Pacific and the lands bordering upon it, and enjoyed undisputed possession of its commerce until English and Dutch privateers, or buccaneers, invaded it by the way of Cape Horn and preyed upon her commerce. The easier to enter the Pacific, for this purpose, the Northwest passage was eagerly sought by the English, and the desire to find it and fortify its Pacific end against invasion was the ruling motive that prompted the spasmodic and fruitless expeditions sent out by Spain along the northern coast. Failure led to a practical abandonment of the effort on both sides for many years, until interest was suddenly revived in it by the movements of a power previously supposed to have no interest whatever in this region.

The sudden rise of Russia from oblivion to a high rank among the powers of the world, a revolution wrought by the genius of Peter the Great, is one of the marvels of history. Gradually he extended his power eastward across the snowy wastes of Siberia, until his dominions were washed by the waters of the Pacific beating upon the peninsula of Kamtchatka. Having reached the Pacific he became eager to extend his power still farther eastward, until it touched the western confines of the dependencies of England, France and Spain in America. How far that was, or what was the nature of the region coveted, no one had the faintest knowledge. He sought to find a northern passage into the Pacific, similar to the one the English were seeking in the opposite direction, as well as to explore eastward from Kamtchatka. Before his plans could be executed, he died, but his widow and successor, Catherine, took up the project, and in 1725 sent Vitus Behring, a Danish navigator, from Kamtchatka. He sailed northward until he found the coast trending steadily westward, and believing he had entered the Arctic ocean, he returned. Neither going nor returning though the straits, which were later named in his honor, did he see the American coast, consequently he reported that a great open sea lay to the eastward of Asia, joining the Pacific and Arctic oceans. During the next few years several other expeditions were sent out, one of them landing on the American coast in 1733 and discovering that but a strait, and not an open sea, connected the two great oceans.

In 1741 Behring reached the American coast in the vicinity of Mount St. Elias, christened by him, and went as far south as latitude 54 degrees 40 minutes. Upon his return voyage his vessel was driven out of its course, and many of the crew died of scurvy. They landed upon Behring's isle, a small speck upon the bosom of the ocean, consisting of a few granite peaks, thrust above the sea, their sides continuously lashed by the surf. Before spring Behring and thirty of his followers found a grave amid those water-bound rocks. Upon the return of spring the survivors constructed a small boat from the wreck of their vessel, and succeeded in reaching the bay of Avacheta, on the Kamtchatkan coast. They had subsisted during the winter upon the
flesh of fur-bearing animals, probably seal and seal otter, and the skins had served for beds and clothing. In these furs were the survivors clad when they returned, and their value led to the dispatch of several expeditions by Russian traders in search of furs, with the result that a large trade in furs was gradually established, and Russian colonies were established on the coast of America.

For many years Alaska, or Allaska, was believed by the Russians to be the largest of a group of islands, the many long inlets penetrating the mainland being supposed to be passages between islands, and this error was not disclosed until the explorations of the celebrated Captain Cook revealed the true nature of the coast line in 1778. The Russians for many years took their furs to Avacha and Ochotok, and sent them thence overland to the Chinese market at great expense, being unaware that the ocean in which the fur islands lay was the same great sea that washed the Chinese coast, and could be entered by the way of Cape Horn. This was discovered when some Polish exiles escaped in a vessel from the coast of Kamchatska and reached Canton, where they sold at a high price furs they had picked up on the way. Then for the first time was realised the great magnitude of the Pacific, and that the same waters beat upon Behring's isle, the coast of China, the Spanish colonies of North and South America and the sunny islands of the broad South sea.

Both England and Spain became uneasy about the progress Russia was making on the northern coast, and they sent out several expeditions. The first of importance was that of Captain James Cook, who sailed from England in 1776, and reached the coast of Oregon in March, 1778, having discovered the Hawaiian islands the previous January. He followed the coast northward to Mount St. Elias, thence westward and northward through Behring's straits, into the Arctic ocean as far as Icy Cape, exploring all the inlets, and proving Alaska to be a great western extension of the mainland of America, and not a group of large islands, as the Russians believed. He proceeded to the Hawaiian islands to spend the winter and was there killed in a needless quarrel with the natives.

The first to avail themselves of the discoveries of Cook were the Russians. Cook's voyage opened their eyes to the nature and value of the fur regions, and they determined to enter deeply into that which they had been simply skimming for years. The many independent traders who had been making perilous voyages among the islands of the Aleutian archipelago combined and organised a trading company in 1781, and in 1783 established the first permanent station on Kodiak Island, from which stations gradually spread during succeeding years along the islands and mainland. Interest was also stimulated in this region elsewhere, and in 1786 the first English trading vessel reached the Alaskan coast in search of furs, followed during the next few years by other English and American trading vessels, as well as exploring expeditions of several nations. In 1786 La Perouse, a French navigator, explored the southeastern coast, and during that and the following year Fortlock and Dixon, in English vessels, explored the coast and
Cook's Inlet. Because of this activity by foreigners, orders were issued from St. Petersburg in 1787 to take possession of the mainland. At the same time Spain aroused herself to assert her claim of exclusive jurisdiction of the Pacific, and sent an expedition north to see what the Russians were doing. This expedition visited Kadiak island and Unalaska in 1788, and returned to Mexico with the report that there were eight settlements in Alaska, all of them west of Prince William's sound, while another was about to be established near the sound itself, which was done that year near the mouth of Copper river. These posts were chiefly occupied by natives of Siberia and Kamchatka. It was also reported that the Russians were preparing to take possession of Nootka sound, on Vancouver island, and other points far to the south. Spain sent a remonstrance to Russia that her subjects were encroaching upon the Spanish dominions in the Pacific, and was answered that the Russians were acting under express directions of the crown. Meanwhile English traders had taken possession of Nootka sound, on Vancouver island, and in 1789 Spain sent an expedition there, captured the vessels of the English companies and took possession. This almost led to a war, but the matter was settled by the Nootka convention of 1793, by which Spain's acknowledged sovereignty terminated at the California line, above which point both Spain and England should have equal rights.

Knowledge of the nature of the great unknown wilderness back of the Alaskan line was gained in 1787, when Alexander Mackenzie made his famous journey to the Arctic ocean by the way of Great Slave lake and Mackenzie river, and again in 1791-2, when he made the first journey overland to the Pacific by way of Peace river and the Fraser river. From 1790 to 1791 several Spanish, English and American vessels traded along the coast and explored the numerous passages and inlets, and from 1793 to 1794 Captain George Vancouver, the English Nootka commissioner, explored the entire coast north of California to the head of Cook's inlet, and settled definitely in the negative the question of a passage through the northern continent between the Atlantic and Pacific, belief in which had existed for nearly three centuries. It was then realised fully that Alaska was a great western extension of the continent, deeply penetrated by arms of the sea and its coast fringed with innumerable islands. From this time till its purchase by the United States, Alaska was undisputably in the hands of Russia.

In 1790 Shelikoff, the most energetic of the traders, organised the Shelikoff company to monopolise the trade, and was granted special privileges by the government. Delareff as made chief director, being governor of the entire fur region, and the famous Alexander Baranoff was given charge of the posts on Kadiak island and Cook's inlet, the former being the general headquarters. Baranoff was made chief director in 1792, and for many years ruled Alaska with an iron hand, inflicting many cruelties upon the natives, with whom he was constantly at war, and conducting himself in a most outrageous and corrupt manner. He was frequently complained of and reported against, and twice successors were appointed, both of them meeting with disas-
ter before reaching him. In 1783 an imperial ukase was issued authorizing the sending of missionaries and convicts to the American colonies, and the following year 100 convicts, two overseers and 11 monks were colonized on the coast near St. Elias, where they endured incredible hardships, even the monks being compelled to work like slaves. In 1795 the settlement of New Russia was made on Behring, or Yakutat, bay. Opposition to the Shelikoff company having sprung up, the government chartered the Russian-American company for 20 years, giving it control of all the coast north of latitude 65 degrees. Baranoff was made manager and in consequence governor of the country, complete control being in the hands of the company. There was no law except the rules of the company, and no justice for the foreigner or native save such as pleased Baranoff to give.

Sitka, the present capital of Alaska, was established by Baranoff in 1799, in Sitka bay, on Baranoff island, the fort erected at that time being called Fort Archangel Gabriel. English and American vessels visited the coast and their cargoes were the chief source of supplies for the Russian posts. In 1804 a settlement was established on Sitka bay, called New Archangel, and this was made by Baranoff the headquarters of the company and the seat of government of the colony, being none other than the present city of Sitka. The Astor settlement at the mouth of the Columbia in 1810 and 1811 was made in pursuance of an agreement to supply the Russian posts. For another source of supplies Baranoff effected a settlement in California, at Bodega bay, built Fort Ross, and established a colony to grow wheat and vegetables. This settlement was sold to John A. Sutter in 1841, when no longer needed by the Russians. In 1817 Baranoff resigned and Hagenmeister became governor.

In 1816 the first extensive explorations of the coast north of the peninsula were made by Kotsube, whose name was given to the great sound north of Behring strait. In 1818 Korsakoff crossed Alaska on foot from Cook's inlet to the mouth of Kushkoquim river; and Kohakoff built a fort at Nushergak, on Bristol bay. In 1819 important reforms were instituted in the government of the company and colony. At that time there were five settlements on the Aleutian islands, four on Cook's inlet, two on Chugach gulf and one on Baranoff island, the capital. In 1820 Muravieff became governor, and the same year Kushkoquim river was explored. In 1831 the charter of the company was renewed for 50 years, and an imperial ukase was issued, claiming all the country north of latitude 60 degrees. This led to a remonstrance on the part of the United States, which nation had purchased the Spanish claims in 1819, resulting in a treaty in 1824, limiting Russian settlements to the country north of latitude 54 degrees 40 minutes, and giving free trade privileges to both along the entire coast. The following year a similar treaty was made with England. This confined the dispute for possession of the country between California and latitude 54 degrees 40 minutes to England and the United States, a matter which was settled by the treaty of 1846, dividing the disputed territory at the forty-ninth parallel.
In 1835 Chistakoff became chief director, and moved the capital from New Archangel to St. Paul, on Kodiak island. In 1836 Captain Beechy, of the British navy, explored the Arctic coast of Alaska as far east as Point Barrow. In 1831 Baron Wrangel became governor and relocated the capital at New Archangel. In 1833 Alaska ceased to be merely a penal colony, and permission was given to all Russian subjects to reside there. The same year Fort St. Michael was built by Tebenek on Norton sound, 20 miles north of the mouth of the Yukon, and in 1835 the delta of the Yukon was explored by Glagunoff. The Stickeen river, having been discovered in 1832 by the American ship Atahualpa, and Wrangel learning in 1833 that the Hudson's Bay Company was preparing to take possession of that region, he established Fort Dyonesius at its mouth, subsequently called Fort Wrangel. This led to complaint by the Hudson's Bay Company, and finally to the leasing of the fort by that company, from which time the entire interior was dominated by the English corporation, whose posts had been extended northward to the Arctic and westward to the Pacific.

In 1836 Kuprinoff became chief director. In 1837 the Arctic coast from the mouth of the Mackenzie west to Point Barrow was explored by Dease and Simpson, thus completing the delimitation of the entire Alaskan coast. Fort Nulato was built on the Yukon, but was abandoned the same year and was burned by the natives. It was rebuilt in 1841, was captured and burned again in 1851, and was finally rebuilt in 1859. In 1840 Etolin became chief director, and in 1844 the company's charter was renewed for 20 years from 1845. In 1843 the Yukon was ascended as far as Nowikakat, and in 1847 McMurray built Fort Yukon near the mouth of the Porcupine and explored the latter river. In 1848 Wolwodsky succeeded Etolin as governor. This year is memorable as the beginning of whaling in the Arctic. Captain Rays took an American vessel through the straits and was so successful that the following year 134 American whaling vessels entered the Arctic ocean. The first settlement made on the Yukon by the British was in 1851, when Fort Selkirk was established by Robert Campbell east of the 141st meridian, which had been made the boundary line by the treaties of 1824 and 1825. The fort was burned by natives, but subsequently rebuilt. In 1860 Furnheim became governor, and the following year the exploration of the Yukon was completed by Kennicott, who descended the stream. Dissatisfaction with the condition of affairs led to a refusal by the czar to renew the company's charter in 1862, and it lost all its special privileges, the result being a practical suspension of government in Alaska until 1864, when Makasoff, the first imperial governor, arrived in the colony.

In 1865 the Western Union Telegraph Company entered upon the ambitious project of connecting Europe with the United States by a telegraph line through Alaska and Siberia. It sent out a large number of well equipped expeditions, which explored both the Alaskan and the Siberian coasts and interior, and even built a portion of the line, which went to waste when the whole project was abandoned because of the success of the Atlantic cable. In the course of this work the Yukon
was ascended and descended and the region about its mouth thoroughly explored by Jones and Lukeen and others, and again in 1866 Kennicott, Ketchum, Lebarge and Lukeen explored the river from the upper lakes as far down as Fort Yukon.

The next step in the history of Alaska was its purchase by the United States in 1867, for $7,200,000, through negotiations conducted by William H. Seward. The far-sighted statesman was severely criticized at the time for his purchase of barren rocks and snow, but he was able to show that the fur trade alone was worth the purchase price, while the fisheries were unsurpassed in their possibilities and the mineral wealth gave promise of great value, which has been more than fulfilled by the developments of recent years. There is no one now who thinks Seward made a bad bargain.

At the time Alaska was purchased it had a population of but a few Russians and mixed breeds, besides the natives. Schools had been established by the government, under control of the priests of the official Greek church, for both the white population and the natives, but the government was primitive and autocratic. Troops were sent north to occupy the country, and a military government was established, with the capital at Sitka, the name given by the Americans to the old Russian town of New Archangel. For a long time the colony, for it could be called nothing else, was neglected by congress, but its growing importance at last compelled that body to pass an act for its government in 1884.

In the summer of 1881 a convention was held at Juneau, to take steps to secure a government for Alaska. This convention selected Mottrom D. Ball as a delegate to congress to secure legislation. He went to Washington, and, though not admitted to a seat in congress, his presence did much to attract attention to the needs of that section of the country. For several sessions various Alaska bills were before congress, and June 17, 1884, a bill introduced the year before by Senator Benjamin Harrison became a law. This act provided for a governor, district judge, clerk of the court, marshal, collector of customs, and four commissioners, since increased to five, one to reside in each of the chief towns, and all to be appointed by the president. Sitka was made the capital and place of official residence, also a land office. The laws of Oregon were made applicable to the district, and an Oregon judge was appointed to administer them. The law prohibited the cutting and export of timber, the killing of fur seals, except by the company with which the government had a contract, and the importation, manufacture or sale of liquor. With the exception of occasional confiscations by the collector, the liquor law has been a dead letter; as great quantities of whisky and beer have been smuggled in, and saloons run openly in every town, from which the government, with its usual inconsistency, collects a revenue license. This matter of liquor has been an important one ever since the fur trade with the natives began. Now that the white men are pouring into that region in large numbers it may be called settled. They will demand
H. H. Wendling's Camp on El Dorado Creek.
the same right to drink and sell liquor enjoyed by their brethren in other territories, and the next Alaska act will undoubtedly grant it to them, reserving only the prohibition against selling liquor to Indians.

This act, though a vast improvement on a merely military government, was not such as the growing needs of the country required. By 1880 the white population had increased to 4500, chiefly along the coast, and in the next few years this was nearly doubled by the development of the mines and fisheries, especially by the opening up of the placer mines along the Yukon. The rush of the present year has almost doubled it again, with prospect of much more than doubling another year. Conditions have so radically changed that a regular territorial government can not much longer be denied to Alaska.

After the act of 1884 was passed efforts were continued to secure a better form of government. In 1888 the democrats sent two delegates to the democratic national convention, and they were seated. In 1889 the republicans held a convention at Juneau and sent Minor W. Bruce to Washington with a memorial to congress and a member of the republican national committee. From that time both parties gave Alaska representation in their conventions.

The misunderstanding and contentions regarding the laws that are applicable to Alaska, so far as lands and claims are concerned, have been set at rest by a statement by Commissioner Binger Hermann, of the general land office. Many inquiries on this question have come to the attention of the department, and numerous applications have been made for copies of the public land laws which apply to Alaska. The general land office has taken much interest in the reports from the gold belt and has investigated the laws that govern them. Mr. Hermann says there is no longer any question about what laws extend to Alaska, and that these laws are applicable:

First—The mineral land laws of the United States.

Second—Township laws, which provide for the incorporation of townships and acquisition of title thereto from the United States government to township trustees.

Third—The laws providing for trade and manufactures, and giving each qualified person 160 acres of land in a square and compact form.

The coal lands regulations are distinct from the mineral regulations or laws, and the jurisdiction of neither coal laws nor public land law extends to Alaska, the territory being expressly excluded by the laws themselves from their operation. The act approved May 17, 1884, providing for civil government of Alaska, has this language as to mines and mining privileges:

"The laws of the United States relating to mining claims and rights incidental thereto shall on and after the passage of this act be in full force and effect in said district of Alaska, subject to such regulations as may be made by the secretary of the interior and approved by the president, and parties who have located mines or mining privileges thereon, under the United States laws applicable to the public domain, or have occupied or improved or exercised acts of own-
ership over such claims, shall not be disturbed therein, but shall be allowed to perfect title by payments provided for."  
There is still more general authority without the special authority. The act of July 14, 1886, says:  
"All valuable mineral deposits in lands belonging to the United States, both surveyed and unsurveyed, are hereby declared to be free and open to exploration and purchase, and lands in which they are found, to occupation and purchase by citizens of the United States, and by those who have declared an intention to become such under the rules prescribed by law and according to local customs of rules of miners in the several mining districts, so far as the same are applicable and not inconsistent with the laws of the United States."  
The patenting of mineral lands in Alaska is not a new thing, for that work has been going on for some time. In addition to the land office at Sitka one will be established at Circle City.

**CANADIAN GOVERNMENT.**

The fact that the gold fields of the interior lie partly in Canada and partly in the United States much complicates the situation. The British Columbia line extends some distance north of the southern line of Alaska, so that all the interior south of that line is subject to the laws of that province. North of that line, including the entire Yukon region not in the United States, lies in the Northwest Territory, which includes that vast region of British America lying north of the organized provinces. This territory is governed by regulations promulgated by the Canadian government, which has adopted mining regulations for it as given at length in this volume. In 1894 a detachment of 20 mounted police was dispatched to the Yukon country, under command of Inspector Constantine, who established posts at Fort Cudahy and Forty-Mile, and proceeded to enforce the Canadian regulations and collect customs duties. The next year a regular customs collector was appointed. Since the great rush began the present year additional police and customs officers have been sent to the Yukon district, and Major Joseph Walsh has been appointed administrator and made practically governor of that district, while a judge has been appointed to hold court and administer the civil and criminal laws until the Canadian parliament can take action. The office of the gold commissioner, where all locations must be made and licenses secured, is at Dawson City, though it is possible branch offices may soon be located elsewhere.

**CANADIAN DUTIES.**

One of the first steps taken by the Canadian government when the rush to the Klondike began, was to send customs officers to collect duties on all goods taken in. This was not done in a spirit of hostility to the prospectors, nor were any special duties imposed. It was simply, the same effort on the part of the Canadian officials to enforce the regular laws of that country that were being made by similar American
ALASKA, THE NEW ELDORADO

Officials. Customs collectors were hastily sent in over the Chilcoot trail to Lake Tagish, where they established a station for the collection of duties on all goods taken past. This duty has not been collected upon the personal wearing apparel or a reasonable quantity of supplies taken in by individuals for their own use, but has been levied upon everything taken in for trade or in quantities beyond the legitimate needs of the owners for a reasonable period. The names of all persons who refuse to pay the duty are forwarded to the mining commissioners at Dawson, and all such persons will be denied the privilege of locating claims, even if their outfits are not confiscated. An American entering the Northwest territory, whether by one of the overland routes or by steamer on the Yukon, must be prepared to pay duty on the stuff he takes in and pay it in cash. The reverse is true of all persons entering Alaska from the Canadian side, since it is not to be supposed that the American collector of customs and his deputies will be less energetic in enforcing the revenue laws of the United States than are the Canadian officials with the laws of that country. The following are the duties levied by Canada upon the chief articles going into the mining region:

<table>
<thead>
<tr>
<th>Description</th>
<th>Duty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axes, hatchets, shovels, spades, picks, etc</td>
<td>25% ad valorem</td>
</tr>
<tr>
<td>Baking powder, 6c per pound.</td>
<td></td>
</tr>
<tr>
<td>Bed comforts</td>
<td>321/2%</td>
</tr>
<tr>
<td>Blankets, 6c per pound, and</td>
<td>25%</td>
</tr>
<tr>
<td>Boats and ship sails</td>
<td>25%</td>
</tr>
<tr>
<td>Boots and shoes and rubber boots</td>
<td>25%</td>
</tr>
<tr>
<td>Breadstuffs, grain, flour and meal, all kinds</td>
<td>20%</td>
</tr>
<tr>
<td>Butter, 4c per pound.</td>
<td></td>
</tr>
<tr>
<td>Candles</td>
<td>25%</td>
</tr>
<tr>
<td>Cartridges and ammunition</td>
<td>30%</td>
</tr>
<tr>
<td>Cheese, 3c per pound.</td>
<td></td>
</tr>
<tr>
<td>Cigars and cigarettes, $2.00 per pound, and</td>
<td>20%</td>
</tr>
<tr>
<td>Clothing</td>
<td></td>
</tr>
<tr>
<td>Socks, 10c per dozen pairs, and</td>
<td>35%</td>
</tr>
<tr>
<td>Knitted goods of every description</td>
<td>35%</td>
</tr>
<tr>
<td>Ready-made, partially of wool</td>
<td>30%</td>
</tr>
<tr>
<td>Water-proof clothing</td>
<td>35%</td>
</tr>
<tr>
<td>Cotton knitted goods</td>
<td>35%</td>
</tr>
<tr>
<td>Duck, from 20 to 80</td>
<td>35%</td>
</tr>
<tr>
<td>Fur caps, capes, coats, muff, etc.</td>
<td>35%</td>
</tr>
<tr>
<td>Jerseys, knitted</td>
<td>35%</td>
</tr>
<tr>
<td>Linen clothing</td>
<td>331/3%</td>
</tr>
<tr>
<td>Oiled cloth</td>
<td>30%</td>
</tr>
<tr>
<td>Sacks or bags</td>
<td>30%</td>
</tr>
<tr>
<td>Coffee, condensed</td>
<td>30%</td>
</tr>
<tr>
<td>Roasted, 5c per pound, and</td>
<td>10%</td>
</tr>
<tr>
<td>Substitutes, 5c per pound.</td>
<td></td>
</tr>
<tr>
<td>Extracts, 5c per pound.</td>
<td></td>
</tr>
</tbody>
</table>
Condensed milk, 3c per pound.
Crowbars.............................................85
Cutlery.............................................35
Dogs..................................................30
Drugs.................................................30
Earthenware.........................................30
Edged tools...........................................35
Fire arms..............................................30
Flour, wheat, 75c; rye, 50c per barrel.
Fish hooks and lines..................................25
Fruits, dried...........................................25
Prunes, raisins, currents, 1c per pound.
Jellies, jams, preserves, 3c per pound.
Furniture..............................................30
Galvanized iron or tinware..........................30
Hardware.............................................33 1/3
Harness and saddlery..................................30
Horses..................................................30
Lard, 2c per pound.
Maps and charts.....................................20
Meats, canned.........................................25
In barrels, 2c per pound.
Oat meal..............................................20
Pipes, tobacco.........................................35
Pork in barrels, 2c per pound.
Potatoes, 15c per bushel.
Potted meats..........................................25
Powder, mining and blasting, 2c per pound.
Fics, 1 1/3c per pound.
Sailida, portable.....................................20
Sugar, 64-100c per pound.
Surgical instruments................................15
Tents..................................................12 1/3
Tobacco, 42c per pound, and........................

THE BOUNDARY QUESTION.

A controversy exists between the United States and Great Britain as to the boundary line between Alaska and Canada. In the Yukon country this is only a question of survey and is of little importance, but in Southern Alaska it involves the construction of a treaty and if settled according to the claim of Great Britain would take from the United States a strip of land along the coast, including the wonderful tourist attraction of Glacier bay and several such starting points for the interior as Taku, Dyne and Skaguay.

The treaty made in 1885 between Russia and England, referred to in the previous chapter, defined the boundary line according to the somewhat imperfect geographical knowledge of the time. This treaty fixed the starting point at the south end of Prince of Wales Island, in
latitude 64 degrees 40 minutes, the line thence to run north along the channel of Portland canal as far the point of the continent where it strikes the 66th degree of north latitude, following thence the summit of the mountains parallel with the coast to the point of intersection with the 141st degree of west longitude, thence following that meridian to the Arctic ocean. It is especially provided that wherever the summit of the mountains parallel to the coast shall be more than 10 marine leagues from the ocean, the line shall run parallel to the windings of the coast and never exceed the distance of 10 marine leagues therefrom. This is what constitutes the controversy. The British claim is that Behm canal was really intended, instead of Portland canal, as the southern line, since the Portland canal is east from the starting point, and not north, as specified in the treaty, and that the 10 marine leagues should be measured from the main channels of water and not from the heads of inlets as measured by the United States. The difference in the lines the acceptance of the construction now given to the treaty by England would produce, is clearly shown on the accompanying map. It is so important that much difficulty will be experienced in adjusting the matter. As to the boundary in the Yukon region, it is only a question of accurate location of the 141st meridian, which runs due north from the summit of Mt. St. Elias. Of the location of this meridian General Duffield, superintendent of the coast and geodetic survey, says:

"The location was made on the north at Porcupines river by our surveyors and in the vicinity of the Yukon by the Canadians under Ogilvie, and their work there checked by our men. We found that where Ogilvie's line crossed Forty-Mile creek it was six feet and nine inches too far east, and when it crossed the Yukon it was 418 feet too far west. Thus it may be seen that the line as located by Ogilvie is substantially correct. There is no possibility of an error, the correction of which would put the new gold regions in American territory. At the nearest point Dawson City is 50 miles on the Canadian side of the Ogilvie line. If the treaty now before the senate providing for fixing the boundary is ratified, a commission will be appointed to perform this duty. It is considered more than probable that the Ogilvie survey will be accepted."

YUKON MAIL SERVICE.

The United States postoffice department has issued an order establishing an exchange of mails between Dyea, Alaska, and Dawson City, Canada, beginning September 30, from Dyea.

The mails in question shall contain only letters and postal cards, to the exclusion of all other articles. The mail made up at the office at Dyea for the office at Dawson City shall contain letters and postal cards addressed for delivery at any place in the Yukon district of Canada, and the mail made up at the office of Dawson City for the office of Dyea shall contain letters and postal cards addressed for delivery at any place in the United States.
This is the formal announcement of the inauguration of the new postal service in the gold region, which has been established through an agreement between this country and Canada. The contract for performing the service will be let by the Canadian government, the United States paying the latter for its share of the expenses, based on the stretch of Alaskan territory the route traverses.

No newspapers can be got through this winter, and all mailed will be held there until they can be sent in by way of St. Michaels in the spring.

In the summer months there will be regular mail service for both letters and papers by the way of St. Michaels to Circle City, and probably arrangements will be made to have an interchange of mail between Circle City on the Alaska side of the line and Dawson City on the Canadian side.

It is expected that the Canadian government will open up an entirely new mail route by way of the Stickeen river and Lake Teslin next year. For the carrying of the mail by the present agreement, a large number of trained dogs will be taken in from the Hudson's Bay Company posts along the Mackenzie and at other points in the extreme north.

The United States has a regular mail route between Juneau and Circle City, by way of Chilkoot pass, by which only letters and postal cards are taken. This leaves Juneau the first of each month, the new Canadian service leaving in the middle of the month. There are at present no receiving and distributing offices in the interior except Circle City and Dawson, but several will no doubt soon be established.

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Chapter II

Geography, Climate and Resources

Alaska is a vast wilderness. It is a great westward projection of the northern end of the North American continent. The mainland is almost square in shape, except where it is projected to the southwest in a long peninsula between the Pacific ocean and Behring sea, the peninsula being supplemented by the long line of Aleutian islands, until the farthermost point, the island of Attu, the extreme western limit of the United States, is 3,060 miles west of Sitka. Even the Hawaiian islands do not extend as far west as the limits of Alaska. When the sun goes down at Attu it has already risen on the eastern border of Maine, and thus it never sets on the domain of the United States.

The area of Alaska, by which name is designated only that portion of the country belonging to the United States, is 617,703 square
miles, of which 580,107 are on the mainland. The Aleutian islands have a total of 6391 miles, and the great Alexandrian archipelago, that mass of large and small islands bordering the coast of Southeastern Alaska, has 31,305 square miles. The coast line is a very tortuous one and is deeply indented with inlets, so that the total length of the coast line is 26,000 miles, or 2000 more miles than the circumference of the earth. It was these long inlets and the numerous large islands fringing the coast, that led the early Russian explorers and traders to believe that this entire region was one vast group of islands, of which the one they called "Alaska" was the largest. It is chiefly upon the islands and the adjacent mainland that settlements have been made up to the present time, the vast interior having remained almost unknown until the magic power of gold began to transform it into a Mecca for its worshippers.

The Coast range of mountains so familiar farther south raises a high and icy barrier between the coast and the interior, their summits being but a few miles from the sea, terminating at the angle where the coast line turns westward, in a series of Alpine peaks, of which St. Elias is the best known, though Mount Logan, just to the north of it, is said by Schwatka, who made an unsuccessful attempt to ascend St. Elias, to be a few hundred feet higher. St. Elias was ascended the past summer by Prince Luigi and a party of Italian alpiners, guided by Americans, and its height was ascertained to be 18,100 feet. On the coast south of St. Elias and Logan are the Fairweather Alps, consisting of four peaks from 10,000 to 14,000 feet high. Wrangel, another high peak, said to have an altitude exceeding 20,000 feet, lies farther into the interior, to the northwest of St. Elias and in the Copper river region. Farther to the south, on an island opposite Sitka, is Mount Edgecumb, one of the earliest landmarks named by explorers and originally called San Jacinto by the Spanish explorers.

In this Alpine region there are a multitude of tremendous glaciers, some of them terminating at the water's edge and constantly dropping their frozen offerings into the sea. The best known of these are the Muir and Davidson glaciers, because these are visited by the tourist steamers. Glacier bay, the terminal of the tourist route, is a long arm of the sea extending far inland immediately east of the Fairweather Alps. At the head of Muir Inlet lies the tremendous Muir glacier, its green wall of ice rising like a rock cliff abruptly from the water and far above the deck of the vessel that ventures near its base. This river of ice flows steadily downward, its progress being marked by the huge icebergs that break from it with the detonation of artillery and plunge into the sea, throwing the water high into the air. These great ice masses float about the bay and out into the ocean until gradually melted, and the steamer that takes pleasure-seekers to the foot of this great moving wall of ice must thread its way carefully among these floating islands. Glacier bay is the terminus of the tourist route to Alaska, which lies continuously along the sheltered inner passages between the islands and mainland, like the navigation of an inland lake,
and in constant view of some of the grandest scenery the world contains.

Under the influence of the Japan current and protected somewhat by the coast mountains, the islands and the narrow strip on the mainland between the mountains and the sea have a much milder climate than the bleak interior. The rainfall is heavy and timber and grass grow luxuriantly. In the interior timber grows to much smaller size and only near the lakes and water courses, while the climate is far more severe.

Alaska is divided almost in the middle by the great Yukon river, flowing from the eastern border, with a great sweep to the north as far as the Arctic circle, and then to the southwest, into Behring sea at Norton sound. It is one of the great rivers of the world, being 3200 miles long, and for a long distance above its mouth extremely wide, its delta being 60 miles wide, and at places hundreds of miles inland it broadens out to a width of 10 miles, and yet it is navigable. The river and its numerous large tributaries have a total length for light draft river steamers of an unknown length, through probably not less than 4000 miles. The Yukon heads in Northwest Territory, Canada, its chief sources being the Pelly river, flowing west from the Rocky mountains, and the Lewis river, flowing north from the lakes near the coast east of Juneau. The junction of these two rivers forms the Yukon proper, 2044 miles from the sea, the Pelly being 600 miles long and the Lewis and connecting lakes 357. Taking the Pelly as the main stream the total length of the Yukon would exceed 3200 miles. The drainage area is more than 600,000 square miles. The Yukon is not the only large river of Alaska. Parallel to it for hundreds of miles on the south, and also entering Behring sea, is the great Kuskokwim river, also navigable. Flowing into Kotzebue sound, north of Behring strait, are the Newak and Noatak rivers, while several rivers of unknown length flow into the Arctic ocean, one of them said to be of great size. A number of rivers flow southward into the Pacific, the longest of which are Copper river near Prince William sound, and White river, between St. Elias and Fairweather, both navigable for some distance. Flowing westward into the channels along the Alexandrian archipelago are the Taku and the Stickeen, both navigable. The last four rivers are all possible routes into the interior.

The interior of Alaska is a region of rolling table land, mountains and valleys, where grass grows, flowers bloom in luxuriance, moss abounds, and birds sing by the thousands in summer time, while in the winter a mantle of snow covers the entire country and the streams and lakes are locked with ice. The scene of wonderful beauty which enchants the traveler’s eye in the summer, as he is borne on the bosom of the mighty river by the throbbing steamboat, is transformed in a few weeks into a vast wilderness of white, upon which the sun, hanging low along the southern horizon or dipping entirely below it, seems reluctant to gaze.
ALASKA, THE NEW ELDORADO

THE CLIMATE.

No more reliable or succinct statement of the climate of the various districts of Alaska can be found than the special bulletin issued by Willis L. Moore, chief of the weather bureau, of the department of agriculture. It is as follows:

The general conception of Alaskan climate is largely due to those who follow the sea, and this is not strange when we consider the vast extent of shore line (over 26,000 miles) possessed by that territory. The climates of the coast and the interior are unlike in many respects, and the differences are intensified in this as perhaps in few other countries by exceptional physical conditions. The natural contrast between land and sea is here tremendously increased by the current of warm water that impinges on the coast of British Columbia, one branch flowing northward toward Sitka, and thence westward to the Kadiak and Shumagin islands. The fringe of islands that separates the mainland from the Pacific ocean from Dixon sound northward, and also a strip of the mainland for possibly 20 miles back from the sea, following the sweep of the coast as it curves to the northwestward to the westward extremity of Alaska, form a distinct climatic division which may be termed temperate Alaska.

The temperature rarely falls to zero; winter does not set in until about December 1, and by the last of May the snow has disappeared, except on the mountains. The mean winter temperature of Sitka is 33.5 degrees, but little less than that of Washington, D. C. While Sitka is fully exposed to the sea influences, places farther inland, but not over the coast range of mountains, as Kilaipoo and Juneau, have also a mild temperature throughout the winter months. The temperature changes from month to month in temperate Alaska are small, not exceeding 20 degrees from midwinter to midsummer. The average temperature of July, the warmest month of summer, rarely reaches 65 degrees, and the highest temperature for a single day seldom reaches 75 degrees.

The rainfall of temperate Alaska is notorious the world over, not only as regards the quantity that falls, but also as to the manner of its falling, viz: In long and incessant rains and drizzles. Cloud and fog naturally abound, there being on an average but 66 clear days in the year.

Alaska is a land of striking contrasts, both in climate as well as topography. When the sun shines, the atmosphere is remarkably clear, the scenic effects are magnificent, all nature seems to be in holiday attire. But the scene may change very quickly; the sky becomes overcast; the winds increase in force; rain begins to fall; the evergreens sigh ominously, and utter desolation and loneliness prevail.

North of the Aleutian islands the coast climate becomes more rigorous in winter, but in summer the difference is much less marked. Thus, at St. Michael’s, a short distance above the mouth of the Yukon, the mean summer temperature is 60 degrees, but 4 degrees cooler than Sitka. The mean summer temperature of Point Barrow, the most
northerly point in the United States, is 38.3 degrees, but four-tenths of a degree less than the temperature of the air flowing across the summit of Pike's peak, Colorado.

The rainfall of the coast region north of the Yukon delta is small, diminishing to less than 10 inches within the Arctic circle.

The climate of the interior, including in that designation practically all of the country except a narrow fringe of coastal margin and the territory before referred to as temperate Alaska, is one of extreme rigor in winter, with a brief but relatively hot summer, especially when the sky is free from cloud.

In the Klondike region in midwinter the sun rises from 9:30 to 10 A.M. and sets from 2 to 3 P.M., the total length of daylight being about four hours. Remembering that the sun rises but a few degrees above the horizon, and that it is wholly obscured on a great many days, the character of the winter months may easily be imagined.

We are indebted to the United States coast and geodetic survey for a series of six months' observations on the Yukon, not far from the site of the present gold discoveries. The observations were made with standard instruments, and are wholly reliable. The mean temperatures of the months October, 1889, to April, 1890, both inclusive, are as follows: October, 33 degrees above zero; November, 8 degrees above zero; December, 11 degrees below zero; January, 17 degrees below zero; February, 15 degrees below zero; March, 6 degrees above zero; April, 29 degrees above zero. The daily mean temperature fell and remained below the freezing point (33 degrees) from November 4, 1889, to April 21, 1890, thus giving 168 days as the length of the closed season, 1889-90, assuming that outdoor operations are controlled by temperature only, being suspended when the daily mean falls to or below the freezing point.

The lowest temperatures registered during the winter were:
Thirty-two degrees below in November; 47 degrees below zero in December; 59 degrees below zero in January; 55 degrees below zero in February; 45 degrees below zero in March; 26 degrees below zero in April.

The greatest continuous cold occurred in February, 1890, when the daily mean for five consecutive days was 47 degrees below zero. The weather moderated slightly the first of March, but the temperature still remained below the freezing point. Generally, cloudy weather prevailed, there being but three consecutive days in any month with clear weather during the whole winter. Snow fell on about one-third of the days in winter, and a less number in the early spring and late fall months.

Greater cold than that here noted has been experienced in the United States for a very short time, but never has it continued so very cold for so long a time. In the interior of Alaska the winter sets in as early as September, when snow storms may be expected in the mountains and passes. Headway during one of these storms is impossible, and the traveler who is overtaken by them is indeed fortunate if he
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escapes with his life. Snow storms of great severity may occur in any month from September to May inclusive.

The changes of temperature from winter to summer are rapid, owing to the great increase in the length of the day. In May the sun rises at about 3 A.M. and sets about 9 P.M. In June it rises about 1:30 in the morning and sets at 10:30 P.M., giving about 20 hours of daylight and diffuse twilight the remainder of the time.

The mean summer temperature of the interior doubtless ranges between 60 to 70 degrees, according to the elevation, being highest in the middle and lower Yukon valleys.

RESOURCES AND DEVELOPMENT.

When Alaska was purchased not even the statesman who negotiated the treaty and bore patiently the sarcasm of his countrymen, realized the value of the acquisition. He knew that there were resources of timber, fish, furs and minerals of great value, but died before their partial development proved them to be so far beyond his greatest expectations. In addition to the gold mines, the chief resources are as follows:

The humid climate of the coast district of Southeast Alaska promotes a strong growth of timber on the islands and a narrow strip along the mainland. Spruce, hemlock and red and yellow cedar are the leading varieties, the trees growing to very large size. The yellow cedar is especially valuable for furniture and finishing. Along the coast west of Sitka the timber is smaller and less valuable. In the interior the timber near the mouth of the Yukon and other streams is of a fair size, but diminishes as distance is gained inland. It is chiefly spruce, cottonwood, alder and willow that grows along the water courses and lakes. Fir timber of good size is also found to a considerable extent. Little use has yet been made of the timber, except for local purposes along the coast, but the demand in the mining districts has become so great that several small sawmills have been sent up there this year, yet doubtless much lumber for use there will continue to be sent from Portland and other points on the lower coast.

Coal has been found in several places, but coal measures have not yet been opened up. The most promising veins yet found are near Killisnoo, or Chichagof island. Other discoveries are on Unga island, Cook inlet, Lituga bay and Chilkat river, the most extensive being on Cook inlet. The coal is bituminous and of a good quality. On the side of Behring sea coal has been found on Herendeen bay, and some of it has been shipped by the Alaskan Commercial Company to Unalaska and found to be of excellent quality. At Cape Sabine, on the Arctic, coal has been found and both the Thetis and Corwin, government vessels, have mined coal there for their own use. Coal now used in Alaska is brought from British Columbia and Puget sound. Petroleum has been found in a number of places, but no developments have been undertaken.

The fisheries have already assumed large proportions and promise
greatly to increase. The United States fish commission has reported 100 varieties of fish in Alaskan waters, the most important of which is the salmon. The king salmon, much like the chinook of the Columbia river, is from 20 to 60 pounds in weight, sometimes 100 pounds, and the silver salmon, 8 to 15 pounds. The salmon swarm in all the rivers, and canneries are located in many places, Kodiak island being the seat of the greatest industry. The canneries all belong to a combine, except those in the extreme south. The Alaskan output of canned salmon is about 500,000 cases annually.

Cod abound along the coast, a number of fine banks having been located. Several firms are engaged in catching and shipping codfish. Halibut is also caught in large quantities and marketed fresh, dried and smoked. Herring abound in great schools and are an important part of the food supply of the natives. A fish of the smelt variety, called oolichon, or candle fish, enters the rivers in immense numbers. They are very oily, and when dried will burn like a candle. The natives express a fine quality of oil from them, as they also do from the herring and dogfish.

The hair seal abounds in great numbers and constitutes an important part of the food supply of the Indians. The beluga, or white grampus, whale is also captured by the natives, the skin being valuable for ropes, boats, etc. The walrus abounds in Behring sea and the Arctic, but is fast being exterminated. Its skin and tusks are both valuable. The black whale has been chased by whalers into the icy fastnesses of the Arctic ocean, and has been almost exterminated. So many whaling vessels are lost that the government has established a rescue station at Point Barrow, the most northerly point of Alaska.

An important resource is the fur seal, which resorts each summer in immense numbers to the Pribilof, or Seal islands, in Behring sea, for breeding purposes. The government has a contract with a company, by which only 100,000 seals may be killed on these islands annually, and less if the secretary of the treasury so directs, while all others are prohibited from killing seals at all, except in the open sea beyond the jurisdiction of the government, which, by arbitration agreement, extends 50 miles around the islands. A large fleet of vessels follows up the herd from as far down as the coast of California every spring, and kills many thousands of them, while during the summer they hover about the islands and kill many more. The complete extermination of the fur seals is threatened, unless better international regulations for their protection are agreed upon.

Another valuable amphibious animal is the sea otter, found in the ocean along the entire coast. By no means so plentiful as the seal, it is far more valuable, individually, a single skin often being worth $150. They have several times been supposed to have been exterminated, but in a few years have reappeared again. The land otter, a far less valuable animal, is the most abundant of all fur-bearing animals in Alaska, except the fox. The beaver, once abundant, has now become quite scarce and its fur is not in so much demand as 50 years ago.
Dock Scene Before Sailing of an Alaska Steamer.
Of the bear family there are several varieties, the brown bear being the most widely distributed. They are fierce fighters and are not hunted much, as their skins are not very valuable. The black bear is found in the timbered regions and mountains. His skin is valuable and he is less dangerous to hunters. The white, or polar, bear is found along the Arctic coast. Several varieties of foxes contribute much to the fur market, the most numerous and most widely distributed being the red fox, though the least valuable. The black or silver fox is the one most highly prized for his fur. He attains a large size and his habitat is the mountains of the interior. He varies in color from silver to jet black. The blue fox is a highly-prized variety, found on the Aleutian Islands, where he is propagated for his fur. The silver fox is extremely valuable, and is found in the Yukon region. The white fox is found along the coast of Behring sea and the Arctic. The cross fox is a mixture of the red and others.

The mink abounds along the rivers of the interior and on the coast. In the forest-covered mountains the lynx and gray and white wolves are plentiful. Wolverines are found in the lake and Yukon regions. Muskrats, rabbits and armots are abundant everywhere.

Deer abound, especially in Southwestern Alaska, but they have been so relentlessly slaughtered for their hides that they are in danger of becoming exterminated. In the Yukon country moose, cariboo and deer are found of large size. In the Alpine regions of the coast mountains the muskara, or American chamois, and mountain sheep are found.

In the summer of 1892 Minor W. Bruce, acting as an agent of the government, imported 170 reindeer from Siberia and established a breeding station at Port Clarence, near Behring strait. The purpose of this was to supply a reserve of food for the Eskimos, who were threatened with starvation in the winter time, owing to the extermination of the walrus, wild reindeer and whale, their chief food supply. This herd, by natural increase and new importations, has swelled to 1800 animals, other stations having been established at Point Barrow, Cape Nome and Galvin bay. Dr. Sheldon Jackson, a well known Alaska missionary, was the promoter of this reindeer project. It is now proposed to utilize these animals for transportation purposes in the Yukon country during the winter season, both for carrying the mail and in hauling supplies. The revenue cutter Bear has been directed to convey twenty of them from Port Clarence to St. Michaels this fall, and they may play an important part in the work of sending relief into the over-crowded mines this winter. The reindeer can find subsistence by digging roots, moss and grasses from the frozen snow, and thus has a great advantage over both dogs and horses, besides being much swifter of foot.

Now that Alaska is gaining so rapidly in population, the question of agriculture is becoming an important one. A government commission has been appointed to investigate and report upon the agricultural possibilities of that region, and this report will doubtless be submitted to Congress at its next session. Experiment stations will probably be
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established as a result of this report. Conditions seem favorable for such cereals and vegetables as mature quickly. Even in the Yukon region summer vegetables may be grown. The question of stock-raising is also an important one. The islands along the coast supply abundant food for stock, but the cold rains, sleet and raw winds are hard upon animals, especially sheep, and little success has been met with thus far. It is believed that cattle may be raised in the interior, as nutritious grasses and mosses abound.

Chapter III

Gold Discovery on the Youkon

The most authentic date of the discovery and working of the Yukon gold placers in the interior of Alaska is that gathered by Harold B. Goodrich, of the United States Geological Survey, whose account appears as a portion of the official report of J. E. Spurr, who was director of the expedition which recently returned from the Yukon country.

According to this report, a Russian exploring back of Sitka early in the century found several pieces of rich quartz, but Baranoff, the governor and manager of the fur company, did not want any mining carried on, and ordered the finder of the ore to stop prospecting. Not until 1863 was any prospecting done in the interior. Following the Fraser river excitement, in 1863, and the opening of the Cassiar mines a little later, gold placers were discovered and worked on the Stikine river, yielding $10 per day to the man. In 1863 W. P. Blake began prospecting on that stream, and after going 50 miles up the river, came to the conclusion that "there is every reason to believe that the gold region of the interior extends along the mountains to the shores of the icy sea, and is thus connected with the gold regions of Asia."

Soon afterwards the finding of minute specks of gold by some of the Hudson Bay Company's men on the Yukon, in the vicinity of Fort Selkirk, was reported, but the metal was not in quantities sufficient to warrant a rush to the locality. In 1869 Ketchum and Labarge, members of the Western Union telegraph expedition, ascended the Yukon and found evidences of gold on the upper river. These were casual observations, however, and it was not until 1875 that systematic prospecting for the yellow stuff was begun by George Holt. He brought to the coast glowing accounts of coarse gold on the upper Lewis river. The Indians murdered him later on.

Other reports of the same kind started a rush for the interior by miners and prospectors. The only practicable routes lay over the passes in the Coast range of mountains. There were four of these passes, but Chilkoot pass, though excessively rough and difficult, was
nearly always preferred. From time immemorial the Indians of the coast had maintained a monopoly of trade with so-called Stick Indians of the interior. In bartering, the latter were permitted to come as far as Chilkoot pass, where they were met by the coast Indians. The position of the latter as intermediaries between the whites and the Indians of the interior was very profitable to them, and their monopoly delayed the development of the country for several years. In 1879, however, they for the first time permitted the whites to enter, and the removal of the embargo resulted in the discovery of gold-bearing ledges near Taku. The interior of Alaska, which previously had been terra incognita, was thus thrown open, and from this time dates the development of the gold-mining industry.

In 1881 four miners crossed the pass and prospected the Big Salmon river. They reported gold the whole length of that stream. In the following year a well-organised expedition attempted to prospect the Yukon from the other end. In June the party, consisting of 45 men under the leadership of Edward and Eef Schieffelin, bought a steamer and ascended the Yukon as far as Nukinkayet, where they wintered. They prospected many small creeks and rivers, and found some gravel bars that yielded $10 a day per man. In the prospect every pan showed gold. The conclusion drawn was that the country would never pay for mining operations on account of the severity of the winters and the shortness of the open season. This trip is interesting mainly because it resulted in the first report of gold in United States territory, all the former prospecting tours having been in British Possessions.

In the fall of 1883 some miners brought into Juneau $1000 of coarse gold, which they said came from the Yukon. This caused great excitement, and in the following spring there was a rush, over 300 men crossing the mountains. A couple of years later the rush was still continuing, and two men cleared up $85,000 by “rocking” on a bar about 100 miles from the mouth of Stewart river. The rocker is the same thing as the California cradle—a bottomless box set on rockers and divided into three compartments. The gravel is thrown into the upper compartment and by setting the rocker in motion, is sifted through a sheet-iron mesh into the lower compartment, in which a cloth catches the finer sand and gold and strains the water. The material thus collected is taken out and panned.

In this primitive way Stewart river was prospected for 300 miles from its mouth. The total gold produced by all the Yukon country in that year, 1886, was estimated at about $76,600. In the spring of 1886 Cassiar bar, 10 miles below the mouth of Big Salmon river, was discovered, and the yield was reported at $15 a day per man, the total output of the placer there being $30,000. In the late autumn of 1886 a miner named Franklin had discovered gold near the mouth of Shitando river, otherwise known as Forty-Mile creek. A stampede followed and the camp of Forty-Mile was founded.

In the latter part of 1887 Franklin gulch was struck, being named in honor of the discoverer of Forty-Mile. This locality has been a constant “payor” ever since. The character of the gold found there is
nuggety, masses of considerable size being common. Franklin gulch has the fame of having produced the two largest nuggets ever found in the Yukon region, worth $600 and $229 respectively. The discovery and working of this gulch mark an advance from the primitive bar working to the gulch diggings, in which sluice boxes are used and the current of a stream made to perform most of the work.

The first estimate of the production of the Yukon placers is in the report of the director of the mint for 1890. It states the quantity of gold obtained at $50,000, but the figure is much too small. The estimate for that year by the governor of Alaska was $275,000. The event of 1893 was the discovery of Miller's creek by O. C. Miller, a noted prospector in the Yukon country. This creek had been prospected before, but had been given up, because the surface gravel which did not bear gold was so deep. In the first year of actual work, however, one claim yielded $50,000. In the spring of 1893 many new claims were staked out in this locality, and 80 men were staking out $100,000. Since that time Miller's creek has been the heaviest producer of the Forty-Mile district, and until recently of the whole Yukon. Its entire length lies in British territory.

In the spring of 1893 the reported richness of placers in the interior caused a rush of miners, over 300 men being employed in the Forty-Mile district alone. In the summer of that year two Russian half-breeds, named Pitka and Sorresco, reported gold on Birch creek.

Eighty men went from Forty-Mile to the new district, which was soon found to be very rich. A town was built there called Circle City, from its proximity to the Arctic circle, and this settlement soon became the most important in the interior. In the meantime the Koyukuk river was being prospected, and $50,000 was taken from that stream. The total amount produced by the Yukon placers in 1894 was double that of the year before, the two camps of Forty-Mile and Birch creek getting out $400,000. With the gold from the placers was some silver.

In 1895 the output had doubled again. Eagle creek was opened up, showing the prettiest gold thus far obtained on the Yukon. A little prospecting was done on Porcupine creek, where a result of 10 cents to the pan was secured. The total output of the Yukon placers that year was $700,000, Birch creek being the foremost producer.

The latest excitement began during the latter part of August of last year, when it was reported at Forty-Mile that rich placers had been discovered on the waters of the Klondike river. Klondike is a miner’s corruption of the Indian name Thaidiuk, meaning water full of fish. The stream has long been a favorite fishing ground for the Indians; it enters the Yukon 45 miles below the mouth of Sixty-Mile, and 15 miles above old Fort Reliance. There was a great stampede to the new region, so that in the winter of 1896-97 Forty-Mile was almost deserted, and 50 men were on the Klondike. The most important parts of this district now are on Bonanza and Hunker creeks. On the former the first discovery was made, $1000 being taken out in a few days. Since that time 400 claims have been located, up to January of the present year only, and half as many on Hunker creek.
The expectation is that hydraulic mining will be employed on a large scale some day on the Yukon for mining the placers, but the method is costly and requires much capital. At present the miner's implements are of the simplest, consisting generally of a hand goldpan, spade, whip-saw and ax. The geological survey's estimate of the yield of the Yukon placers during 1896 is $1,400,000. The yield of 1897 is variously estimated as high as $10,000,000, of which some $5,000,000 to $4,000,000 has already been brought out of the country.

The purpose of Geologist Spurr's expedition was to find the source from which the gold of the Yukon placers was derived. This problem was absolutely solved by the discovery of a gigantic belt of auriferous rocks at least 800 miles long and from 50 to 100 miles in width. The
belt in question passes from British territory into American in the neighborhood of Forty-Mile creek. It has a northwesterly trend, and crosses the Yukon river near the mouth of Porcupine river, thence trending still northward for an unknown distance into an unexplored country. Specks of bright gold are seen occasionally on the surface of the rocks, but the bulk of the precious metal is disguised in the form of sulphides and in combination with iron pyrites. Immense bodies of ore are in sight, of unknown thickness.

The authorities of the geological survey believe that the Alaskan gold deposits are destined to rival in productiveness those of South Africa. Naturally, the miners have struck first for the gravel deposits, because they are on the surface and easily accessible. During ages past the streams have worn away the gold-bearing rocks, fetching down particles of the yellow metal. The latter, being heavy, have sunk to the bottom and have remained while the lighter particles floated away. Thus at length a natural auriferous concentrate was formed, and it is these deposits that the miners have been working. At a future day, provided with the proper machinery and the necessary capital, they will attack the virgin rocks from which the metal of the gravels is derived, and then the Yukon valley will become in all probability the greatest gold-producing region of the world.

A report of the gold discoveries and the character and extent of the new gold fields was made to the Canadian government this year by William Ogilvie, who has been in that region for several years as chief of the Canadian international boundary survey. In his report he says:

"Klondike is a mispronunciation of the Indian word 'Throntak,' or 'Thronduick,' which means 'plenty of fish.' The discovery of gold in branches of this stream, I believe, was due to the reports of Indians. A white man named J. A. Carmich, who worked with me in 1887, was the first to take advantage of the rumor, and located a claim in the first branch, which was named by the miners Bonanza creek. Carmich reached his claim in August. He had to cut some logs and get provisions to enable him to begin work on his claim. He returned with a few weeks' provisions for himself, wife and brother-in-law (Indians), in the last of August, and immediately set about working his claim. The gravel itself he had to carry in a box on his back from 30 to 100 feet. Notwithstanding this, three men working very irregularly washed out $14,000 in eight days, and Carmich asserts that had he proper facilities he could have done it in two days.

"A branch of the Bonanza named Eldorado has prospected magnificently, and another branch named Tilly creek has prospected well. There are about 170 claims staked in the main creek and the branches are good for as many more, aggregating about 350 good claims, which will require over a thousand men to work properly. A few miles further up, Bear creek enterst the Klondike, and it has been prospected and located on. About 12 miles above the mouth of Bear creek, Gold Bottom creek joins the Klondike, and on a branch of it named Hunker creek, very rich ground has been found. On Gold Bottom creek and
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branches there will probably be two or three hundred claims. The Indians have reached another claim much further up which they call Too Much Gold creek, on which the gold is so plentiful the miners say in joke, 'You have to mix gravel with it to sluice.' Up to date nothing definite has been heard from this creek.

"From all this we think we have here a district which will give 1000 claims of 400 feet in length each. Now 1000 such claims will require at least 3000 men to work them properly, and as wages for working in the mines are from $8 to $10 per day, we have every reason to assume that this particular territory will in a year or two contain 10,000 souls at least, for the news has gone out to the East, and an unprecedented influx is anticipated next spring.

"And this is not all, for a large creek called Indian creek joins the Yukon midway between Klondike and Stewart rivers, and all along this creek good pay dirt may be found. All that stood in the way of working heretofore has been the scarcity of provisions and the difficulty of getting them up there. Indian creek is quite a large stream, and it is probable it will yield 500 or 600 claims."

"Further south yet lie the ends of several branches of Stewart river, on which some prospecting has been done and good indications found, but the want of provisions prevented development. Now gold has been found in several of the streams joining Pelly river, and also along the Hootalinqua. In the line of these finds further south are the Cassiar gold fields in British Columbia, so the presumption is that we have in our territory along the easterly branches of the Yukon a gold-bearing belt of indefinite width and upward of 200 miles long, exclusive of the British Columbia part. Quarts of good quality is reported in the hills around Bonanza creek, but of this I will be able to speak more fully after my proposed survey.

"It is pretty certain from information I have got from prospectors that all or nearly all of the northerly branch of White river is on our side of the line, and copper is found on it. I have also seen a specimen of silver ore said to have been picked up in a creek flowing into Bennett lake, about 14 miles down it on the eastern side.

"When it was fairly established that Bonanza creek was rich in gold there was a rush from Forty-Mile. The town was almost deserted. Men who had been in a chronic state of drunkenness for weeks were pressed into boats as ballast and taken up to stake themselves a claim, and claims were staked by men for their friends who were not in the country at the time."
Chapter IV

General Conditions in the Gold Fields

Joseph Leda, the founder of Dawson City, in an interview published in the September number of McClure's Magazine, speaks as follows of conditions in that region and of mining methods:

"Working a claim can go on at all seasons of the year, and part of the process is best in winter, but prospecting is good only in summer, when the water is flowing and the ground loose. That is another reason why it is useless for new bands to go in now. They cannot do anything except work for others till spring. Then they can prospect with water flowing and the ground soft. If they strike it they can stake out their claim, clear a patch of trees, underbrush, and stones, and work the surface till winter sets in. We quit the 'pan' or 'hand' method then. The 'rocker' is almost never used except in 'sniping,' which is a light surface search on unclaimed land or on a claim that is not being worked for enough to pay expenses or to raise a 'grub-stake.' As soon as the water freezes so that it won't flow in on a man, we begin to dig to the bedrock, sometimes forty feet down. The ground is frozen, too, in winter, of course, but by 'burning' it, as we say, we can soften it enough to let pick and shovel in. All the dirt is piled on one side, and when spring opens again, releasing the water, we put up our sluices and wash it all summer or till we have enough. There has not been any quartz mining yet on the Yukon, but back of the placers, in the hills which have not been prospected, the original ledge must be holding good things for the capitalist.

"Life on the Klondike is pretty quiet. Most of the men there are hard workers; but the climate, with the long winter nights, forces us to be idle a great deal, and miners are miners, of course. And there is very little government. The point is, however, that such government as there is, is good. I like the Canadian officers, the Canadian laws, and the Canadians themselves. The police are strict and efficient. The captain was a fine man, but he had more than he could do this last season, when the rush for the Klondike came. That began in August a year ago, and as the rumor spread up and down the Yukon, the towns and mining camps were deserted by everybody who could get away. Men left the women to come on after them, and hurried off to the Klondike to lay out claims. Circle City was cleaned out. There wasn't room enough on the steamer to take all who wanted to get away to the new diggings, and many a good-paying claim was abandoned for the still better ones on the creeks that make the Klondike. The captain of the police had only a few men without horses to detail around over the claims, and, besides his regular duties, he had
to act as register of claims and settle disputes that were brought to
him. And there were a good many of these. The need of civil officers
is very great, especially of a surveyor.

"The miners on the Yukon are shrewd, experienced men, and
sometimes they are tricky. I do not like the kind of government they
set up for themselves, except in the very first stages. It is all by
miners' meetings. They begin by being fair, but after a while cliques
are formed, which run things to suit the men who are in them, or,
which is just as bad, they turn the sessions into fun. Nobody can get
justice from a miners' meeting when women are on one side.

"When Bonanza Creek was opened up some of the claims got
mixed up in the rush, and the measurements were all wrong. Notices
were posted on the store doors and on the houses, calling a miners'
meeting to settle the boundaries of claims. As was usual in such
meetings, a committee was selected to mark off the claims all the way
up the creek with a fifty-foot rope. Somehow a rope only forty feet
long was sneaked in, and that made all the claims short. The space
that was left over was grabbed by the fellows who were in the game.

"Sometimes in winter, when there is plenty of time, a dispute that
is left to the miners' meeting grows into a regular trial, with lawyers
(there are several among the miners) engaged for a fee, a committee
in place of the judge, and a regular jury. Witnesses are examined,
the lawyers make speeches, and the trial lasts till nobody who listens
to it all, knows what to think. I never liked it. The best way, ac-
cording to my experience, for two men who can't agree, to have a
settlement is to choose their own committee, each side picking a rep-
resentative and both selecting a third. Then the committee is fair,
and generally the decision is satisfactory.

"Most of the time when the men cannot work is spent in gambling.
The saloons are kept up in style, with mirrors, decorations, and fine,
polished, hardwood bars. No cheating is allowed, and none is tried.
The saloon-keepers won't have it in their places. Nobody goes armed,
for it is no use. Some of the men are the kind that would take natu-
really to shooting, but they don't try it on the Yukon. The only case
that I know of was when James Cronister shot Washburn, and that
didn't amount to anything, because Washburn was a bad man. There
was a jury trial, but the verdict was that Cronister was justi-
fied.

"The only society or organization for any purpose besides business
in there is the Yukon Pioneers. I don't belong to that, so I don't know
much about it. It is something like the California Pioneers of '49.
They have a gold badge in the shape of a triangle with Y. P. on it and
the date '39. To be a member you must have come into the country
before 1889.

"We need a great many things besides gold. We have no coin.
Gold dust and nuggets pass current by weight at about fifteen dollars
and fifty cents to the ounce. It is pretty rough reckoning, as, for in-
stance, when a man brings in a nugget mixed with quartz. Then we
take it altogether, gravel and gold, for pure gold, and make it up on
the goods. Carpenters, blacksmiths—all the trades—are wanted, and men who can work at them can make much more than the average miner. They can't make what a lucky miner can, but if they are enterprising they can make a good stake. Wages are $15 a day, but a man who works for himself can make much more than that. I have gone into the logging business with a mill at Dawson. The spruce trees are thirty inches through, and after rafting them down from Ogilvie and Forty Mile, you get $120 a thousand foot for them sawed into boards. Then there is butchering for the man who will drive sheep over in the summer. It has been done, and is to be done again. But it is useless for me to go on telling all the occupations that would pay high profits. The future of the Northwest country is not so long as that of a country that can look forward to other industries than mining and the business that depends on mining, but it is longer than the lifetime of any of us. The surface has been pricked in a few places, but I do not know that the best has been found, and I am quite sure no one has any idea of the tremendous extent of the placer diggings, to say nothing of the quartz that is sure to follow. Then, all the other metals, silver and copper and iron, have been turned up, while coal is plentiful. I believe thoroughly in the country. All I have doubt about is the character of some of the men who are rushing in to get rich by just picking up the gold."

The conditions in the mines about Dawson in July, 1897, are thus described by Charles Haines, in a letter from that city:

"The rich diggings have been comparatively idle during the summer, although the output from Eldorado and Bonanza creeks was enormous, and there is plenty of gold in sight. There is every prospect of an immense output of gold from the district next spring. The total output this season is, as near as I can judge, about $7,000,000, but very little ground has been worked, and the dumps will, like some of the tailings of old California placers, pan out thousands of dollars when worked with improved machinery. The placers are the most puzzling and deceiving I have ever seen. Imagine a man working on "good color" and finding the ground worth only a few dollars per day, and then turning to a waste of mud and moss, with no surface indications, and unearthing a bonanza. That is the situation here, and all over Alaska.

"The man who comes here to mine does so at the expense of health and happiness, and it is with him a question of making a fortune quickly or taking chances with death.

"About me are scores of men who can weigh their gold by the bucketful, and who value their claims at millions. Four hundred valuable diggings along the creeks, and every diggings is a fabulous mine of gold, yet there are weary men who have gone and are returning to Dawson after searching the great country hereabout, and never a nugget do they show for their toll, having made a long tramp over broken ground; and into a country whose natural disadvantages are exceeded by no other place on earth."
"This Alaska-Northwest Territory gold field is an odd prize-drawing proposition that I can liken to nothing that admits of a better comparison than a lottery. A number of spots are selected on the creeks and the rivers, and for one year the miner labors. The year closes, the water runs, and the season's output barely pays expenses. Not two miles away from the unfortunate one works a man who has taken from an unyielding bit of earth a sackful of gold. The lucky one did not strike the pocket because of his ability as a miner; chance favored him, and that was all. In short, the miner guesses at it and locates any and everywhere. In 10 cases out of 20 he misses it, and has to wait another year for a new trial.

"Dawson is merely a collection of log huts, saloons and a mass of tents, about 500 in number. When the long nights come, and the glass goes down to 60 degrees below zero, there will be intense suffering here, and I shudder to think of the results.

"Provisions are going to be very scarce, and there is little reason to doubt that the entire town will have to go on short rations during the winter, and that scurvy will be rampant.

"The gold that will go down the river for shipment this year will amount to about $2,000,000. There is a lot of gold that will remain in camp for it is used as an equivalent of money, and is legal tender at $17 per ounce. Of the 2000 or 4000 inhabitants, only a couple of hundred at the most have made big strikes. There is plenty of work at from $15 to $20 per day, and many men have paid $2.50 per day or less for living, and saved the balance.

"Reports of other strikes are constantly received here, and many are authentic, so far as Stewart and Pelly rivers are concerned, but nothing like so rich as the Klondike has been reported. Quite a number of people are preparing to leave here for Juneau in case the steamers do not get through with provisions, and the outlook for a good grub supply is not encouraging.

"In conclusion, the Alaska and Northwest Territory gold fields will be developed slowly. Ten thousand men may come here, but they will be lost in the vast country when they spread out to prospect. Not more than 500 of them will strike a mine. When they do strike pay gravel, their fortune is made. In years to come, when at the sacrifice of human life and energy, the treasures of this great land are located, the wealth of the Northwest will be something beyond comprehension."

Milton Misamore, whose trip down the Yukon is described elsewhere in this volume, thus speaks of the state of affairs at Dawson upon his arrival in June, 1897:

"When we reached here we found that the reported mines were not fakes. These are probably the richest placer diggings in the world. They claim that as much as $300 has been taken out of one pan of gravel. All the men working for wages last winter in the mines received $1.50 an hour, and are now receiving $1.15 a day, with no likelihood of wages being reduced. Carpenters employed here receive the same sum, and no wages are less than $10 a day. There are two
stores, with a considerable stock of goods each. There is another immense store in course of construction. There is plenty of all kinds of provisions here now, with the exception of bacon and dried fruit. All bacon brought in over the trail brings 50 cents a pound very readily. Flour is cheap, selling at $3 a barrel. Dry granulated sugar brings 50 cents, brown sugar 25 cents, dried apples 25 cents, beans 15 cents, baking powder 1.50 a pound, butter 1.50 a roll. Hair-cutting costs $1.00 and shaving 50 cents; common boarding house meals are $1.00, whisky 50 cents a drink, cigars 50 cents. There are more saloons than any other kinds of business. There is one dance house with four or five girls, and more coming. There are a dozen or more faro tables running, which recognize no other limit than the roof, which is 16 feet, and some of the high rollers nearly play the limit. There are numerous businesses represented here, such as doctors, watchmakers, brokers, laundry, tanner, blacksmiths, etc. Nearly all business is being done in tents, framed with timbers. There is a small mill here, but the output is nothing compared with the demand for lumber. Lumber is selling at $1.50 a thousand and logs $45 a thousand, with such a scarcity of the latter that the mill cannot keep running all the time.

"The city is located on the Yukon, one-half mile from the mouth of the Klondike. The Klondike is about the size of the Clackamas river, and the Yukon is fully a mile wide here. The mines are wonderfully rich. On Eldorado creek they took from a prospect hole 6 by 7 feet $8100. No. 33 got from four buckets of gravel $3250, this quantity being about 48 pans, making it about $80 to the pan. No. 36 took out of their sluice-box 100 pounds of gold in six hours, two men only being employed in the shoveling. Many others are said to be doing as well. There are three mines on the Eldorado creek, about 20 miles from Dawson city. Eldorado is a branch that empties into the Bonanza, which latter empties into the Klondike. All the mines are on flat, boggy ground, and cannot be worked successfully while the weather is warm, as the streams are high and much drainage water runs into them. There are few summer mines here now, and they are doing little, as there is not enough water to run their sluices now. The nearest mines to this place are five or six miles distant, and no one seems to know how many claims have been staked out. Every bit of ground for 50 or 60 miles on the Klondike is claimed, most of which will be worked this winter. It is the general opinion here that there will be plenty of work for everybody, and some are of the opinion that some of the mines will pay as high as $20 before the winter is over.

"It is necessary that wages should be high in some of them, as food is high. On Eldorado creek at the nearest point flour is worth $30 a sack, brown sugar 60 cents, beans 60 cents, etc. The rates for packing from Dawson City are about $1.25 a hundred for each mile of distance. The mouth of Eldorado creek is 10 miles distant, making freight $35 to that point, and to the end of the trail $50, which is as far as goods can be packed now. At present horses are used some, a good horse being capable of carrying 350 pounds. In winter dogs and
sledges are used. It will be at least two and one-half months before there is much demand for labor, and it is no time to prospect, as the large rivers are all high.

“It has been very warm ever since I struck the Yukon, and may get much warmer yet during the coming month. Just as soon as the sun goes down it begins to freeze, forming quite a scum of ice over pools during the time that the sun is below the horizon. We have not had any night for the last month, nor won’t have for the same time to come. The mosquitoes are very bad, although there are less of them here in town than on the flats. It seems strange that where the sun shines hot so continuously the ground should remain frozen, but it is the case. Here in Dawson the ground is frozen solidly to within six inches of the surface.”

The conditions of life along the Yukon are thus described by W. W. Caldwell, of Rochester, Mo., who came out of the country this year with a large quantity of gold dust after two years of hard experience. He owns an interest in three valuable claims on the Klondike. He says:

“I remember the time in Dawson City when it was a common sight to see bottles, tin cans, buckets and every available vessel, wood or metal, standing about on shelves, tables, in corners, everywhere, in open sight, full of gold, thousands upon thousands of dollars’ worth in every shack and store. Nobody ever thought of losing any of it or having any of it stolen, for there is an unwritten miner’s law that is more potent than any on your statutes. Next spring, however, when the big crowd gets in there, they’ll not leave it lie around so loosely, though it would be folly for any crook to attempt to get away with anybody’s gold, for he could never get out of the country with it, and of course when caught his trial and execution would be short and certain.

“I can’t imagine what all the people who intend to go up next year intend to do, for all the claims on the Klondike, Eldorado and Bonanza are taken, and unless they work for others or buy claims I don’t see anything for them to do, except to strike out in new directions and prospect for other gold beds. If many will do this, and there will be nothing else for them to do, it will tend to develop many new fields, and the one who will be nearest the new discoveries will be the fortunate one for the time being, and so on it will go for years, many making failures of it and a few striking it rich. I am afraid there are too many men going in there physically unqualified for the work, more than for the severity of the winter. These will drop out by the hundreds, either dying there or if able will get back to civilization. My advice would be to those having the Klondike fever to hold a sort of self-communion, and find out if they are willing to undergo the solitude, the darkness, coarse food and hard manual work attending a winter’s diggings on a claim. It means not only grit, but patience of the heroic order, for the odds are always against you through it all. In summer, after locating your claim, you have to figure on the amount
of work you are going to do and number of men you propose to employ, and then calculate on the number of cords of wood you will need during the five months' digging. All this wood must be cut in the summer and taken to your claim, handy for ready use. In other words, it is hard work from one end of the year to the other, and at the end you may have hardly enough to pay for your grub.

"The climate is not so severe as people imagine. It is a dry, clear, bracing, healthy cold that gives one a ravenous appetite and fits a man to do the work of two ordinary men in a more temperate climate. Ten hours is the regulation day's work, and three square meals, and if a man is anyways regular and cooks his food the danger from scurvy is small. There have been but few cases of scurvy, and these among men who were too lazy to cook their food and were generally careless about themselves.

"During the winter months there are only from two to four hours of twilight, it being light enough to see, but not to read by. Candles are used all the time, and sometimes have to be used in the middle of the day to eat your dinner by. The snowfall is not heavy—not near as heavy as in Montana—nor are there many storms. The cold, however, is bitter, and the mercury goes down pretty low.

"All provisions have to be cached on a high platform built on posts, some eight or ten feet from the ground, in order to protect them from dogs, wolves and bears. In the morning the day's provisions are taken out by means of a ladder, and the bacon or meat and other stuff placed near the fire, where it thaws."

Milton Misamore, of Portland, who has just returned from the Yukon country, thus speaks of conditions as they exist there:

"A man to have even a reasonably complete outfit must not figure on less than 100 pounds of catables for each month of his contemplated stay. Now, you would say that 1,000 pounds of provisions would be a year's supply; yet it would not be enough if you expected to stay a year, because if you were to stay so long, you could not get away for a number of months longer. Thus, if you leave here next spring and remain in the Alaskan interior until the following winter, you could not get away from there then until the following spring, by which time your supply of provisions would be exhausted, and you would have nothing to get out with unless you buy more there. So 1,000 pounds is less than you need, if you expect to stay over a winter, and more than you need if you expect to return the same season. Besides this weight of food alone you must figure upon several hundred pounds of tools and other supplies, and in this connection I want to speak of weapons. This little pocket knife is all the weapon I have carried or had any use for. I have been reading an interview with a youth who lately came out of the Yukon country, and he is quoted as saying that a man can shoot all the game he wants to there. Now, I have traveled over that region about as much as a man could in the time I had, and the only game I saw in the Yukon country was a solitary porcupine. You can't take time to hunt game if you go to hunt gold, and
you would better pack an extra pick or shovel than a shooting iron. Nothing seems more absurd to the old prospectors in those than the arrival of tenderfeet loaded down with bolts full of pistols.

"Now, I have endeavored to make the most careful inquiries of others who have made the trip, and, as a result of this, together with what I personally observed, I am led to the conservative estimate of an average loss of 25 per cent. of the outfits taken in. And in that country those who have most must part with at least a little to those who have most. For example, a party of six that went down the rapid
at the same time that I did lost their boat and entire outfit, by bumping against a rock. With my limited outfit, I could look after but two of them, which I was glad to do, as far as Dawson, and even then the latch string was out until they were able to do for themselves. Others who came along helped the rest of the party. I understand the practice is somewhat different with some of those who have gone in since the big rush began, but a man's meanness in that country does not easily escape him. The reason he is the sooner he is likely to be sorry for it. By the way, now, you know, or, that is, since the stores closed up there, the miners' committee looks after every pound of food that enters the region. They see that the man who brings it is left enough to last him through, but the rest is taken from him (though he is paid the best price for it) and put into the common stock. The same will be done with such provisions as get up the river on the steamers. The government by miners is better in that region, I believe, than that of the provincial police. The latter may arrest a man for stealing another's grub, which is equivalent to murder in starvation times, and the police shut him in the guard house, where he is well fed. The committee would do better than that."

"Don't think of taking furs. You don't need them. They are heavy and otherwise cumbersome, and one sweats under them as under rubber garments. I have talked with scores of Yukoners, many of whom had spent many winters in the country, and all agree that one should dress so as to allow of as much freedom of movement as possible, compatible with warmth. These men wear two suits of the heaviest underwear, and over this overalls of heavy drilling, and a cape or hooded jumper of the same material, called a 'parka.' A woolen or other warm cap is worn on the head, and over this in the coldest weather the hood of the parka is drawn. The close-woven texture of the drilling shields the wind from the figure, and the underclothing keeps the body warm. The drilling is cheap, and wears well. No coat is worn with this, the working dress of the miner. No leather or rubber footwear is worn. It cramps the feet and it is extremely essential that the extremities have the greatest freedom of circulation. Therefore, Yukoners universally wear winter moccasins, called 'muck-lucks,' made generally by the Indians. They are worn much too large for the feet, so as to permit the wearing of at least two pairs of heavy socks and a piece of woolen cloth over the socks. For summer traveling over the wet, swampy country, where an ordinary pair of boots would be soaked through in no time, they wear 'water muck-lucks.' For working in the sluices they wear, when they can get them, high-grade rubber boots, with rubber soles. I took a pair of them up there, wore them nearly out, and then sold them for $2 more than they cost me.

"The climate is not especially trying, if one takes care of one's self, except in such places as Dawson City, which is built right on the clear ice of a frozen swamp. There is no drainage in such a place, and the refuse of the camps stays right in the moss and mud of the surface.
Consequently there is much typhoid. I know no better remedy for it or rather preventative, than to swallow a good dose of quinine and whisky upon the first symptoms of its presence in one's self."

In regard to his success in packing in his outfit of 900 pounds alone, while others failed, he says:

"It is not that I am of more than average strength, or endurance. I was simply careful not to overtax myself. Why, I used to see great, stout, husky fellows passing me with their 100 to 175 pounds on their backs and smiling at my little pack of 60 pounds, which I dropped at the end of a few hundred yards; then I went back for more. Some of them would walk three or four miles or more with those heavy weights and only let go when they could carry no longer. Then the long walk back would tire them almost as much. My experience in packing has taught me the value of stopping before exhaustion. Thus, by carrying a light weight a short distance, one is able to recover or rest on the short return walk, and I say that, if one will work one's entire outfit a short distance each day, without allowing himself to overdo, he will make much faster progress in the long run than a far stronger man who strives to pack the heaviest weight the greatest distance, and so scatters his outfit all along the trail, where he cannot look after it. I saw men, great, strong fellows, who, unlike me, had all their lives been used to hard outdoor work, yet when they had got as far as the foot of the pass they would sit down and weep with discouragement, having so overtaxed their strength on the easy stretches they had none left for the hardest part of the journey. I tell you, there is nothing in it when a man works so hard one day that he must lay off four to recuperate."

James McMahon, of Tacoma, thus speaks of his experience in the Klondike last winter, on Adams creek:

"Four men of us worked nearly four months during the winter taking gravel from the creek bed. We made an excavation seventy-two feet long, sixty-one feet wide and sixteen feet deep, reaching bedrock. When the creek thawed we washed the gravel in sluice boxes in three or four weeks. My share of the clean-up was $65,000. In the winter we picked up nuggets on the dump ranging in value from 50 cents to $500, amounting to $1,600. The gold-bearing gravel lies on the creek bottom, and is reached by sinking a hole through the ice in the river, which freezes solid. Then fires are built to thaw the earth and drift work done to reach the richest gravel. For nine days we were unable to leave our cabin because of the cold. The thermometer was 15 degrees below zero. It is no fun living in such a country. I have a claim on Hunker creek, twenty-five miles from where the stream empties into the Klondike. I have two men working there, and pay them $15 a day. The gravel yields from 20 cents to $2.00 to the pan. I have a claim on Indian creek, that yields from 80 cents to $6.00 to the pan."

From the reports of returning miners the condition of Dawson City early the past summer is summarized as follows:
Dawson is situated on the north side of the junction of the Klondike and Yukon rivers, right at the angle. The Yukon is 800 yards wide at this point and the Klondike about the same. Across the Klondike river there is a little Indian village called Louse Town, which is known on the map as Klondike. The Indians are of the tribe of Gena de Pou, or Foolish people.

There are about seventy-five women at Dawson, some wives of miners, some in the dance hall kept by Harry Ash. The women get a percentage of the receipts for dancing with the miners. Frequently when the miners feel flush, they give the women nuggets.

One of the bars there cost $7.50 in San Francisco. It belongs to Leach & Ashby. Joseph Cooper has a bar, bought in San Francisco last spring which cost about the same, $7.50. It is a fine thing, with mirrors and everything.

There are ten saloons and three restaurants. One restaurant belongs to a barber, one to an Italian and one to an iron monger. They charge $1.50 for a meal, which consists of bacon, beans, bread, coffee, a piece of cheese and dried fruit. The restaurants are well patronised. They sell everything they can rake or scrape.

The currency there is mostly gold dust and paying is done by weight. Each establishment has its scales. The man who makes a purchase throws his sack of dust over the counter and the keeper of the store weighs it out. The basis is $17 to one ounce.

Two of the transportation companies keep general stores. This summer flour was $1.25 a hundred pounds; sugar 20 to 25 cents—20 cents for brown and 25 cents for granulated; rice is 20 cents a pound, oatmeal 25 cents; condensed milk is 60 cents a can, butter is $1.50 a roll, beans are 12½ cents, salt is 15 cents, dried fruit 25 to 30 cents; apricots are 35 cents a pound; tobacco sells for $1.50 a pound—chewing and fancy brands for smoking; plug cut is $2.00 a pound, cigars wholesale there for $9.00 per 1000. Blankets run all the way—for a good blanket which a white man would use—from $18.00 to $20.00 a pair. Hudson Bay blankets sell for $30.00, which would be got for about $4.00 in England. A good linen shirt will cost $5.00, a suit of underwear about $10.00, canvas overalls from $2.00 to $3.50, boots from $10.00 to $12.00. The common stogey shoes are worth $5.00 to $7.50. A suit of clothes brings $30.00 to $50.00. There are no tailors there yet. These clothes are custom made winter clothes, the same as they keep in the cities. They are largely remnants of clothing dealers' old stock. There are a number of sewing machines in the country.

There are baths in Dawson. The bath houses are made out of logs. There is an arch built of rock, and this arch is fired until the rock is hot; then the fire is put out and a barrel of cold water is thrown on the rock until the house is filled full of steam. You can then get up on a shelf or lie on the floor and get any temperature you want. It is a good sweat bath, and is all right too, for cleaning. There are a number of bath tubs, also.
There is a school at Circle City and one is being built in Dawson this year. The teacher in Circle City was an American from Nebraska.

At Dawson there will be a Catholic church built this summer. There will probably be also an English church and a Presbyterian church, too. Bishop Rowe, of Boston, has the latter in charge.

There is a theatrical company at Circle City. The leading actor and manager of it is George Snow. His wife is the leading lady. They gave all sort of plays—"Uncle Tom's Cabin" one night, "Old Kentucky" the next, "Camille" the next, the "Newsboy" the next. It is a repertoire company. They will have a theater in Dawson this winter.

Several lawyers are there, and two or three physicians.

The summer opens about May 15. The ice goes down the river, and by June 1 no snow is seen anywhere. The summer lasts till September. The days lengthen and shorten there at the rate of seven minutes a day. The longest day there is June 22. On that day they have the sun for about 20 hours—a clear, warm sun. After the winter sets in on the first of September, the cold comes gradually. In the months of September and October the climate is fine. The month of October there is about the same as November here; after that everything is closed up. The Yukon river usually closes between the 1st and 10th of November. It is not navigable after that time until the next spring. The ice in the rivers freezes five and a half feet thick, according to Mr. Ogilvie, who cut holes for measurement once a month during the winter. From that time until June 15 of the next summer the life the men and women lead is about the same as in any mining camp. In the winter time the nights are spent in playing cards. Among the gamblers the great game is poker. Among the miners the favorites are whist, pedro, cribbage and checkers.

Some claims are worked simply by building long sluices along the creek and bringing water to them from above by means of a ditch, the dirt being shoveled into the sluice from the sides. Others have the dirt shoveled down to the sluices from the benches above. These claims can only be worked in the summer time while the water is running. The claims upon which work is done in the winter time are those on the flats or boggy marshes, where a shaft has to be sunk to get at the rich dirt near the bedrock. The ground is thawed by means of fires kept burning in the shaft, and the dirt is sent up to the surface in buckets, where it is piled up on the dump. In the summer time this dirt is run through a sluice and the gold taken out of it. Thus it will be seen that actual washing of gold from the dirt can be done only for a short time each year, and that if a man puts in his time in the winter piling up the pay dirt near his shaft for washing the next summer, he may not be able to make a clean up of it all the next summer in time to get out of the country that year, being thus compelled to remain another winter. This is also true of one who has a claim requiring summer working, for when the mining season is over it is too late to go down the river or over the trail to the coast.
Chapter V

Routes to the Yukon Mines

Of equal importance to the selection of a sufficient and proper outfit is the question of what route shall be taken to reach the interior from the coast, and this should be decided before the outfit is purchased, since the route to be followed determines in several important particulars the nature of the equipment necessary.

In the first place it may be said that Dawson City, the commercial point of the Klondike region, may be reached from Portland by an all-water route by the way of the mouth of the Yukon river, or by water to some point on the southern coast of Alaska, and thence overland on foot to the headwaters of the Yukon and by boat down the river, or by still longer overland trails. Each of these routes will be considered separately, though it is proper to qualify in advance anything that may be said, by the advice to leave the decision of this matter until spring, since new developments and added facilities provided before that time may so radically change the present conditions in regard to some of the routes as materially to affect the decision. This is a question that might well be determined after arriving in Portland, but before purchasing an outfit, taking advantage of the very latest information on the subject, since there are railroad and other projects on foot that have not yet developed.

ST. MICHAELS AND YUKON ROUTE.

Under present conditions, and until a railroad is built from some point on the coast to connect with steamers on the upper waters of the Yukon, the easiest route is by ocean steamer to St. Michaels, near the mouth of the Yukon, and thence by river steamer up the stream to Dawson. The distances by this route are as follows:

- Portland to St. Michaels.................. 8350 miles
- St. Michaels to Circle City.............. 500 miles
- Circle City to Forty-Mile................ 850 miles
- Forty-Mile to Dawson.................... 50 miles

The steamer route to St. Michaels cuts across the northeast corner of the Pacific, as shown on the accompanying map, passes through the Aleutian archipelago at Dutch Harbor, Unalaska, and crosses Bering sea to St. Michaels, which is located on an island 50 miles north of the Yukon's mouth. Because of the shallowness of the water ocean steamers cannot enter the Yukon, and passengers and freight are transferred to light draft river steamers at St. Michaels. The chief objection to this route is the shortness of the navigation season on the Yukon, being only about three months each year. During the other
nine months one can get in and out only by one of the overland routes. Ice breaks up in the Yukon between May 15 and the first of June, but the mouth of the river is often blocked with ice for some time after the river above is navigable. It is customary for such steamers as are near the mouth of the river to winter at a point about 76 miles up the stream. When released from the ice they start up the river, while those frozen in at the head of navigation start down stream. By the time the latter reach the mouth of the river the ice is gone, and they can get to St. Michaels, where they find the first lot of passengers that have arrived from the south that season. By this time it is the first of June, or later. The last boats to go clear up the river must leave St. Michaels not much later than the first of September, as the river generally freezes between the tenth and twentieth of the month. This leaves only three months of actual travel in or out.

At present both the Alaska Commercial Company and the North American Trading and Transportation Company have steamers on the river, and each has trading posts at St. Michaels and at various points in the interior. The present year these boats have been unable to carry in the supplies required for the greatly increased population of the mining regions, and upon this fact is based the prediction of shortness of provisions and great hardship in the mining region before spring. Nothing but an enormous increase in the number of river boats will give the facilities that will be demanded by travel and freight seeking this route in 1898. It is very doubtful if the provision that will be made will be at all adequate to the demand, and this may result in a very high rate charged for travel by this route. There are great many projects on foot to get new steamers upon the Yukon. Some of them contemplate the sending of material already prepared, to be put together on the river bank, while others plan to take boats already built, either towed in the water or resting on the decks of ocean vessels. What of these many enterprises will succeed and what will fail it is impossible to predict, but it may safely be said that in one way or another there will be a large addition to the Yukon river fleet in 1898, yet probably not sufficient to the demands of travel.

Steamers navigating the Yukon must cut their own fuel from the timber growing along the river. The companies now having boats there have wood cut and piled up on the bank, but new companies would have to cut their own as they went along. The river is navigable for ordinary river steamers without much difficulty, except for 100 miles below the mouth of the Porcupine, where it is quite shallow, owing to sediment deposited from the latter river. Here at times the channel is only four feet in depth. The river could probably be navigated to the Lewis and up that stream as far as the White Horse rapids, or by the Hootalinqua river to Lake Teslin, as is contemplated in the Stickeen route. Pelly, Stewart, Tahkeena, Porcupine, Tanana, Koyukuk, Anvik, White, Birch, Salmon and others are also navigable, making in all several thousand miles of navigable water on the Yukon.
Near the Summit of White Pass.

and its branches, all of which may be rendered available by the development of the country within a very few years.

CHILCOOT AND WHITE PASSES.

It is impossible to separate these two routes across the Coast mountains in considering the entrance of the Yukon country by way of the upper lakes. This is the route taken by the thousands who rushed to the gold fields in the late summer of 1897. Both start from the head of Dyce (Tuya, or Tya, as it is variously spelled), or Chilcoot, inlet, a
branch of Lynn canal, some 100 miles north of Juneau. The head of
the inlet is forked, the Chilcoot river flowing into the west, or Dyce,
fork, and the Skagway river flowing into the east, or Skagway, fork.
From the former the Chilcoot pass leads across the mountains 27 miles
to Lake Linderman, and from the latter the White pass leads also
across the summit about 40 miles, either to Lake Bennett or Lake
Tagish.

The respective merits of these two passes have been much dis-
pputed the past summer, owing to the experiences of those who tried to
go over them. Heretofore the Chilcoot pass has been the route used,
Indians being employed to pack goods over its steep summit, the price
until the present season for that service being about 15 cents per
pound. An Indian man will carry at one time from 90 to 120 pounds,
a squaw from 50 to 75 pounds, a boy of 14 years from 40 to 75 pounds,
and a dog about 40 pounds. The load is lashed upon the Indian's back,
so that the straps go over his shoulders, while a band is passed under
the pack and over the man's head, coming across his forehead. With
such a load they will travel the rugged trail, wading swift streams,
clambering over rough boulders and scaling icy steeps, where an inex-
perienced white man could not go with a quarter of the weight. Fred-
erick Thurston thus describes the trip over this pass in April, 1899:

"Every two or three hundred yards the entire party stopped to
rest. At one o'clock we reached the forks of the river, seven miles
from our starting point, and the Indians said we would camp for the
night. They were completely exhausted by floundering through the
soft snow under their heavy packs. Half of the next day was spent in
wading through snow from three to six feet deep, to the place known
as Sheep camp, only five miles. Our camp for the second night was at
the foot of the dreaded pass and only 12 miles from the coast. In the
early morning we started. Looking for a couple of miles up a large
gorge, flanked by precipitous snow-covered mountains, we could see
at the summit, thousands of feet above, the little notch known as
Chilcoot pass. The Indians, struggling under their heavy loads,
stopped for breath every few minutes. We four white men had the
exasperating task of dragging along two empty sleds. At eleven
o'clock we had reached the foot of the ascent. From here to the sum-
mit is only half a mile, but the angle of the slope is about 45 degrees.
As soon as the Indians learned that the crust of the snow was hard
and unyielding, they divided the packs, leaving nearly half their loads
at the foot of the ascent for a second trip. One of the men, producing
a strong plaited line of rawhide, about 100 feet long, passed it under
every man's belt, lashing the nine of us together, 10 feet apart. The
man at the head of the line carried a hatchet, and as we advanced, cut
footholds in the ice and hard-packed snow. The slope being too steep
for direct ascent, we resorted to 'navigging,' and our progress was
painfully slow, as we had to cut every step. There was no opportunity
to sit down or rest, and we kept pegging away until at last we stood on
the crest of snow and ice that divides the valley of the Yukon from the
sea, three hours after lashing ourselves together. On the summit we threw ourselves down upon the snow and remained motionless for half an hour. Then the Indians went back after the remainder of the packs, returning in two hours.

"The use of the two sleds that had been brought along empty was now apparent, and on them was loaded and securely strapped down the thousand pounds of stuff the Indians had carried to the summit. Down grade we started on the northern side of the range. For the first half mile down the glassy slope it was a wild ride. The sleds, each with two men in addition to its load of 500 pounds, flew down grade with the speed of an express train. It was well they were of oak and the runners shed with steel, for sometimes they would clear the snow for 50 feet at a bound. The sled ahead of the one I was on struck an uneven place and went over. Its lashings broke, and for a few brief seconds the air was filled with rolls of blankets, sides of bacon, mining tools and earnest, soulful profanity. Our sled, coming on to a gentler slope, and softer snow, was eventually stopped without disaster. In half an hour the other sled was reloaded and joined us. We were now out of the gorge on a sort of bench, or flat, covered with soft snow. We got into the harness and, pushing and pulling, struggled on in the hope of reaching Lake Lindenman before night. When night came the air was full of flying snow, and we were so weakened by hunger that we decided to abandon the sleds until the next day. Taking each a roll of blankets we struck down a ravine which we correctly judged was a tributary of Lake Lindenman."

That night they camped in the snow, with nothing to eat, went back for their sleds the next day and were all day getting them down to the camping place, where they had their first meal for 37 hours. The next day, by great exertion, they dragged both sleds to the bank of Lake Lindenman, the head of the Yukon system of lakes and rivers. On the frozen surface of the lakes they made good progress, covering its entire length and the short portage to Lake Bennett, 26 miles, in one day. The next day, rigging up sails from tent flies, they propelled their sleds by wind 36 miles across Lake Bennett, and then dragged them along the bank of the small stream connecting it with Lake Nared. Two days of hard work took them over Lake Tagish and to the shore of Lake Marsh, where, the snow becoming soft and the ice beginning to break up, they went into camp and built a boat from lumber whip-sawed out of the surrounding trees, in which they made the remainder of the journey down the lakes and river to Forty-Mile, their destination.

In considering the above account of crossing the Chilkoot pass, it must not be forgotten that the journey was made at the most favorable time of the year. The crossing in summer, when the rains produce deep mud, the roughness of the trail is exposed by disappearance of the snow and sleds cannot be used for drawing the supplies, is a far more difficult task. It is this which rendered it so difficult for the thousands who rushed to Dyea to get over the summit with their tons of
Much more packing was necessary, white men unused to the work could pack but little, and there were not enough Indians to do the work. The Indians began by charging 17 cents a pound and ended by putting the price up to 40 cents. Those who had but little stuff and could pay the price were taken over. The others had to make such shift as they could for themselves. Many succeeded in getting over with a portion only, and still others did not get over at all. In the spring, after the fierce storms have ceased, those remaining and the thousands who will join them will be able to get over much more easily and be at the lakes by the time the ice breaks up, so that they can go down the river. There is a project on foot to build a tramway at the summit of the pass, to haul goods up the steepest place, and if this is done, it will simplify matters materially.

As to the White pass, the experience there was disastrous. Being about a thousand feet lower than the Chilkoot, it was at once supposed that it was easier to cross, notwithstanding the experienced Indian packers never use it. Even if it were not, the crowding of the Chilkoot pass and the exactions of the Indian packers were enough to send the crowd to Skagway, where, also, freight could be much more easily and safely landed from the steamer. It was soon found that the Skagway trail led across marshes, which were soon rendered impassable by incessant rain and constant ice, up gorges so strewn with rough boulders that a horse could scarcely be led over them, along steep precipices, where a misstep would send horse and pack to destruction, and up ascents almost as steep as that of the Chilkoot summit. No less than 5,000 persons, unorganised and each man working for himself, with more than a thousand pack animals, crowded the trail and for a long time could make no progress. The marsh was corduroyed, but the logs could not be kept in place. Hundreds of animals mired down and were shot or left to die as they were. Others fell over precipices. Men were heartless and cruel. Some of the more energetic formed a committee and proceeded to work on the trail. Boulders were blasted and the marsh was corduroyed to better effect. As a result of three months of effort a few hundreds of the most active and best equipped succeeded in getting over with all their outfit, and others by abandoning a portion, while the great majority, having made but little progress, returned as best they could to the new town of Skagway, to Juneau, and even further south, either abandoning the journey entirely or to wait until spring.

After an examination of the Skagway trail, H. H. Stretch, a mining engineer, thus reported upon it late in August:

"Skagway valley was once occupied by a huge glacier. Near the lower end, the rocks are ancient sedimentary or stratified deposits, with innumerable dikes and stringers of granite asphalt, but all the upper portions of the valley, and the summit of the range, are nothing but a very coarse granite, without any trace of any structure, but with very strongly marked, nearly horizontal, bedding planes, cut by nearly vertical sledge joints."
Birdseye View of Dyce and Shagwuy and the Pass.

"The action of the ice which formerly ploughed its way down the valley, has ground these rocks to polished surfaces, the vertical faces supporting only a few lichens, while the horizontal benches, before the
advent of the gold seekers, were covered with a thick carpet of moss and lichens, which, though with but a very trail held on the rocks, gave a sure and satisfactory foothold. Only in a few places are there pebbles or boulders, and but few rock slides; but where these do exist, the individual boulders are so large and massed so irregularly, that travel over them is more difficult than over the solid unbroken benches. Of earth there is practically none, but in the course of ages a black vegetable muck has accumulated in some of the crevices and in potholes along the river bottom. Scrubby timber, spruce, birch, and alder, finds a foothold in the crevices, the latter chiefly in the wetter bottoms, and over such material the trail finds its way. Distances from Skaguay are as follows: First crossing of river, 1 1/2 miles; end of road, 3 1/2 miles; Small Lake, 5 miles; Porcupine creek, 7 1/2 miles; second crossing of river bridge, 11 1/2 miles; third crossing of river bridge, 13 1/2 miles; fourth crossing of river bridge, 14 1/2 miles; fifth crossing of river, ford, 17 1/2 miles; summit, 19 miles; Meadows, 28 miles; Lake Bennett, 43 miles.

"Five miles out, at the lake, the elevation is 460 feet; the trail quickly ascends to 610 feet; then sinks to 470 at Porcupine creek. In a short distance, the elevation is 1400, and the path zigzags down to the second crossing, 100 feet elevation. The fourth rise is 1600 feet above the sea, and the trail almost at once goes upward to 3100 feet. A descent is then made to the ford, 1800 feet high, and then comes the climb to the summit, an elevation of 3400 feet. From this point to the lakes the trail is not extremely difficult."

Mr. Stretch says there is no danger to human life in making the trip.

Dyea trail was reported on about the same time by John A. Miller, a railroad engineer.

"A good road," he says, "extends for eight miles; then it gets muddy, but not very bad. Pack trains of horses make the round trip to Sheep Camp, 14 miles, in a day, carrying 220 pounds. From there to the foot of the hill the road is not so good, and here is where the seekers for gold are delayed on this trail. For about two miles the difficulties to be overcome are equally as bad as on the Skaguay trail, but, having once gotten over the summit, the trail is comparatively easy.

"After talking with reliable men, who have nothing at stake and who have been over both trails; after talking with Indians, who know every inch of the country, and after my own experience on the two trails, I can only come to one conclusion, and that is, at the present time the Dyea trail is the only practical one, and it is getting too late to attempt that now."

A plain but truthful account of the actual condition of affairs on the two trails during the third week in August, at the height of the rush, is given by E. Benson, of Portland. He is manager of the Benson Logging Company, and went up to see if it was practical to employ some of the devices used in logging to transport goods over the passes. He went over Chilkoot pass to Lake Lindeman and returned by
White's pass. He is of the opinion that Chilkoot pass, though steeper, is the most practical. Though he found a greater number on the Skagway trail, the difficulties were so much greater than on the other they were making poor progress, while on the Chilkoot trail the men were getting along fairly well. He has reported favorably on a tramway for Chilkoot pass, and one may be put in by the company he represents. He said of the two passes:

"I reached Sheep Camp, the main stopping place on this side of the summit of the Chilkoot pass, easily, as I had no burden. I found probably 1100 persons and 45 horses on the trail between the summit and Dyea. I walked across the trail from salt water to Lake Linderman, a distance estimated to be 37 miles, in 14 hours. The trail is extremely rough, and not passable for horses for a distance of 3½ miles on the Dyea side of the summit. The animals are made to carry packs to the beginning of this point, where the loads are taken off and carried over by human beings, the horses being driven over loose. The packs are replaced when the summit is passed and carried by the horses until Lake Linderman is reached. Between the Yukon side of the summit and Lake Linderman there were about 75 persons, and at Lake Linderman there were 125 campers. These latter were making their boats and water craft for the trip down the lakes and river. Although timber seems scarce, there is sufficient to supply the demand for boat lumber. The largest tree I saw was eight inches in diameter at the butt. All here were whipecawing, and it required a good strong man about three days to get his outfit ready for the voyage. I went to Lake Bennett and found a small sawmill operating there. The owner told me he had orders to keep him running for six weeks.

"From Lake Bennett I started back over the Skagway trail, walking a distance of 38 miles in 13½ hours. My first day's journey brought me near the summit, where I camped for the night and vainly tried to sleep. When I rose in the morning my covers were white with frost. I found very few people had gotten through, although there was a host on the other side making the endeavor. Next morning I crossed the summit and crossed down on this side. The first thing I struck was a river, knee deep, that had to be forded, which was the coldest water I ever felt. From near the summit down on the coast side there was a mass of men and horses, working, struggling and straining to reach the top. I counted many and estimated the remainder, placing the whole number of persons trying this trial at between 3200 and 3500, with about 1000 horses. Along the trail were numerous dead horses, where they had fallen over rocks or sunk exhausted in the mire. I never saw men work like those people did. Their spirits seemed high, but they were laboring like demons from early until late. Men who were from stores and unused to manual labor were getting into the harness with a vigor that seemed impossible.

"It is hard to describe the difficulties that were encountered on this trail and were impeding that mass of humanity so that the distance from the coast to the summit of 30 miles was requiring a long
time to cover. The trail leads along a canyon that has in the bed a small but swift and terribly cold stream. The road is not in the bottom. It winds along the side hills, probably 1600 feet above the water, then dips down across the bottom and up the other side to about the same elevation. This change from one side to the other takes place three or four times, thus making one climb a great deal more hills than is necessary on the Chilkoot pass. The surface of the hillsides presents the greatest difficulties. The trail for the most part is on a bed of boulders that are extremely hard to climb over. At places between them there will be formed a veritable mire, which is not soil, but a growth of moss and peat that quickly becomes mud beneath trampling. In the bottom of these mires will be a bed of sharp stones that cut the horses frightfully while they are wallowing through them. Much time is also lost in the passing of going and returning horses. All of a man's pack is not on one animal, and when he goes a distance he unloads and returns to get the remainder. This causes one string of horses to be passing back while there is another going forward. There are only few places where they can pass each other, and you will see lines of 400 and 500 horses standing waiting for others to pass. In this manner some are kept waiting nearly all the time. I do not believe that more than a very small per cent. of these men on the Skaguay trail will reach the summit before snow flies. It is an impossibility for many to do so, and the remainder will have a wild hope before them."

DOWN THE YUKON.

Whether one reaches the lakes at the head of the Yukon by the Chilkoot or White pass, the remainder of the journey to Dawson is the same. He must build a boat and descend the chain of lakes and the Lewis and Yukon rivers, a distance of about 500 miles. There is nothing specially difficult or dangerous about this journey, except a few short portages, and the passage of Mile's canyon and White Horse rapids, yet it is necessary to exercise care and common sense along the entire route.

The first thing necessary is to construct a boat. A raft should not be trusted. Miners have always taken whipsaws along to use in cutting up timber for boats. The trees are small and it takes about a week to cut up the timber and another to build the boat. Nails and oakum should be a part of every outfit by this route. There is now a small sawmill on Lake Bennett, but is was this year entirely unable to supply lumber for all the boats needed, and most of the miners had to build their own. Boats sold at $150 to $300 on Lake Bennett. The timber near the head of the lake has all been cut, and one now has to go back two or three miles for timber, or pay a good price to have his stuff freighted in a schoon to the foot of the lake, where timber is still plentiful. A great many boats were taken to Dyea and Skaguay, some in sections and some in pieces, but so far as has been learned, few if any of these were taken across the summit, and the advice of those
who have examined the conditions and returned or written of their experiences, is not to attempt to take boats over the pass, but to build them on the lakes.

Those who go in early in the spring can build their boats, put them on runners and draw or sail them on the ice of the lakes till the river is reached and the ice breaks up, as was done by the Funston party, previously spoken of. Those who reach the lakes later can use both sail and oar. The boat must be made strong to endure the strain it will receive. In navigating the lakes and rivers the accompanying map will be found useful, the directions it gives being explicit. The route leads through Lake Linderman, six miles, a portage to Lake Bennett of one mile, down the lake 24 miles, through Cariboo crossing to Lake Tagish two miles, down the lake 10 miles, by river to Lake Marsh six miles, across the lake 19 miles, down river to Miles canyon 26 miles, three-quarters of a mile through the canyon, to White Horse rapids two miles and a half a mile through them, to Lake LeBarge 30 miles, down the lake 31 miles, down the Lewis and Yukon rivers, passing Hootalinqua river at 30 miles, Big Salmon 34 miles, Little Salmon 37 miles, Five Finger rapids 62 miles, Rink rapids 6½ miles, Felly river 56 miles, White river 37 miles, Stewart river 9 miles, Sixty-Mile river 21 miles, Dawson City 50 miles, Forty-Mile 50 miles, Circle City 360 miles.

The actual experiences of a party making the journey from Lake Linderman to Dawson in June, 1897, is given in the following letter from Milton Misamore, of Portland:

"We camped eight days at the head of Lake Linderman, building a boat. We were compelled to go back two or three miles for suitable timber for the lumber, as the trees there are small, and those fit for lumber are scarce. We finally got aboard our craft and headed down the lake with a strong wind at our backs. The wind was a little too strong, and we shipped several whitecaps before we reached the foot of the lake, six miles distant, which was covered in two hours. Here we were compelled to portage across to Lake Bennett, a distance of three-quarters of a mile. The stream connecting the two lakes is small, very swift and strewn with boulders, which endanger a boat. We guided ours through with the aid of ropes, after packing our goods to the desired spot.

"At the head of Lake Bennett, we found quite a village of tents, belonging to campers engaged in building boats for the journey down the lakes and rivers. This has been the place for building boats to navigate these streams for many years, and the timber for either boats or rafts has been used up for several miles back. Further down the lake, about 26 miles, there is an abundance of fine timber. There is a small portable sawmill at the head of Lake Bennett, but the demand last spring was so great for lumber that it could not near fill it. We were detained here one day by head winds, but on the afternoon of June 12 we pulled out down the lake, using our oars all the way down, and thus making the 26 miles to the foot by next morning."
"Here we entered a small stream connecting Lakes Bennett and Tagish, and were carried by a strong current down to the head of the latter, just four miles, very quickly. Proceeding down this last lake a few miles, we came abreast of Windy Arm, of which we had been warned. This is a long arm coming into the lake from the southeast, and the country formation is such that a strong wind strikes the lake from this direction. In accordance with our instructions, we kept well to the opposite side, and when the wind struck us, had plenty of sea room to sail straight through. Some of the boats we fell in with did not take this precaution, and were blown to the shore, where they were compelled to pull with their oars for several hours before getting clear.

"From Lake Tagish we drifted down to another lake, named Lake Marsh. This is a long, shallow body of water, and our boat struck bottom several times even when the lake was five miles wide. In traveling its distance of 20 miles, we saw many fish, but they would not bite.

"From this lake we entered the river of terrors. When we had left Lake Marsh about 25 miles, we saw a red flag floating on the right shore, and several bandana handkerchiefs nailed to posts and trees. We recognized this as a warning that we were entering the dreaded Miles canyon. The current was very strong here, and it was with difficulty that we succeeded in landing our boat a few hundred feet above the mouth of the canyon. Here we found some other boats that had landed to take a look before the leap (a thing which every one going through this place should do). The more we looked the less we liked the aspect, but as the only alternative is a rock ridge portage of a mile in length, which few will undertake, we at last shoved out into the stream and headed for the middle of the canyon's mouth. The suspense was very brief, for we were shooting through the canyon in a moment. We got through all right, with but little water in the boat, but enough to land and ball out. The canyon is three-quarters of a mile long, and the sides are perpendicular bluffs from 200 to 300 feet high. The water in the middle of the channel is much higher than at the sides, and a boat must be kept as near it as possible, as, if it strikes any of the rocks on the sides, going at the rate of three-quarters of a mile in two minutes, it would be dashed to pieces. The boat must be kept head on, also, as the water rolls up stream like the breakers of the ocean. If a boat of ordinary size gets sidewise, it is sure to upset.

"The river for two miles below the rapids is not much better than the stream while in the canyon. When we launched again and started on, we struck several boulders with more or less force, all of which we found it impossible to avoid. We commenced immediately to pull for the left bank, and reached it about two miles below, just as we came onto another of the odious red flags. This was the signal that the White Horse rapids were ahead. As we had had enough excitement for one day, we camped for the night.

"We learned that four boats had run the White Horse rapids the day before, and that two more would try it in the morning. The first
Shooting the Dreaded Miles' Canyon.
to try it was a bateau, about 25 feet long, containing four men and a
ton of provisions. We watched them go through, which was done
apparently in good style, but when they got below the falls, they pulled
for shore in great haste. Upon investigation it was found they had
shipped enough water to damage a quantity of their freight. The
second was a large sloop with several men aboard, and eight or ten
tone of provisions. They went over, but by the time they could reach
the shore below, they were settling in the water badly. They had
knocked a large hole in the bottom. While standing below the rapids
we saw a lot of stuff come floating down, which was evidence that
some unfortunate had been upset. We got some to shore safely, but
saw a value that we afterwards learned contained $350 float right near
and sink. The wreck was the remnants of a party of two and their
boat that had come from the rapids we had just passed. Their boat
was too light for them and sank in the Miles rapids. They clung to
the overturned boat until luckily rescued, but lost boat, outfit and
everything else save their lives.

"The sight of these things persuaded us not to attempt White
Horse rapids, and with the assistance of others, who were aided in
a like manner by us, we let our boat down to within 100 feet of the
falls with a long rope, and then took it onto a point of land and
scroited it over to the river below, without any loss whatever. The
crowd that was there mutually aiding each other all got over in this
manner in five hours.

"These rapids are three-fourths of a mile long. After passing them
we drifted down the river 25 miles, until we reached Lake LaBarge.
This is the largest of the lakes we passed through, being 35 miles long
by 10 wide. We encountered head winds here, making us just 48
hours in getting through. Upon leaving this lake we entered Thirty-
Mile river, so called from its length. This stream and the Hootalinqua
at their confluence form the Lewis. Thirty-Mile river, when we passed,
was about the width of the Willamette, and the Hootalinqua was
about the width of the Columbia, the two together making a mighty
stream. Thirty-Mile is very rapid, and has some sunken boulders that
make it dangerous if caution is not exercised. The Hootalinqua was
on the warpath when we reached it, running like a millrace, and very
muddy. We camped immediately after reaching the Hootalinqua, and
the next day ran to within four miles of Five-Finger rapids, a distance
of 156 miles in 18 hours. Five-Finger rapids are conceded to be more
dangerous than Miles rapids, which we had run.

"Five hundred and ten miles from Juneau the Lewis and Pelly
rivers flow together, forming the Yukon, one of the greatest rivers on
the American continent. In many places it is more than five miles in
width, and in others narrower, but deep, and flowing with a strong
current. You cannot by any means go to sleep and let your boat drift.
There are a multitude of islands, sometimes four or five abreast of
each other, and as many channels, some of which are very deep and
clear of drift, while others are shallow or narrow and full of drift. Such channels must be avoided.

"After leaving the lakes we made a daily run of over 100 miles, until Dawson City was reached. We reached this place June 22, just 63 days from Portland. This time was just 20 days longer than I calculated on, and was 33 days longer than is usually necessary to make the trip. A person can make the trip from Portland in 30 days."

The passage of Miles canyon in May, 1883, is thus described by Frederick Funston, in the article previously quoted from:

"We knew that we must now be near Miles canyon, and kept a sharp lookout. We had gone scarcely a mile when we whirled around a bend and saw a low, brown rocky ridge, divided by a slit less than 30 feet wide, and at the same time heard the roar of the river in its wild rush through the canyon. With one impulse we pulled frantically for the bank, and got a line ashore and around a tree just in the nick of time.

"This canyon was named by the late Lieutenant Frederick Schwatka, in honor of Nelson A. Miles, who had been instrumental in sending him on his trip to the Yukon in 1883. The river, which has been about 300 feet wide, suddenly contracts to about a tenth of that width, and, increasing its velocity to 20 miles an hour, rushes with terrific force through a canyon with absolutely perpendicular walls 100 feet high. The canyon is only three-quarters of a mile long, and at its lower end the river spreads out into a series of rapids, culminating three miles below in the White Horse. There are two ways of passing this canyon, one by portaging over the hill on the east bank and the other by boldly running through. Some of the men whom we found encamped there were utilizing the former method. The boats were unloaded and dragged out of the water, and by means of a windlass hauled up the hill slope 100 feet high, and then pulled on wooden rollers for three-quarters of a mile, being finally slid down another hill to the river. The contents of the boats were carried over by the men on their backs. It is the most slavish work imaginable, and saves up the better part of four days.

"We had seen both ways of passing Miles canyon, one requiring four days and the other two minutes. We looked at each other in an inquiring sort of way, and then, without a word, walked down to where the Nancy Hauk was moored against the bank. All took their places, kneeling and facing the bow, McConnell in the stern, Matters amidships and I forward. The oars were placed on board, and each of us used an ordinary canoe paddle. I must confess that I never felt stiffer in my life than as we shoved away from shore and started for the entrance. It was all over so quickly that we hardly knew how it happened. Barely missing the big rock at the mouth of the canyon, the boat started on its wild ride. The walls seemed to fairly fly past us, and after starting, we heard a cheer from the rocks above us, but did not dare look up. By frantic paddling we kept in the middle, and off from the canyon walls. The sensation was akin to that of riding
It was not a dry spot on one of us when we got through, and the boat took so much water that she nearly foundered before we could bail her out. But a great weight was off our minds, for Miles canyon, more than all other things, is dreaded by Yukon travelers. Including those lost in 1894, an even dozen of men have had their boats swamped or crushed like egg shells against the canyon walls, and not one of them has come alive out of that wild maelstrom of water."

**TAKU ROUTE.**

Much interest is being taken in a proposed route from Taku Inlet to Lake Teslin. The Yukon Mining, Trading and Transportation Company is surveying a railroad over this route, a branch of which is to be extended 20 miles up the coast to Juneau. Application has been made to the United States and Canadian governments for charters, as the route starts in the United States territory, but for the greater portion of the way is in Canada. The road would be 130 miles long. It is proposed to have small steamers on Lake Teslin, which will pass from the lake to the Lewis and Yukon by way of Hootalinqua river. This would render packing unnecessary, as one could land from the ocean steamer, go by car to the lake and there board a steamer that would land him at any point along the Yukon desired. If this enterprise is successful at least a year must elapse before it could be carried out. Meanwhile efforts will be made to pack over this trial, going part way up the Taku in a steamer. A party has gone in by that route this fall, intending to camp for the winter on Lake Teslin.

Juneau is the starting-point for the Taku. Steamers make the trip to the head of the Inlet; thence the route is on foot straight up the river to headwaters in a chain of small lakes nearly or quite connecting with Lake Teslin. In the winter time heavily loaded sleds can be drawn the entire distance. There is plenty of timber for boats on Lake Teslin.

Distances on this route, as shown by the United States and British government maps, are, nearly as can be shown, as follows:

<table>
<thead>
<tr>
<th>Miles</th>
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<tr>
<td>Juneau to entrance of Taku Inlet</td>
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<tr>
<td>Up Taku Inlet to river</td>
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<tr>
<td>Up Taku river to head of canoe navigation</td>
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<tr>
<td>Portage to mouth of Silver Salmon</td>
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<tr>
<td>Portage up Silver Salmon</td>
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<tr>
<td>Portage thence across Lake Teslin</td>
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<tr>
<td>Lake Teslin (narrow and long)</td>
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<tr>
<td>Hootalinqua river to Lewis</td>
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<td><strong>Total</strong></td>
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</table>

**STICKER ROUTE.**

Another practicable route is by way of Sticker river, which is navigable to Telegraph creek. 100 miles, and already has a steamer
PLYING ITS WATERS. FROM TELEGRAPH CREEK THERE IS A PRACTICABLE ROUTE FOR STAGES AND FREIGHT WAGONS NORTH TO LAKE TELLLA, FROM WHICH POINT THE STEAMER WOULD BE USED AS DESCRIBED FOR THE TAKU ROUTE. IT IS REPORTED THAT ARRANGEMENTS ARE NOW BEING MADE TO BUILD STEAMERS ON LAKE TELLLA, TO PUT ON A STAGE LINE AND TO OPEN UP THIS ROUTE TO TRAVEL IN THE SPRING, ALSO TO BUILD A RAILROAD OVER THE STAGE ROUTE AS SPEEDILY AS POSSIBLE. THIS MAY BE MADE THE CANADIAN MAIL ROUTE NEXT YEAR.

DALTON TRAIL.

From Pyramid harbor there is an overland route to the Yukon below Fort Selkirk, on through the Chikat pass, lying to the west of Chilkoot pass, and generally called the Dalton trail, because several times used by a man named Jack Dalton in taking horses into the interior. Dalton was a trading post on this trail. Several miners came out to the coast by this trail the past summer. In going over this route it is necessary to pack to the Tahkeena river, when a raft or boat may be used in descending the stream to the Lewis. The long distance to pack is what renders it impracticable for one with a large outfit to take in, unless he has plenty of pack animals. It is claimed a man can ride a horse all through and that there is plenty of grass. Cattle and sheep were driven over the trail the past summer. This is also the route of a proposed telegraph line to Dawson, the wires to be laid along the ground.

OTHER ROUTES.

Although little is known of the region lying between the Copper river and the Yukon, it is claimed that by a short portage one can go from the head waters of the Copper river to tributaries of the Yukon, and it is possible that travel may sometime go by that route. A practicable route by White river, just east of Mount St. Elias, is also claimed, and this route is now being explored.

There is probably a practical route in the interior from the Cariboo and Cassiar mining districts in the northern end of British Columbia to Dease river, and thence by the Pelly to the Yukon. It is also probable that a route north along the eastern base of the Rocky mountains, from Edmonton, on the Canadian Pacific, to Athabasca and the Dease and Pelly rivers. It is said that both of these routes are being tried this year, but they are long and it would seem impracticable to use them for freight. It is also asserted that it is practical to go by the way of Great Slave lake, descend the Mackenzie river nearly to the Arctic ocean, and then ascend the Peel river and make a short portage to a tributary of the Yukon. All such routes are impracticable compared with those from the coast and by the way of St. Michaels, and will receive little consideration at the hands of gold seekers for several years at least.
Chapter VI

Mines on the American Side

Although interest is now centered in the Klondike and other mining districts on the Canadian side of the international line, undoubtedly future developments on the American side of the line will be very important. The policy of the Canadian government in reserving one half the claims for its own purposes and of exacting a heavy royalty on the gold taken out of other claims, will have the natural effect of driving American prospectors across the line into their own country, where the mining laws are more liberal and every foot of mineral land is subject to entry, with no royalty squeezed from the miners by the government.

Although there have for several years been good mines on Birch creek, Miller creek, and other streams, of which Circle City is the commercial point, there is a vast area of Alaska as yet unprospected, including a great many tributaries of the Yukon and its chief branches. Miners are learning that the heavier gold deposits are on the small streams, and as the headwaters of the Yukon’s affluents are prospected there will doubtless be many rich discoveries made. To locate and develop these new districts will be the task of the thousands of eager gold-hunters now pouring into Alaska.

In regard to the opportunities for the prospector on the American side of the line the experience of Milton Misamore may be taken as an example. He went to Klondike in the spring, but came out this fall because he believed there would be a scarcity of provisions. He will return again in the spring. He says the field on the American side is every whit as good as across the border. He left Dawson shortly after arriving there in June, and proceeded with his boat and outfit to Circle City, having found that everything of value had been staked out in the Klondike region. From Circle City he crossed overland south to Birch creek, which nearly parallels the Yukon for some distance. After spending some time in that region taking in the Mastodon, Miller, Deadwood, Eagle and Greenhorn creeks, he came back to Circle City, and, loading his boat, proceeded about 400 miles down stream to the Minook, where new gold discoveries had been reported. Here he located a claim and would have remained, but found that he could not get supplies.

Along the streams entering the Arctic, Behring sea and the Pacific there is a good prospect of discovering rich diggings as on the Yukon. Gold has been found on the Selwikh, Beachland and Kowak rivers, entering Kataboo sound, but no attempt has been made to work the placers there. Cook’s inlet has been partially prospected, and last
winter 800 miners were at work there, some of them, however, having
since left for the Klondike, under the impulse so characteristic of
miners, to desert diggings worth $10 a day whenever they hear of any-
thing better. However, quite a number of others have gone to Cook's
inlet this year. The gold found there is coarse. As there is a vast
unexplored region around the inlet, it would seem that the prospect
before the searcher for gold there must be as good as is offered in the
interior, which is so much more difficult to reach, so much more expen-
sive as a place of residence and has such disadvantages of climate.
The same may be said of the region of Copper river and its numerous
tributaries in the vicinity of Prince William sound. Here is another
promising field for exploitation, where gold has already been found.
Quite a number have gone into that region this year.

Along the coast at Lituya bay discoveries have been made, also in
the beach sands for 90 miles near Kukutat, in ruby and black sand,
where considerable work has been done. The region inland has been
practically unexplored. On Unga island a fine quartz ledge has been
uncovered and a ten-stamp mill was erected a few years ago,
since increased to forty stamps. This mine gives promise of paying
large dividends, notwithstanding the great expense of working a
mine so far from any base of supplies. On Golofam bay, in Norton
sound, a rich silver ledge was discovered twelve years ago. A ship
load of quartz taken to San Francisco proved so rich that a company
was organized in 1892 and $80,000 were expended in developments. The ore still proved to be rich, but trouble in the company for several years prevented further work.

The region generally known as Southeast Alaska, embracing the coast and adjacent islands south of Mount St. Elias, has been mined more or less for the past twenty years. Gold was discovered near Sitka in 1873, and prospecting then began; in 1880 gold was discovered in the vicinity of Juneau, and soon prospectors were scattered all along the coast and began to work their way inland. The town of Juneau, so called in honor of Joseph Juneau, the first man to develop mines in that region, sprung into existence as a result of the discovery of placers on Gold creek, from which considerable gold has been taken. While the excitement of these discoveries was still drawing miners to Alaska, it became known that a man known in the camp as French Pete, had discovered a large ledge of quartz on a high mountain side on Douglas island, across the bay from Juneau. This was purchased by John Treadwell for $400. Through a series of years there has been a steady development of this property, until now it has the largest stamp mill in the world, containing 300 stamps, and arrangements are on foot to increase the number to 500. This is a low-grade ore, but so favorably is the ledge situated for cheap working, so easy is the ore to work and so wide is the ledge, that it is said the ore can be mined and milled for 60 cents a ton, and that great profit is being made on ore running less than $3 to the ton, and an output of $125,000 a month produced. In connection with this mine it is necessary to speak of the Bear’s Nest mine swindle, which, for several years had such an unfavorable effect upon the mineral development of Alaska. This was nothing less than the organization of a company to work a ledge adjoining the Treadwell, which ledge was artistically “salted” for the benefit of experts by substituting Treadwell ore for the barren rock taken out of the Bear’s Nest. Large blocks of stock were sold, chiefly in England, and many people were swindled, with the result that Alaska was looked upon unfavorably as a field for mining investments for a number of years.

Though capitalists were thus frightened away, the indefatigable prospector continued his work and many placer claims and quartz locations, both gold and silver, were made. Now that confidence in Alaskan mines has been restored by the wonderful discoveries in the Yukon region, capital may be expected to take hold of these numerous quartz ledges along the coast. A dozen stamp mills are at work on Gold creek, Sheep creek, Sum Dum and at other points within a few miles of Juneau, and new ones are being erected every year. The most noted of the mines, besides the Treadwell, are the Mexico, Ready Bullion, Silver Queen and Bald Eagle. There are rich ledges on Berner’s bay, Lynn canal, and on Fanta bay, Admiralty island, also on the famous Glacier bay, where rich gales has been found. Further to the south, on Annette island and on Prince of Wales island very rich quartz has been discovered, but as yet little has been done to develop the ledges.
On the whole, it would seem, whether capitalist or prospector, it is wholly unnecessary to neglect the opportunities offered by the quartz locations already made and the vast area of unexplored country on the American side of the line and join the throng rushing into the Canadian gold fields on the Yukon, where only half of the claims are subject to entry and a royalty is exacted upon the gold taken from the earth.

The output of gold in 1896 is given below, to show the development of mines other than those on the Yukon. That which is credited to Yukon placers nearly all came from the American side of the line, Birch creek being on that side as well as many of the other districts lumped together in one total:

<table>
<thead>
<tr>
<th>Company</th>
<th>Stamps</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newell Gold Mining Company</td>
<td>38</td>
<td>$100,000</td>
</tr>
<tr>
<td>Berner's-Bay Mining and Milling Company</td>
<td>40</td>
<td>125,000</td>
</tr>
<tr>
<td>Alaska Treadwell Gold Mining Company</td>
<td>240</td>
<td>200,000</td>
</tr>
<tr>
<td>Alaska Mexican-Gold Mining Company</td>
<td>120</td>
<td>450,000</td>
</tr>
<tr>
<td>Alaska Commercial Company</td>
<td>40</td>
<td>500,000</td>
</tr>
<tr>
<td>Bald Eagle Mining Company</td>
<td>4</td>
<td>200,000</td>
</tr>
<tr>
<td>Ebner Gold Mining Company</td>
<td>10</td>
<td>35,000</td>
</tr>
<tr>
<td>Juneau Gold Mining Company</td>
<td>30</td>
<td>35,000</td>
</tr>
<tr>
<td>Julian Gold Mining Company</td>
<td>10</td>
<td>20,000</td>
</tr>
<tr>
<td>Alaska Willoughby Gold Mining Company</td>
<td>10</td>
<td>15,000</td>
</tr>
</tbody>
</table>

Green mine, Norton Sound, 10 stamps ... 15,000

Total output of quartz mines          $3,855,000
Lituya bay placer mines               15,000
Cook Inlet placer mines               175,000
Birch creek district, Yukon mines     1,300,000
Other Yukon districts                  300,000
From several small creeks in various parts of the territory ... 25,000

Total output                             $4,670,000

Chapter VII

How and Where to Outfit

What to take and where to buy it are two important questions every person starting for Alaska must determine. The first depends much upon the route by which it is purposed to enter the gold fields, while the second should be settled by the conditions of convenience and economy.

In regard to where an outfit should be procured, there is nothing clearer than the fact that it is an act of folly to purchase it in any of
the Eastern cities and pay for its transportation across the continent, since it can be procured in Portland fully as cheaply and the extra cost and bother be avoided. Thus economy suggests a delay in this matter till the coast is reached. Economy, however, is not the only reason for pursuing this course. No Eastern city is prepared to supply just the things necessary, nor do the merchants there know what is required nor how it should be packed for transportation. This latter is a matter of vital importance, for if one's provisions are spoiled or lost during the hard trip across the passea and down the lakes and rivers, or even in the hold of the vessel going north, it may mean complete failure to the gold-hunter. The study the merchants of Portland have given this subject and the experience they have had and the special attention they have given to laying in stocks of the special things required, render that city a desirable place in which to procure an outfit.

Portland is the chief commercial point of the Pacific Northwest. In business transacted, bank clearings, foreign commerce, etc., it equals all the other cities of that region combined. It has regular steamer lines to Alaska, to San Francisco and to Japan and China, and is the terminus of more lines of transcontinental railroad than any other city on the Pacific coast. Stocks of goods are so large and competition is so free and strong, that Alaska outfits may be purchased at the lowest possible figure. The man who outfits in person will be certain of getting the best quality of goods at the lowest prices, will have the benefit of experience in selection and packing, and will not be likely to purchase a lot of things not needed or unsuitable to the conditions as he will find them in Alaska. Experience this year shows that outfits can be purchased in Portland cheaper than at any other point on the Pacific coast and at a considerable saving over cost and transportation from the East.

If one is going in by the St. Michaels route he will not require those things necessary to get his outfit over the passes and down the lakes and rivers, but his stock of provisions and clothing would be the same for either route. As to provisions, one should either take enough for six months or eighteen months, because if he remains longer than six months he must remain a whole year longer, and can not depend upon being able to buy provisions. Those who went into the mines this year short of supplies, expecting to purchase them, are now in danger of starvation, and the government is endeavoring to find a way of sending in supplies to their relief, with small prospect of being able to do so. A man without ample supplies can accomplish nothing. He cannot go out on a prospecting trip, which may take him a year, nor can be procure work in mines already located, since the owners will not hire men who can not subsist themselves, as they would be obliged to feed them from their own scant stores. It has been impossible for the river steamers to take in enough supplies for those dependent upon them this year, and this will doubtless be the condition of affairs next year, for, although there will certainly be a large increase of steamers
on the river next season, there will be a proportionate increase in the population dependent upon purchasing supplies in the mines. Every consideration of prudence and foresight demands that the gold-hunter take with him both food and clothing for at least eighteen months.

The question of what food to take and how much must be settled by the requirements of the climate. In the first place allowance must be made for the fact that in that cold climate, with the physical exertion the gold-hunter will be subject to, a great deal more food per day will be consumed than at home. The system demands in that climate an excessive amount of food, especially fat, such as bacon, which is the staple article of diet. A man of long experience in the Yukon says that the estimate of food should be at least 100 pounds per month for one man. It is a waste of time and money and a possible imperiling of life to take anything but the best quality of goods. On this basis, supplies for eighteen months, with their cost in Portland, based upon the very best quality of goods, would be as given in the table at the end of this chapter.

So far as clothing is concerned, one can take what meets his own ideas, provided he includes in his list not less than one pair of gum boots, one pair of heavy leather shoes, half a dozen pairs of heavy woolen socks, half a dozen pairs of woolen mitts and fleece-lined leather mitts, two heavy woolen shirts, three suits of heavy woolen underwear, a heavy mackinaw coat, two pairs of mackinaw pants, three pairs of overalls, three pairs of ten-pound blankets, of which the Oregon-make are the best, several yards of mosquito netting, as mosquitoes are a pest there, a pair of snow glasses to protect the eyes from snow blindness, a canvas sleeping bag or a rubber blanket to sleep on, a tarpaulin to cover supplies with and a tent to live in. If sleeping bags are taken the blankets will not be necessary, or not so many will be required. For sleeping bags one can get a plain canvas bag, or one lined with mackinaw or pelt, or a double bag of heavy woolen and canvas. Generally speaking, the sleeping bag possesses more warmth for the same weight than plain blankets. As to foot wear, the Alaska "muckshucks" are worn most of the time, being a sort of mocassin boot made by the Indians and to be had only in Alaska. Leather shoes crack and are ruined in a short time, and gum boots are worn only while at work in the wet. The importance of buying the best quality of everything can not be too strongly insisted upon, and this applies to clothing fully as much as to groceries. Not to do so many mean distress and even failure.

The matter of packing supplies on the owner's back is one not to be overlooked. Although one may be able to hire his packing done in going in, either by horse, dogs or Indians, there will be many times when he will be compelled to do this kind of work for himself, and he should equip himself for it. The Merriman pack, which supports most of the weight on the hips, is a splendid device. The Yukon packing frame is also a fine thing, the weight being put on the shoulders and head. Common packing straps are of little use.
ALASKA, THE NEW ELDORADO

If one is going by the overland route by the lakes and river, he should take an equipment for building a boat, including oars, etc. In any event he should have a set of ordinary tools, with nails, etc., for use in mining, building cabins and other work. For cooking utensils the essentials are a small steel stove, and graniteware pots, pans, cups, etc., as this is the most durable and easiest to keep clean. If horses or dogs are taken for packing or drawing sleds, care should be taken to get proper pack saddles, harness, etc. As to boats, the experience this year has been that it is better to build them at the lakes than to attempt to take them over the pass. Hundreds of boats were taken north, either complete or knocked down, and were sold or abandoned. When it was almost impossible to get the necessaries of life and mining over the pass, boats and other things had to be left behind. Next spring, perhaps, such things can be taken in more easily over the snow. With such numbers going in at one time it would certainly be better to take in a boat, specially constructed for the purpose, if arrangements can be made for getting it over the pass. For use over the snow sleds will be required, and they should be made very strong, though as light as possible consistent with strength, and shod with steel runners. Only the frame of a sled is necessary. Plenty of rope should be taken for lashing and for other purposes.

To sum up the whole matter of equipment in a few words, do not attempt to select it until you reach Portland and have fully determined upon the route by which you will reach the mines, a matter which you will be better able to settle and at that time, than at home, because the latest and most authentic information will be at your command. Having determined this question, buy an outfit suitable to the route you are to travel, get only the best quality of everything, and avail yourself fully of the valuable knowledge and experience of the Portland merchants in making your selections and in packing your outfit so that it will stand the journey in good condition and be packed in the most convenient form for handling.

Regular steamer lines have been established between Portland and the north, and the best equipped vessels in the Alaska trade will make trips as frequently as once a week in the spring and summer. One can go to Portland with only the money necessary for an outfit, spend a few days there selecting just what is required, and then start north thoroughly equipped for the task before him and with less uncertainty as to the suitability of his outfit, at less expense to himself than by pursuing any other course. Sailing dates of steamers will be published by the Oregon Railway & Navigation Company in ample time in the spring. A bi-monthly line to Juneau, Sitka, Dyea and Skagway will run all winter.

Sailing dates of steamers and other information may be secured later by addressing the Secretary of the Transportation Committee, Chamber of Commerce, Portland, Oregon.
these things, one that can be rolled up and tied. Suit your own ideas as to smoking and chewing tobacco, but remember that it is almost as good as money and you can scarcely take too much.

Fine wove mosquito bar is necessary, as mosquitoes swarm there in the summer time. Gnats are also a pest, and carbolic salve is good for their bites. Fleas are plentiful.

Take fishing tackle with you, as there is plenty of fish. A short gun is desirable for ducks and grouse, though it adds to the burden to be carried and there is little time to hunt.

You need not take traps, as it is against the law for white men to trap fur-bearing animals in Alaska.

Granite ware or aluminum cooking utensils are the best and easiest to keep clean, but the latter cost more than the former, and both more than steel.

Do not use oiled canvas for packs, nor rely upon oiled clothing. The extreme cold makes oiled cloth crack and your outfit may be spoiled. Heavy canvas, either plain or paraffined, known as "aquapel," should be used for packs and outside sleeping bags. Pack your stuff in these sacks as nearly 50 pounds in each as possible. Number the sacks and keep a list of their contents. Such necessaries as matches, candles, etc., should be divided among several sacks, so that the loss of a portion of your outfit will not deprive you of them entirely. Put your matches in tin cans. Put a roll of butter in the middle of a sack of flour. It will keep well there. Butter keeps best in sealed cans.

Be sparing and careful in using your supplies and do not waste in cooking. Keep things and yourself clean. Cook carefully and well and you will be in better health for work.

Do not sit around after becoming heated with work without putting on an extra coat or something else. Pneumonia and rheumatism await the one who neglects this advice.

Do not wear wet clothing. Dry it every night. Sheep skin sleeping bags and coats are not desirable, as they get dirty and full of fleas and are damp.

A little vegetable garden can be made in summer, and such seed as beets, cabbages, radishes, lettuce, turnips, carrots, etc., should be taken. Fresh vegetables are a luxury and a preservative of health.

A sail for your boat may be made by putting eyelets in your canvas tarpaulin or cover for supplies, or in your double sleeping bag, if you take one. You will want a wooden block and 150 feet of rope.

For dog sleds the best that can be had are the regular Esquimo dogs, but these are scarce. The best to be found in the States are Scotch collies and long-haired setters. Big dogs eat too much and short-haired dogs are useless.

Never overdo yourself in packing. Stop before you are exhausted. It is better to pack small quantities at a time and take them only a short distance. In this way you keep your outfit together and
do not get it scattered along the trail, and you keep yourself in good condition for work. Pursue the same policy with pack animals and dogs. See that they are not overloaded, that their packs are properly adjusted and securely tied, that no saddle, strap or wrinkle in a blanket galls or chafes them, give them plenty of time to rest, and feed them regularly. The better care you take of your animals the better work they will do. When hungry dogs will chew leather harness. Canvas harness is therefore preferable for them. Do not pack a horse till you learn how. Learn to make the diamond hitch.

Take paper to write on and stamped government envelopes, both Canadian and United States, also pen and ink and pencils. A few books to read are worth their weight.

Of quicksilver you will want about five pounds. This is very little in bulk. It should be packed in an iron bottle, so that there will be no danger of breaking. Be careful in handling it, as it spills easily. A bottle can be made of iron pipe, with a screw top.

Do not forget that the old adage "The more haste the less speed," is still a good one. Get the best advice you can, but take advice only from those who speak from experience.

Finally, in outfitting, do not scorn the advice or assistance of the Portland merchants with whom you trade. They have experience and knowledge that will be valuable to you and are reliable and trustworthy.

PORTLAND GROCERY PRICE LIST.

(October 1, 1897.)

Supplies for eighteen months.

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<th>Item</th>
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<th>Notes</th>
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<tr>
<td>Bacon, lbs</td>
<td>...300</td>
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<td>Beans, lbs</td>
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<td>lb .02½</td>
</tr>
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<td>Sugar, granulated, lbs</td>
<td>...150</td>
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<td>Cornmeal, lbs</td>
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<td>Ginger, lb</td>
<td>...½</td>
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<td>Milk, cond., doz.</td>
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<td>da 1.35</td>
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<tr>
<td>Soap, laundry, bars</td>
<td>...6</td>
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<tr>
<td>Matches, packages</td>
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<tr>
<td>Butter, sealed case</td>
<td>...25</td>
<td>lb .35</td>
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<tr>
<td>Extract beef, 5 oz can jar</td>
<td>...2</td>
<td>da 4.40</td>
</tr>
</tbody>
</table>

Soups, lbs                   | ...20         | can .25                   |

Tobacco, as desired          |                |                           |

Quicksilver, lbs             | ...5          | lb .70                    |

Evaporated fruits            | ...100        | lb .07½                   |

Prunes, lbs                  | ...60         | lb .06                    |

Raisins, lbs                 | ...10         | lb .06                    |

Evap. potatoes, lbs          | ...75         | lb .10                    |

Evap. onions, lbs            | ...75         | lb .10                    |

Dried fish, lbs              | ...30         | lb .10                    |

Coffee, lbs                  | ...40         | lb .20                    |

Tea, lbs                     | ...5          | lb .35                    |

Salt, lbs                    | ...30         | lb .01                    |

Soda, lbs                    | ...3          | lb .06                    |
<table>
<thead>
<tr>
<th>Item Description</th>
<th>Price</th>
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<tr>
<td>Heavy leather shoes</td>
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</tr>
<tr>
<td>Gum boots</td>
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</tr>
<tr>
<td>Gum boots, leather sole</td>
<td>5.50@6.50</td>
</tr>
<tr>
<td>Woolen underwear, suit</td>
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<td>Woolen shirts, pair</td>
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<tr>
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<tr>
<td>Mackinaw pants, steel</td>
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<tr>
<td>Overall; wool lined</td>
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</tr>
<tr>
<td>Overall, wool lined</td>
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</tr>
<tr>
<td>Oilskin suit</td>
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<td>Porpoise shoe string, ds</td>
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<td>Sleeping bag, Aquapelle</td>
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<td>Sleeping bag, Kenwood, three pieces</td>
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</tr>
<tr>
<td>Rubber blanket</td>
<td>1.50</td>
</tr>
<tr>
<td>Rubber blkt, pelt backed</td>
<td>2.50</td>
</tr>
<tr>
<td>Waterproof sack for clothing</td>
<td>1.00</td>
</tr>
<tr>
<td>Leather coat, corduroy lined</td>
<td>3.00</td>
</tr>
<tr>
<td>Canvas coat, pelt-lined</td>
<td>5.00@6.00</td>
</tr>
<tr>
<td>Duck, coat, blanket-lined</td>
<td>3.50</td>
</tr>
<tr>
<td>Woolen sweater</td>
<td>1.00@3.00</td>
</tr>
<tr>
<td>Woolen cap</td>
<td>0.50@1.00</td>
</tr>
<tr>
<td>Soft felt hat</td>
<td>1.00@2.00</td>
</tr>
<tr>
<td>Felt hood</td>
<td>0.50</td>
</tr>
<tr>
<td>Felt boots</td>
<td>0.75@1.00</td>
</tr>
<tr>
<td>Fur cap</td>
<td>2.00@5.00</td>
</tr>
<tr>
<td>Canvas sacks, 50 lbs, doz.</td>
<td>3.50</td>
</tr>
<tr>
<td>Canvas sacks, 100 lbs, per dozen</td>
<td>5.00</td>
</tr>
<tr>
<td>Aquapelles', 50 lbs, doz.</td>
<td>5.00</td>
</tr>
<tr>
<td>Canvas outfit cover and sail, 7x10</td>
<td>2.00</td>
</tr>
<tr>
<td>Wall tent, 10x12, ridge rope</td>
<td>7.00@3.00</td>
</tr>
<tr>
<td>Merrimack pack</td>
<td>4.75</td>
</tr>
<tr>
<td>Yukon packing frame</td>
<td>3.50</td>
</tr>
<tr>
<td>Manta, rope, per lb</td>
<td>0.08</td>
</tr>
<tr>
<td>Boat cotton, per lb</td>
<td>0.30@0.50</td>
</tr>
<tr>
<td>Sail needles, per lb</td>
<td>0.30@0.50</td>
</tr>
<tr>
<td>Twine, per lb</td>
<td>0.25@0.50</td>
</tr>
<tr>
<td>Oakum, per lb</td>
<td>0.10</td>
</tr>
<tr>
<td>Pitch, per lb</td>
<td>0.34</td>
</tr>
<tr>
<td>Oars, per foot</td>
<td>0.34</td>
</tr>
<tr>
<td>Rowlocks, per pair</td>
<td>0.25</td>
</tr>
<tr>
<td>Life preservers, 2 lb</td>
<td>1.15@1.50</td>
</tr>
<tr>
<td>Calking iron</td>
<td>0.50</td>
</tr>
<tr>
<td>Wood blocks, 4 in., per pair</td>
<td>1.00@2.00</td>
</tr>
<tr>
<td>Snow shoes</td>
<td>0.00</td>
</tr>
<tr>
<td>Yukon stove</td>
<td>0.00</td>
</tr>
<tr>
<td>Nest camp kettle, 2, steel</td>
<td>0.85</td>
</tr>
<tr>
<td>Nest camp kettle, 3, granite</td>
<td>1.60</td>
</tr>
<tr>
<td>Fry pan, steel</td>
<td>0.25</td>
</tr>
<tr>
<td>Bake pan</td>
<td>0.20</td>
</tr>
<tr>
<td>Water bucket, granite</td>
<td>0.35</td>
</tr>
<tr>
<td>Plates, granite, each</td>
<td>0.20</td>
</tr>
<tr>
<td>Plates, tin, three</td>
<td>0.20</td>
</tr>
<tr>
<td>Cup and saucer, granite</td>
<td>0.30</td>
</tr>
<tr>
<td>Cup, tin</td>
<td>0.10</td>
</tr>
<tr>
<td>Coffee pot</td>
<td>0.35</td>
</tr>
<tr>
<td>Knives and forks, 6 each</td>
<td>0.45</td>
</tr>
<tr>
<td>Table spoons, dos</td>
<td>0.20</td>
</tr>
<tr>
<td>Large spoons, two</td>
<td>0.25</td>
</tr>
<tr>
<td>Butcher knife</td>
<td>0.45</td>
</tr>
<tr>
<td>Drifting pick and handle</td>
<td>1.00</td>
</tr>
<tr>
<td>Round point shovel</td>
<td>0.75</td>
</tr>
<tr>
<td>Gold pan</td>
<td>0.50</td>
</tr>
<tr>
<td>Gold scale</td>
<td>1.25</td>
</tr>
<tr>
<td>Magnifying glass</td>
<td>0.50</td>
</tr>
<tr>
<td>Compass</td>
<td>1.25</td>
</tr>
<tr>
<td>Goggles, or snow glasses</td>
<td>0.25</td>
</tr>
<tr>
<td>Shoe caiks</td>
<td>0.50</td>
</tr>
<tr>
<td>Ca'k set</td>
<td>0.25</td>
</tr>
<tr>
<td>Shoemakers' outfit</td>
<td>1.25</td>
</tr>
<tr>
<td>Whip saw, goose neck</td>
<td>1.60</td>
</tr>
<tr>
<td>Hand saw</td>
<td>0.10</td>
</tr>
<tr>
<td>Jack plane</td>
<td>0.10</td>
</tr>
<tr>
<td>Draw knife</td>
<td>0.75</td>
</tr>
<tr>
<td>Axe, with extra handle</td>
<td>1.25</td>
</tr>
<tr>
<td>Claw hatchet</td>
<td>0.50</td>
</tr>
<tr>
<td>Hammer</td>
<td>0.50</td>
</tr>
<tr>
<td>Square</td>
<td>0.40</td>
</tr>
<tr>
<td>Chisel, 1/2 inch</td>
<td>0.30</td>
</tr>
<tr>
<td>Files for saws, two</td>
<td>0.30</td>
</tr>
<tr>
<td>Whetstone</td>
<td>0.60</td>
</tr>
<tr>
<td>Nails, wire, per lb</td>
<td>0.04</td>
</tr>
<tr>
<td>Nails, galvanized, lb</td>
<td>0.10</td>
</tr>
<tr>
<td>Rubber cement, patches</td>
<td>0.50</td>
</tr>
<tr>
<td>Garden seeds</td>
<td>0.50</td>
</tr>
<tr>
<td>Chalk line and chalk</td>
<td>0.10</td>
</tr>
</tbody>
</table>
SPECIAL NOTICE

The Transportation Committee of the Portland Chamber of Commerce is giving the matter of Alaska transportation facilities its special attention. As soon as the various transportation companies have prepared their schedules for the spring and summer business this committee will be prepared to give inquirers full information about sailing dates, rates of fare, etc., etc. It will be prepared to give the latest and most authentic information, and will cheerfully do so to all who inquire. Address "Transportation Committee, Chamber of Commerce, Portland, Oregon."
MILES CANYON AND WHITE HORSE RAPIDS.

Land at A and examine canyon before running. Keep exactly in the center in running the canyon. After getting through land at B and let boat down with line to G. Cross river to D and let boat down with line to E. Make portage to F and drop boat with line empty. If you run the rapids steer straight for the center and then land at F.

Lake and River Route from Dyea and Skagway to the Yukon—Continued.
AINS WORTH
National Bank
OF PORTLAND, OR.

COR. THIRD AND OAK STREETS.

TRANSACTS A GENERAL BANKING BUSINESS. The Safe Deposit Department connected with this Bank forms an important feature, and offers equal facilities as to convenience and security, to any on this Coast. This Bank has special facilities for furnishing information to those who are contemplating a trip to the Alaska Gold Fields.

CORRESPONDENTS:

THE CHASE NATIONAL BANK, New York.
CRAKHED-WOODWORTH NATIONAL BANK, San Francisco, Cal.
COMMERCIAL NATIONAL BANK, Chicago, Illa.
NATIONAL BANK OF COMMERCE, St. Louis, Mo.
NATIONAL BANK OF COMMERCE, Omaha City, Mo.
That is why those bound for Alaska demand our United States Government Inspected Bacon...

Our U. S. Government Inspected Klondike Sausage is put up specially for Alaska trade. Just the thing in every respect. Ask to see it. Call for the Union Meat Co.'s Government Inspected products. For sale by all dealers.

UNION MEAT CO.
Beef and Pork Packers
PORTLAND, OREGON
O. SUMMERS,

Successor to OLDS & SUMMERS,
111 Third St. & 267 Washington St.
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Makes a Specialty of All

Useful Articles for Mining Purposes

We handle these goods direct from the manufactories.

We also carry a fine line of all kinds of French China-
ware, Plain and Decorated

Crockery, Glassware,

Platedware, Woodenware, Tinware,
Granite-Ironware,

And the Latest Novelties in

House · Furnishing · Goods

Summer's Crockery Palace,

Third and Washington Streets
CHOICE

Three Routes

BETWEEN

THE EAST, CALIFORNIA AND OREGON

Sunset

Via New Orleans, El Paso, Tucson, Yuma, Los Angeles, San Francisco and Sacramento.

THE FAVORITE WINTER ROUTE.

Ogdén

Via Ogdén, Reno, San Francisco and Sacramento.

TWO TRAINS DAILY FROM CHICAGO TO SAN FRANCISCO.

Shasta

Via Sacramento, Castle Craggs, Mt. Shasta and Portland

GREAT SCENIC ROUTE OF THE WEST.

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T. H. GOODMAN,
San Francisco, Cal.

C. H. MARKHAM,
Portland, Ore.
MEIER & FRANK CO.

Established 1871

Largest General Dealers in the Northwest.

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MINERS' COMPLETE OUTFITS

INCLUDING ALL NECESSARIES IN


EVERYTHING THAT WILL CONTRIBUTE TO THE COMFORT AND CONVENIENCE OF THE PROSPECTOR AND MINER

All Goods at Lowest Market Prices.

MEIER & FRANK CO., Portland, Ore.
KLONDIKE

MINERS AND PROSPECTORS WILL DO WELL TO PURCHASE THEIR SUPPLIES OF

W. C. Noon Bag Co.

PORTLAND, OREGON,

32 & 34 First St., North, and 212-214-216 Couch St.

MANUFACTURERS OF

BAGS, TWINES, TENTS, AWNINGS, FLAGS, MINING HOSE, BAGGING MATERIAL, CANVAS, COTTON DUCK, CORDAGE, ETC.

++ SAIL MAKING IN ALL ITS BRANCHES ++

Parties Outfitting for Klondike should secure one of our Storm and Water-Proof Sleeping Bags.

WE MAKE A SPECIALTY OF OUTFITTING PROSPECTORS FOR THE YUKON WITH TENTS, CLOTHES-BAGS, PACKING BAGS AND SLEEPING BAGS.
WADHAMS & CO.

Evaporated Potatoes, Onions and all kinds of Vegetables
Gilt Edge Brand Dried Fruits
Gold Dust Brand Canned Fruits
Golden Niagara Brand High Grade Vegetables
Old Homestead Tomato Catsup
Star Blue Point Oysters
Pheasant Brand Oysters
Silver Drip Syrup
Durkee Select Spices and Extracts
Malliard's Chocolates and Cocoas
Magnolia and Crown Brand Fine Teas
Lord Lancaster High Grade Cigars
La Sincerdad Clear Havana Cigars

We are prepared to fill Alaska Orders Promptly, and Solicit Orders from the Trade Only.

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Security Savings & Trust
- Company -

OF PORTLAND, OREGON

ORGANIZED UNDER THE LAWS OF THE STATE OF OREGON

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C. H. LEWIS, First Vice-President
A. L. MILLS, Second Vice President
C. F. ADAMS, Secretary

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HENRY FAILING, A. BUSH, H. W. CORBETT, C. H. LEWIS,
C. A. DOLPH, A. L. MILLS, C. F. ADAMS.
MINERS' SHOES

GERMAN SOCK

FELT BOOTS

AND A COMPLETE LINE OF

RUBBER BOOTS & SHOES

Especially designed for Alaska trade, sold at Eastern Prices and kept in stock by

Oregon Shoe Co.

49-51 Front Street, Portland, Ore.
M. Seller & Co.

S. W. Corner North Front and Burnside Sts.
PORTLAND, ORE.
Yukon Outfittings

OUR OREGON BLANKETS
Are the wanted weights; warmest for the weights and lowest priced for the values to be bought anywhere.

OUR UNDERWEAR STOCK
Affords the celebrated Lambs' Wool Fleeced "Jaros" Goods, "Stuttgarter" Sanitary Wool Underwear, and the "Lewis," in All-Wool and also lines of lower cost in heavy, serviceable sort such as are used in the mines.

OUR OVERSHIRTS
Are the best in material and best representatives of good shirtmaking that money can buy.

Olds & King
Fifth and Washington Streets
PORTLAND, ORE.
If you are in need of an

ENGINE, + BOILER, + SAW MILL

OR MACHINERY SUPPLIES

It will pay you to get our Prices. Ask for Catalogue
and Estimates

RUSSELL & CO., - Portland, Oregon

A. H. AVERILL, Manager
L. FELDMANN & CO.

WHOLESALE JOBBERS

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Graniteware, Tinware, Hardware, Woodenware

SHOVELS, PICKS, AXES, HANDLES, CUTLERY

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PIPES, STATIONERY AND NOTIONS

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BROOMS AND MATCHES

We manufacture and pack Matches specially for the Klondike Region

GOODS SOLD TO THE TRADE ONLY

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The Portland Flouring Mills Co.

Merchant Millers...

PORTLAND, OREGON

Daily Capacity, 5,000 Barrels

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LANG & CO.

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ESTABLISHED IN 1851

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PACIFIC POTTERY CO.

Manufacturers of

Dark Glazed Stoneware, Butter Pots and Jars,

Terra Cotta Flower Pots

of Every Description

To Alaska

and

Klondike

VIA

UNION PACIFIC

OVERLAND

WORLD’S PICTORIAL LINE.

..Through Cars to the Pacific Coast..

Connecting with FAST and COMMODIOUS STEAMERS for

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LOWEST RAIL AND STEAMSHIP RATES

For complete information concerning Routes, Steamers, Reservations, Rates, etc., address any
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R. W. BAXTER, Gen’l Agent

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Provision Dealers and Alaska Outfitters

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Prospectors can buy their outfits in Portland much cheaper than they can in the smaller towns farther north; whilst the steamers sailing from this port are superior in every way to those generally engaged in the Alaska trade.

We have everything that you want in the way of Provisions, and will be glad to give you the benefit of our experience in selecting your goods. We have plenty evaporated vegetables, such as Onions, Potatoes, Carrots, Julienne, etc. These goods are very valuable as anti-scorbutic. We have also a full line of Drieded Soups, Beef Capsules, etc.

Enquiries, or orders, by mail will receive our prompt and careful attention. No charge for packing. Call and see us.

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229 & 231 YAMHILL STREET

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PORTLAND, ORE.

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CAULKING IRONS, PITCH, OAKUM, BOAT COTTON, ROPE, BLOCKS, NAILS, SAIL-NEEDLES, TWINE, LIFE PRESERVERS, ETC.

And are prepared to furnish Outfits and Supplies for Alaska Miners at short notice and at Low Prices.

Sole Agents for the Celebrated **MERRIAM • PACK** of which we carry a large supply. These packs are acknowledged by experienced mountain climbers to be greatly superior to any pack made.

**EVAPORATED POTATOES AND VEGETABLES AND POTATO MEAL**

Packed in Tin—Will keep indefinitely in any climate.
For the Alaska Trade!

NEUSTADTER BROTHERS

Manufacturers of the well-known

“Standard Shirts”

“Boss of the Road” Overalls Mackinaw Clothing

LINED DUCK CLOTHING, FLANNEL UNDERWEAR AND OVERSHIRTS

.. BLANKETS AND FLANNELS ..

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...BEST VALUES AT MOST REASONABLE PRICES...

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BURLAP GOODS, TENTS, AWNINGS

Canvas, (all grades and widths), Wagon Covers, Sailor Bags, Oil Bags, Sleeping Bags, Etc.

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KLONDIKE + SUPPLIES
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Special Experience in Selecting and Packing Provisions
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ALL KINDS OF FRESH AND DRIED FRUITS

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Coffees, Teas and Spices
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GOLDEN WEST BAKING POWDER

COLUMBIA SODA    COLUMBIA COFFEE
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Sole Proprietors for the Pacific Northwest of the P. P. C.
Gas Coffee Roaster

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FIRST—Go via St. Paul and Chicago because the lines to that point will afford you the very best service.

SECOND—See that the coupon between St. Paul and Chicago reads via the Wisconsin Central because that line makes close connections with all the trans-continenal lines entering the Union Depots, and its service is first-class in every particular.

THIRD—For information, call on your neighbor and friend—the nearest ticket agent—and ask for a ticket reading via the Wisconsin Central lines, or address

JAS. C. POND, Gen. Pass. Agent, Milwaukee, Wis. or GEO. S. BATTY, Gen. Agent, 246 Stark Street, Portland, Oregon.
Spencer & Clarke Company,

SHIPPING AND COMMISSION

...Columbia River, Puget Sound and Alaska Salmon...

PRUNES, EVAPORATED APPLES, ETC.

Representing in Oregon, Washington, Alaska, and British Columbia.

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- Arbuckle Bros., New York
- National Starch Manufacturing Co., New York
- Cleveland Baking Powder Co., New York
- Proctor & Gamble Co., Cincinnati, Ohio
- Union Bag & Paper Co., Sandy Hill, N.Y.

- T. A. Snider Preserve Co., Cincinnati, O.
- St. Charles Condensing Co., St. Charles, Ill.
- American Cereal Co., Peoria, Ill.
- Kansas Salt Co., Hutchinson, Kan.
- L. G. Yoe & Co., Chicago, Ill.
- American Cereal Co., Chicago, Ill.
- D. Ghirardelli Co., San Francisco, Cal.

Etc., Etc.

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Merchants

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SOLICITS ACCOUNTS OF MINES AND MINERS

GOLD DUST HANDLED
PATRICK, MASTICK & CO.
85 FRONT STREET, PORTLAND, ORE.
MANUFACTURERS OF
Saddles, Strap-Work, Soles
... AND TAPS ...
DEALERS IN
LEATHER, FINDINGS AND
SADDLERY
SPECIALTIES
Sleeping Bags, Pack Saddles, Dog Harness,
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Examine our Patent Pack-Saddles with attachment for
Hauling Sleds or Wagons

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YEARLY CAPACITY
200,000,000 FEET

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WESTERN LUMBER CO.
E. K. JONES & CO.
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H. S. HOLMES, General Manager
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Oregon & Washington Flour Co.

Nos. 3 & 5 First St.

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All Grades Millers' Agents Bottom Prices
Oregon Short Line

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TO THE GREAT
KLONDIKE

AND

Yukon Gold Fields!

Connections made at Portland, Tacoma and Seattle with all Transportation Companies for Alaska

Steamship accommodations Reserved by Mail or Wire on application

For full particulars regarding Routes, Rates, etc. Address

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SALT LAKE CITY, UTAH
Corbitt & Macleay Co.

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...And Oriental Goods...

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CIGARS FOR OREGON

...THE BEST CLEAR HAVANA CIGAR ON THE MARKET...

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The Celebrated GOLD MEDAL BROOMS and SUNSET MATCHES

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SIDNEY, AUSTRALIA
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ESTABLISHED IN 1859

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Collections made at all points on favorable terms.
Letters of credit issued available in Europe and the Eastern states.
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...DRY GOODS...

Men's Furnishing Goods and Notions

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HEAVY + MACKINAW + GOODS

Made on our own premises, specially for the Alaska Trade.

EXCLUSIVE AGENTS FOR THE SALE ON THE NORTHWEST COAST OF THE

Blankets and other Heavy Woolen Goods

----- MADE BY THE -----

KLONDIKE CLOTHING

Our many years of experience in outfitting Alaska prospectors have taught us exactly what the climate demands. In many instances our clothing and underwear are specially designed and made for our trade. You cannot be too careful regarding the quality of the clothing you select when starting to the Yukon gold fields, as it will be impossible to purchase clothing while in the interior, so the clothing you start with must last you until you return. We do not carry inferior or trashy goods. NOT HOW CHEAP, BUT HOW GOOD, is what we strive for in our Alaska clothing. Will take pleasure in showing you our special lines of

Mackinaws, Corduroy Clothing, Flannel Shirts, Arctic Underwear, Sweaters, Blankets, Mitts, Wool-Lined Hoods, Leather Coats (Corduroy Lined), Rubber Boots (Nailed and Leather Sole), Buckingham & Hecht High-Cut Heavy Shoes, Etc., Etc.

Whatever you find in our stock is of guaranteed quality. If there was better quality you'd find it here. Write for our price list of Klondike clothing to either store.

THE RED FRONT

269 271 Morrison Street

Bet. Third and Fourth, PORTLAND, OREGON

...BRANCH STORES...

615 Second Avenue, Seattle, Wash.
837 Market Street, San Francisco, Cal.
"A Shipment of 420 Pack Saddles for the Klondike."

JNO. P. SHARKEY
MANUFACTURER OF
PACK SADDLES, APAREJOS
SLEEPING BAGS,
PACK STRAPS
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...CAREFULLY...

and study it well. After having decided which route you intend to take, come direct to Portland, Oregon, the terminus of the most direct steamship lines to the Gold Fields of Alaska, and by so doing you will be in THE LEADING CITY IN THE NORTHWEST to outfit. In making up your list of supplies be careful about Brands as you will want goods which will keep after you get there, this being especially true, regarding Bacon and Hams.

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