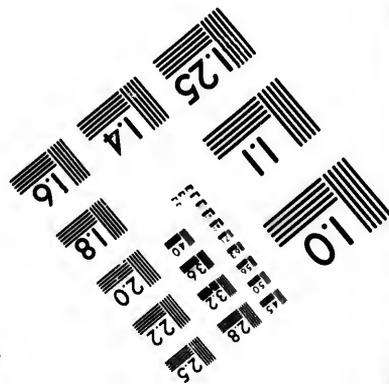
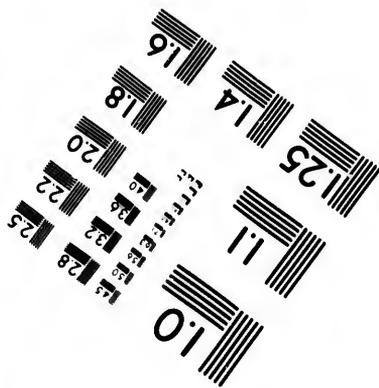
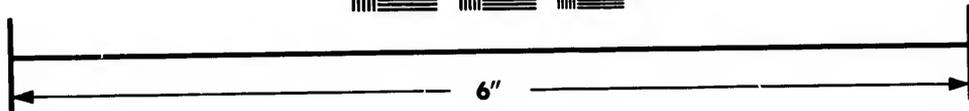
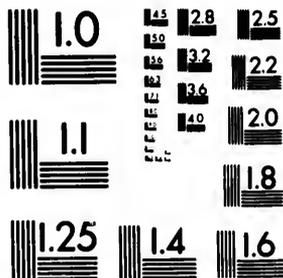


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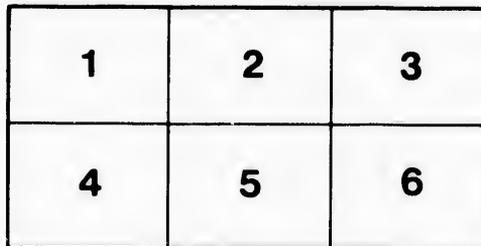
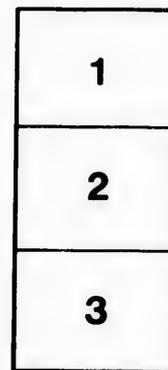
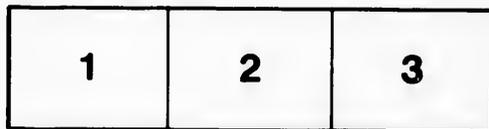
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BRITISH COLUMBIA.

A LECTURE

ON

QUEEN CHARLOTTE ISLANDS.

DELIVERED, BY SPECIAL REQUEST,

Before the Provincial Legislature,

BY

HON. JAMES G. SWAN,

OF PORT TOWNSEND, W. T.

CONNECTED WITH THE SMITHSONIAN INSTITUTE, WASHINGTON.

VICTORIA: Printed by RICHARD WOLFENDEN, Government Printer,
at the Government Printing Office, James Bay.
1884.

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Lecture

[DELIVERED]

Mr. Speaker, Ladies

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no doubt interest some
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Smithsonian Institution
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died in France in 1828
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heiress of the Hungers-
Charles, the proud Duke

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Lecture on Queen Charlotte Islands.

[DELIVERED IN LEGISLATIVE HALL, BRITISH COLUMBIA, BY HON. JAS. G. SWAN, OF PORT TOWNSEND.]

Mr. Speaker, Ladies and Gentlemen:

Before commencing my account of Queen Charlotte Islands, it will perhaps be proper for me, as it will no doubt interest some among you, to inform you why I, an American citizen, should have been sent by the American Government on a scientific exploration to the Queen Charlotte Islands, British Columbia. This leads me to give a brief account of the Smithsonian Institution, under whose auspices my visit to those islands was made.

Smithsonian Institution.

The Smithsonian, is not an Institute, but an *Institution of Institutes*, so to speak, having under its immediate direction and charge the Institution proper, which is the Executive head. The United States Fish Commission, the National Museum and the Bureau of Ethnology; it is, in short, what a university is to a college. It is governed by a Board of Regents, of which the Chief Justice of the Supreme Court of the United States is President; the others are the Vice-President of the United States, members of the Senate and House of Representatives, and distinguished citizens of various States. There are fourteen members of the Board. The members *ex-officio* are, the President of the United States, the Judges of the Supreme Court, and the executive heads of all the departments of Government. The Secretary of the Board is Prof. Spencer F. Baird, who is the chief executive officer.

The Smithsonian Institution was founded, and the first meeting held in December, 1847. The name was adopted from its founder, James Smithson, a wealthy English gentleman of great scientific attainments, who was born about the year 1754, and who died in France in 1829. He was the son of Hugh, the first Duke of Northumberland, and Elizabeth, heiress of the Hungerfords of Studley, and niece to Charles, the proud Duke of Somerset.

The will of James Smithson contained these words: "I bequeath the whole of my property to the United States of America, to found at Washington, under the name of the Smithsonian Institution, an establishment for the increase and diffusion of knowledge among men." This will, which was very voluminous, had first bequeathed various annuities, which have long since expired, was dated October 23rd, 1826, and was proved in the Prerogative Court of Canterbury, by Mr. Charles Drummond, a London banker, on the fourth of November, 1829.

The first announcement made to the American Government of the fact that the United States had become entitled to the bequest of Smithson, was in 1835, but the amount of the bequest was not fully received till August, 1838, when the ship Mediator arrived in New York bringing 104,960*l.* 8*s.* 6*d.* in gold, which was re-coined into American money at the United States mint in Philadelphia, producing \$508,318.46, as the bequest of Smithson, which amount was deposited in the Treasury of the United States,

who became trustees of the fund, where it remained till August, 1846, when a bill passed Congress, which became a law, and under it the Smithsonian Institution was organized, with the late Professor Joseph Henry as its first Secretary and executive officer.

The interest on the Smithsonian fund is applied towards defraying the expense of the Institution proper, and is added to by direct annual appropriations from Congress for the various Bureaus connected with it.

The Occasion of My Visit to Queen Charlotte Islands.

I had for many years been interested in the study of the Indians of the Northwest coast, particularly the Haidas, of Queen Charlotte Islands, and in 1873 I prepared a memoir on these Indians, accompanied with sketches of their carvings and tattoo designs. This memoir was published by the Smithsonian Institution, in Contributions to Knowledge, No. 267, July, 1874. In the notice by the Secretary, Professor Henry says that "the memoir is a valuable contribution to our general knowledge of anthropology and archeology, while yielding besides a special contingent to the ethnology of the North American Continent. Under the latter of these heads, it raises some questions of great significance, which it is hoped will lead to further investigation."

Prof. Henry was personally very much interested to have me make further investigations concerning the Haida Indians, but no arrangement was made during his life time, as he died on the 13th of May, 1878, and, although I went to Alaska in 1875, to procure articles of Indian manufacture for the Centennial Exhibition at Philadelphia, there was no provision made for my visiting Queen Charlotte Islands until 1883, when I was instructed by Prof. Baird, to make collections for the United States Fish Commission, the National Museum, and the Bureau of Ethnology, and to obtain all the useful knowledge I could relative to the manners and customs of the Haidas, of Queen Charlotte Islands; in short, to complete, as far as possible, my work commenced in 1873.

Voyage to Queen Charlotte Islands.

In accordance with these instructions, I left Victoria for Queen Charlotte Islands, on the steamer *Otter*, Capt. Meyer, on the 18th day of June, 1883, and after calling at the various way ports, I arrived at Massett, on the north end of Graham Island, on Monday, June 25th, and was hospitably received, and comfortable quarters assigned me by Alexander McKenzie, Esq., in charge of the Hudson Bay Company's post at Massett.

I was accompanied from Victoria by my only assistant, a young Haida named Johnny Kit Elswa, a very intelligent Indian, who speaks good English, and who was of great advantage to me as interpreter and purchaser of articles of Indian manufacture, as well as general servant. I had no occasion for the services of a white man, and consequently took none in any capacity. Perhaps, if I had been accompanied by

an intelligent white man as a botanist, I might possibly have added to our knowledge of the flora of the islands, but not being able to make extended tours inland for collections, I had to rely on Dawson's descriptions in his published account of his geological survey of those islands, made in 1878-79, and so far as I was able to observe, I found them correct.

I remained at Massett till August 6th, and occupied my time by making collections of Indian curiosities for the United States National Museum, and in studying the manners and customs, and informing myself about the Indians, for the United States Bureau of Ethnology, and collecting specimens of the fish and mollusks for the United States Fish Commission.

Geographical Location.

The Queen Charlotte Islands are a group in the North Pacific Ocean, lying off the coast of British Columbia, between latitude 51 deg. 55 min., and 54 deg. 15 min. north, and between longitude 131 deg. 2 min., and 133 deg. 5 min. west.

The widest portion is at the northern end of Graham Island, on the 54 deg. parallel, and measures about fifty-two nautical miles. The extreme length of the group, from north point, North Island, to Cape St. James, the southern extremity, is 156 miles.

The islands of the main group are North, Graham, Moresby and Prevost. Graham and Moresby are the largest and constitute nearly 85 per cent. of the whole area of the group. There are a great number of small islands and islets around the main group, particularly on the eastern side; some of these islands are of considerable extent, but are of minor importance when compared with Graham and Moresby. A line drawn from the southern extremity of the islands to their north-western point, has a bearing on the true meridian of north twenty-five west, and in general terms may be expressed as north-west and south-east.

When Named.

Some doubt exists as to who was the first discoverer of Queen Charlotte Islands, as the Russian, Spanish, French and English Navigators all cruised in the waters of the North Pacific and along the north-west coast; but they were named by Captain George Dixon of the snow* *Queen Charlotte*, a vessel of 200 tons, belonging to Richard Cadman Etches, and other merchants of London, who formed a commercial co-partnership under the title of the King George's Sound Company in 1787, the object of which was to establish a regular trade between the north-west coast and China.

This new company purchased and fitted out two vessels, the ship *King George*, of 320 tons, under command of Nathaniel Portloch, and the snow *Queen Charlotte*, under Captain Dixon. These two officers, who had served under Captain Cook, had, under that great master, acquired a competent degree of knowledge and experience to qualify them for voyages of exploration and discovery.

Captain Dixon, who had been cruising in the Alaskan waters, had left Norfolk Sound in the vicinity of Cape Edgecombe and was returning to King George's Sound or Nootka, which was the rendezvous of the fur traders of that period.

On the first of July, 1787, after observing the

* A vessel equipped with two masts, like the fore and mainmast of a ship, and a small mast just abaft of mainmast, for carrying a topsail like the modern bark.

north-west portion of Graham Island, he saw what he thought was a deep bay, but the wind being light and variable, he could not reach it, but the next morning, (July 2nd) the Indians came off in great numbers to trade. They had no blankets, but some robes of sea otter skins which Dixon called cloaks; and having laid off and on with moderate weather, trading with the Indians for furs, he prepared to continue his course south on July the fourth, and named the bay which he had seen, but not entered, Cloak Bay.

He then continued his voyage along the coast of the islands and on the third of August he named the group as follows:

"There is every reason to suppose not only from the number of inlets we met with in coasting along the shore, but from our meeting the same inhabitants on the opposite sides of the coast, that this is not one continued land, but rather forms a group of islands, and as such we distinguish them by the name of Queen Charlotte Islands." Captain Dixon does not appear to have landed on the Islands, but made his observations from his vessel's deck. But in 1787 Captain William Douglas, commanding the brig *Iphigenia*, one of the vessels belonging to Captain Meares's expedition, discovered that Cloak Bay, the greatest opening of which faces the west, is terminated to the eastward by a strait which separates the North Island from the northern coast of Graham, the largest island of the Queen Charlotte group; Douglas named this strait Cox's channel, anchored there occasionally, traded with the natives, and traversed it from east to west. It appears, however, that the first discovery of this passage belongs to Captain Gray, master of the American sloop *Washington*. Cox's channel is laid down on the Admiralty charts as Parry Passage, named, according to Dawson, after the late Sir E. Parry, but by what authority is not stated. The first chart on which Queen Charlotte Islands is shown, is the Admiralty chart from Vancouver Island to Cordova Bay, which was taken from a Russian chart of 1840, corrected by Mr. Inskip in 1855, with soundings by Commander William Pearse and A. F. Boxer, master Her Majesty's ship *Alert* 1860. The most recent chart is the one prepared by Staff Commander Daniel Pender, Royal Navy, in 1867-70, and by Dr. George M. Dawson, of the Geological Survey of Canada, from his own reconnaissance of the east and north coasts of the group, in 1879. Dr. Dawson did not visit the west coast of the islands, nor has any one examined it who has made any reliable report till my cruise from Massett to Skidegate in August, 1883, in a canoe, as suggested by Dr. Dawson in his report, page 42, as follows: "The time and means at my disposal did not enable me to make a survey or geological examination of the west coast of the islands, which would require to be carried on during the early summer, which appears to be the least boisterous portion of the year. It is a very dangerous lee shore for sailing craft, and would, I believe, be most easily dealt with in one of the canoes of the country, manned by a good Indian crew." As I am personally acquainted with Dr. Dawson and have confidence in his judgment, I had determined before leaving Victoria, to adopt his plan, and accordingly, through the kindness of Mr. McKenzie, the Hudson Bay Company's agent at Massett, I arranged with old Edinso, or Edinshaw, as the whites call him, to take me from Massett around the west coast to Skidegate. Edinso is a skilful pilot, and knows every nook and corner, and the name of every point, island,

inlet, harbor, reef or rock along the coast, and in this respect was of great service, but in every other thing he proved himself one of the most avaricious old pirates I ever met, and a blatant boaster of mythical deeds of prowess.

As I wished particularly to visit Cloak Bay and North Island, I made my first permanent camp at Kioosta village, in Parry Passage, on the north shore of Graham Island, formerly a large settlement, but now abandoned. I left Massett August 6th, at 8.30 A. M., and having stopped all night at Yatze village, a few miles west of Virago Sound, I reached Kioosta, a deserted village, on the afternoon of the 7th, and pitched my tent in front of the former residence of Edinso, who is, or claims to be the chief of North Island and all the northern portion of Graham Island, which, as one of his certificates from an early navigator says, "he acquired more by might than right."

Here I remained till the 14th, and from my observations of a month at Massett and a week at Kioosta, I formed a pretty accurate idea of the value of the north portion of Graham and North Islands.

Dawson's account of Graham Island being so nearly in accord with my own observations, I will quote from his report on the timber, grazing lands and climate. Mr. Dawson says: "The well known Douglas fir does not occur on Queen Charlotte Islands, finding its northern limit on the outer coast, at the north end of Vancouver Island. The forest is chiefly composed of Menzies spruce (*Abies Menziesii*), the western cedar (*Thuja gigantea*) and the western hemlock (*Abies Mertensiana*). The yellow cedar or cypress (*Cupressus Nutkatensis*) also occurs, though seldom in large groves, and generally scattered over the more barren and rocky portions of the hill slopes. Of the above mentioned, Menzies spruce, the cedar and cypress are the most valuable for timber, and though the first named is not equal to the Douglas fir for most purposes, it must ere long become valuable and can be obtained of excellent quality, and in almost inexhaustible quantity in these islands. Skidegate Inlet would be convenient in many respects as a site for a saw mill, but Naden Harbor or Virago Sound, and Massett Inlet are better suited for the purpose, affording easy access to a large area of wooded country." To these may be added the fine harbors on the west coast described by Marchand.

Humid Climate.

The great growth of trees and comparative immunity of the woodland from forest fires, depend principally on the damp character of the climate of the islands, which is also evidenced in many other ways. The heaviest rainfall, however, is local, taking place on the western mountainous axis, where the westerly wind, surcharged with moisture, first meet an impediment in their flow, and are thrown into the cooler regions of the atmosphere.

It may often be noted, that while heavy rain is falling on the mountains, the sky is comparatively clear over the strait to the eastward.

From this circumstance the triangular area of low land forming the north-eastern part of Graham Island is not subject to an extremely heavy rainfall, and would appear to be well suited to agriculture but for the dense forest covering, which, at the present time, it will not pay to remove.

Grazing Lands.

The Hudson Bay Company have a post at Massett,

where, for several years, cattle have been kept, or rather have kept themselves, grazing on the rich herbage which clothes the open sand-hills in the vicinity of the coast, and requiring no attention summer or winter. Between Massett and Skidegate, on the east coast, a considerable number of animals might live in this way, but of course would thrive better if temporary shelter from the winter storms could be provided. In winter the rainfall of the islands is generally very heavy, with persistently overcast sky, and gales more frequent and violent than those experienced on the coast to the southward. No observations on the total annual precipitation exist. Snow occasionally falls in the winter to the depth of a few feet, but does not lie long, except on the mountains. In the winter of 1877-78, no snow fell on the low lands.

The whole of the northern portion of Graham Island seems better adapted for cultivation than any other equally large area of the whole group.

Marchand's Discoveries.

In August, 1791, Capt. Marchand, a French navigator, arrive at Cloak Bay, in the ship *Solide*, a vessel built by the wealthy house of Baux, of Marseilles, expressly for a cruise to the north-west coast and around the world. The *Solide* was a ship of 300 tons, fitted in the most complete manner for a scientific as well as a commercial voyage. She was commanded by Capt. Etienne Marchand, assisted by two second captains, who would rank in the naval service of the present time as First Lieutenant and executive officer and Second Lieutenant and navigator, or sailing master. One of these second captains was Pierre Masse, and the other was Prosper Chanal. There were also three Lieutenants, two Surgeons, Roblet and Regnier, three volunteer officers, who would now rank as ensigns, and a ship's company of thirty-nine, making a total of fifty persons.

The ship carried an armament of two nine-pound howitzers; four four-pounders and four swivels; and was furnished with small arms and ammunition in ample quantity for the number of men and artillery she carried. The expedition was to circumnavigate the globe, and was the second voyage round the world that has been performed by the French; and, if the observations of the officers were as accurate in every place they visited as I have found them to be as regards Queen Charlotte Islands, they will be found equally reliable, for the published account of the visit to these islands is a simple and faithful exposition of every fact, and a picture drawn from nature of men and things, seen without prejudice and without system.

Cloak Bay.

On arriving off Cloak Bay, says the narrative,* the barge was dispatched under command of Capt. Chanal, accompanied by Surgeon Roblet and two other officers, in order to visit the bay, and ascertain whether it contained good anchorage and was a safe harbor. Capt. Chanal sounded the bay in different parts; he found from eighteen to thirty fathoms over a bottom of soft rock and shells, in other places white sand, and sometimes small pebbles. This bay, which is a league in depth, by a width somewhat smaller, is perfectly sheltered from the north, south and east quarters; but is entirely open to winds from the westward.

The mouth of Cox's channel, or Parry Passage,

*Marchand's Voyages, 2 volumes, London—Longman & Coes, Paternoster Row, Strand, 1811.

which opens into the bay, is not more than three quarters of a mile in width, and is narrowed by a reef, and a tolerably extensive bank which runs off from the south shore of the channel which forms the northern coast of Graham island, and reduces the passage in the west entrance to a breadth of three cables length at most; but in the narrowest part, the soundings are from thirty to forty fathoms, and in a few instances greatly exceeding the latter depth, over a bottom of hard sand and broken shells.

The southern coast of north Island was found to be safe and bold, but all along at a proper distance for anchoring, the depth of the water was from twenty to thirty fathoms over a rough bottom of coral and stones, which they were afraid would damage their hemp cables.

Capt. Chanal thought it proper to terminate the examination, which was for the sole purpose of ascertaining if it would be safe to anchor the *Solide*, which was in the offing, laying off and on, under easy sail; but with his party he went ashore and made many observations, which I will not here recount, but follow him down the coast as far as Runnell Sound, he having been directed by Capt. Marchand to make a minute examination of the shores between Parry or Cox's Passage and Runnell Sound, while the ship would pick up his party after the examination of that part of the coast was completed.

On the 28th of August, 1791, the long boat, under Capt. Chanal, with twenty days' provisions on board, and a full crew, left the ship at 7 o'clock in the morning and made sail toward the coast of which she was to make a minute examination, between the two points fixed for the limits of her cruise.

As Capt. Dixon, who explored these islands in 1787, had touched at no harbor, and traded rapidly under sail, with the different bands that inhabit the western shores, it was out of his power to make it known for purposes of navigation; but the survey which Capt. Chanal made of the harbors he discovered on the west coast of Graham Island is described with no less intelligence than correctness, and his description furnishes a series of sailing directions which merit the greatest confidence, and will be very useful to the navigators who may be induced to visit this coast. The long boat landed in 53 deg. 47 min. which is about ten miles south of Susk, or Fredrick Island. From this place the coast forms a great bight, in which Capt. Chanal was in hopes of discovering some fine harbor. He ranged along the northern shore, and about two miles from the point where he landed, discovered a creek,

Otard's Creek,

Half a league in length, and three or four cables' length wide—as a cable's length is 120 fathoms or 720 feet, it gives the width of this creek, at its entrance, some 2,500 feet, more or less. The bottom is of fine sand, with a depth of water from twelve to twenty fathoms. It is terminated by two sandy beaches, and a rivulet discharges itself on the south shore where the long boat landed. As he saw no sign of this creek having been explored by Europeans, Capt. Chanal called it Otard's Creek, from the name of one of his friends. This creek, although open to winds from the south and south-west, nevertheless affords good anchorage and good shelter; for everywhere the coast here seems level, and appears in no part to have been buffeted by the sea; the country which surrounds it is of middling height, but inland the hills

are much more lofty; in short it was thought that a ship might lie here in safety.

On leaving Otard's Creek, Capt. Chanal steered for an opening which appeared to the south-east half south, about four miles off. He at first ranged along the coast at a suitable distance, leaving on the star-board hand a small island which is terminated seaward, by a point of low rocks on which the sea was breaking; the lead constantly indicated a rocky bottom, and depth of water of from fifteen to twenty-five fathoms.

Port Louis or Athlow Bay.

When Capt. Chanal had run a little more than a league since his departure from Otard's Creek, he found himself at the opening of a channel of moderate breadth, into which the long boat entered. The bay or harbor to which the channel led, appeared to be of considerable extent; the bottom continued to be rocky, and the depth of water from twenty-five to thirty fathoms. In proportion as he penetrated into this channel, the sea gradually became smoother. Night coming on, he landed on a small beach on the northern coast and there passed a very quiet night.

It was high sea at midnight, and low water at half-past six in the morning; this was on the 29th of August, (1791), the day after the full moon. It was reckoned from the extreme marks that the sea had left on the rock, which is perpendicular, that the tides rise in the harbor about ten feet.

The next morning Captain Chanal resumed his course in order to complete the survey of the channel and of the harbor by which it is terminated. When he had proceeded a mile on a true east half north course, which is that of the direction of the channel, he turned to the south, south-east half south, following the trending of the south coast, and he found that he had reached a spacious and convenient harbor, where the soundings throughout were a muddy bottom, with from sixteen to twenty fathoms of water.

The harbor was named Port Louis, in honor of Lient. Louis Marchand, the captain's brother; the Indian name for this harbor is *Athlow*. Capt. Chanal came out by the south passage between the small island and the main land of Graham Island. I have named this island "Chanal Island." The water all along the coast is deep, fifteen fathoms being found quite close to the shore, over a bottom of sand and rock.

Port Chanal.

The next opening he entered, which is about three leagues north-east of Hippah Island, he found the depth of the water vary from twenty-eight to fifty fathoms over a bottom of sand and shells, and black sand; the channel narrowed till, at a distance of a mile inland, it was not more than three-quarters of a cable's length from shore to shore, and a short distance further, it makes an elbow and winds to the north, north-east half east, where it forms a fine basin; an excellent harbor, in which are fifteen fathoms of water with a muddy bottom, and ten fathoms, with the same bottom, at a small distance from the shore, which is formed of pebbles. At the extremity of this basin are two fine rivulets, which have their sources in the neighboring mountains. The water of them is very fine, and has none of that reddish color of the rivulets at Cloak Bay, and I will add, of those in Parry Passage. This harbor was named Port Chanal; an observation taken on the 31st of August, 1791, at noon, places its mouth in latitude 53 deg. 34 min.

north. It is sufficiently spacious to receive three or four ships, which might lie there at anchor, and with an excellent bottom, it affords the best of shelter. The sea is perfectly smooth and it is so completely land-locked, that at no time can the water be agitated. The tide rises only seven or eight feet. The channel throughout all its length presents no dangers, and close to its shores, which are bold, is a considerable depth of water. At the time of taking the noon observation, the west point of Hippah Island, or Nesto, for which the boat was steering, bore south by west at the distance of two leagues; he continued his course, and at half-past 1 o'clock, p. m., he doubled the west point of Hippah Island, which he sounded very closely, and proceeded to examine the channel which separates it from the main land of the large island; but the tide which was coming out of it and the wind that was blowing down it, drove the long boat violently back to the southward, and at half past 3 p. m. he discovered the *Solide* standing in for the land. He steered to join her, and at 5 o'clock p. m. he got on board, and Capt. Marchand stood for the entrance of Barclay Sound, on Vancouver Island, on his way to China.

There is no record of any other navigator passing through the channel which separates Nesto Island from Graham, nor has any mention been made in any of the published works on Queen Charlotte Islands, of this channel or of Skaleo Inlet; if any white man has ever explored them, it was probably some recent adventurer in search of coal or gold, who has not made his discoveries known to the public, and I think that I am the first one who has called public attention to this fine inlet which, I believe, upon a further examination, will be found of importance to the commercial interest of the Province.

I will here leave Marchand, and return to my camp at Kioosta, where one of my objects had been to obtain reliable information regarding the fisheries, and of the fish which abound in this vicinity.

Fish.

While at Massett I saw a very fine variety of salmon, called by the natives Swagan, (*O. Keta*) which though small, are very fat and fine flavored. This variety, which are taken in the spring, and the hump back salmon during the summer, and the dog salmon in the fall, with a very fine flavored salmon trout, seem to be the only varieties taken in Massett Inlet, but I did not learn that they are taken in sufficient quantities to warrant the establishment of a cannery on the inlet or at Virago Sound.

I collected a number of specimens of young cod (*Gadus morrhua*), from two to three inches long, showing that Massett Inlet is one of the breeding grounds of the true cod. Mr. McKenzie had a small quantity of the adult cod which he had salted "in keuch," a fisherman's term for a mass or a pile. I ate some of those fish and found them quite equal to Eastern cod, and far superior to the Pacific cod cured in San Francisco, showing that codfish, when cured near where they are caught, are much better than when allowed to remain a long time in a vessel's hold.

The cod are very plentiful on the west side of Queen Charlotte Islands, but the Haidas do not care for them. Their principal food fish is the halibut which abound, and are taken by the Indians in enormous quantities; they do not, as far as I could ascertain, ever go fishing expressly for cod, and when they do catch them while fishing for halibut, they are quite willing

to dispose of them to the whites. I do not recollect an instance of seeing codfish sliced and dried like halibut or salmon, in fact the Haidas will seldom cook them when they have a plenty of other kinds.

Black Cod.

The fish which they formerly prized for their oil, and took great quantities of for that purpose, are the *skil*, or black cod. In former years, when the Haidas were at variance with the tribes of the mainland, they depended on the *skil* fishing for their supply of grouse for food, for, although whales are plenty about Queen Charlotte Islands, and in all the inlets, the Haidas never attack them, like the Makahs of Cape Flattery, or the tribes of the west coast of Vancouver Island. Of late years, however, the Haidas have obtained their principal supply of grouse from Fort Simpson, or at Naas River, and consequently the *skil* fishing has been almost abandoned.

As this fish has latterly attracted much notice both in Victoria and in Washington, occasioned by some which I brought from Queen Charlotte Islands and introduced to eastern notice through the United States Fish Commission, I will now describe the *skil*, or black cod, as it is popularly termed, the scientific name of which is *Anoplopoma fimbria*.

My name has been mentioned in connection with the black cod as having discovered them; this is incorrect. They were known to the earliest navigators on the north-west coast, and by employees of the Hudson Bay Company, and other white persons for many years. I have known of them at Cape Flattery, Washington Territory, and eaten of them more than sixteen years ago; the only credit which belongs to me is having been the first to introduce them to the public in a marketable shape. I have had frequent correspondence and personal interviews with Alexander C. Anderson, Esq., Fisheries Inspector for British Columbia, previous to my visit to the Queen Charlotte Islands last summer, with regard to the black cod, and had sent specimens to Washington from Cape Flattery, with description of their rare excellence, six years ago. Mr. Anderson, also, in his report to the Minister of Marine and Fisheries, Ottawa, 1880, makes mention of these fish from information given him by Mr. McKenzie, of Massett; and I had promised Mr. Anderson that I would obtain all the information I could respecting the black cod, and if possible to obtain some of the fish. I found on my arrival at Massett that the Indians formerly caught the *skil*, as the Haidas call them, in the deep water about North Island, in Parry Passage, but had not fished there for several years, as they had abandoned the villages of Yakh and Kioosta on Graham Island, and Tadense on North Island, and although I remained in camp at Kioosta from August 7th, till the 14th, my Indians did not attempt to fish for *skil*, as we had no lines or hooks suitable for that fishery, but only a couple of short halibut lines, and some lines of my own for catching salmon by trolling. We found halibut exceedingly plenty, and my Indians caught all we required directly in front of my camp, about midway in Parry Passage. Old Edinso assured me that the *skil*, the halibut and the true cod are in abundance about North Island, and that true cod can be taken in Dixon's entrance as well as all along the west coast of Queen Charlotte Islands. The reason why the Indians do not fish for any of these three kinds except the halibut is, that they do not care for the codfish, and the obstacles to prevent them from

fishing for *skil*, to make it a business, is, as stated by Mr. McKenzie in Mr. Anderson's report: "Depth of water, difficulty of anchoring canoes, strong currents, and necessity of calm weather," all of which can be overcome by white men, with the modern means and appliances for fishing, as at present adopted in the north Atlantic deep sea fisheries.

At Massett I was informed by Mr. McKenzie that I could probably obtain some of the *skil*, at Skidegate, and on my arrival there I arranged with Mr. Andrew McGregor, of the Skidegate Oil Company, who sent a few Indians to the west coast to catch some. They returned in three or four days, bringing about 125 *skil*, which, under my direction and personal supervision, I had split like cod, and salted in a large vat with plenty of salt. My first intention was to pack them in barrels, like pickled salmon, as I thought, from their being so exceedingly fat, that they would become rusty, like mackerel or salmon, when exposed to the air after having been pickled.

Capt. Henry Miller of the steamer *Skidegate*, an experienced fisherman, belonging to Newburyport, Massachusetts, and several others in the employ of the Skidegate Company who were also accustomed to the mackerel fishing of the East, fully coincided in my views; but I could get no barrels, nor was there a cooper at Skidegate, and I had to think of some plan to get the fish to Victoria, where I intended to pack them to send to Washington. I knew the method adopted in Massachusetts for preparing halibut for smoking, and I determined to adopt that plan as the only method I could think of, although I felt in doubt about the fish reaching Victoria in good condition, as it was an untried experiment so far as the *skil* are concerned. I had the fish first rinsed in the pickle they had made in the vat where they were salted, then piled, skin side up, in a long pile, and on top of them were laid spruce plank and heavy stones to press out all the pickle; they were allowed to remain four days under this pressure which made them firm, and easy to handle. I then packed them in boxes, with dry salt, putting twenty fish in each box. On my arrival in Victoria, I had the fish examined by officers of the Hudson Bay Company and other competent judges who advised me to send them to Washington without repacking them, which I did, and they were received by the United States Fish Commission in the very best condition. Prof. Baird at once sent a box to the Fish Bureau of Boston, who tested them in various ways, and gave their unanimous opinion as to their superior excellence. Some of the fish were freshened and smoked, and in that condition are pronounced a great delicacy.

So great is the interest felt in the eastern cities, that Prof. Baird writes me he has urgent letters from Boston enquiring whether the black cod can be obtained in quantity, and stating that a ready market awaits them if they can be delivered in the eastern cities at a reasonable price.

The question having been satisfactorily solved about the black cod keeping in dry salt as I packed them, is of great value to poor settlers on the north-west coast, where the spruce abounds from the Columbia river to Alaska. All that will be required to cure the fish and get them ready for market, are salt and nails; the boxes being made of rough splints or shakes of spruce.

The black cod will undoubtedly pay best if first properly smoked and sent by rail to the eastern

market, although to cure and send them as I did will command ready sales at paying rates.

Best Method of Capture.

This brings me to the consideration of the questions of the distribution of the black cod and the best method of taking them.

The *Anoplopoma fimbria*, or black cod, of the whites; the *T'homak*, of the Nisqually Indians; the *Acht*, of the Clallam; the *Beshow*, of the Makah; the *Beshowee*, of the Nootka and Kuyyot; the *Skil*, of the Haida; the *Kwakeneth*, of Knight Inlet, etc., are found from Monterey to the Arctic ocean, but south of Cape Flattery, at the entrance of Fuca Strait, they do not attain a large size and are not of much repute as a food fish. They are sometimes sold in the San Francisco market as "Spanish mackerel," but are not much sought after. In the deep waters of Fuca Strait and Puget Sound, and in all the harbors and inlets of British Columbia and Alaska, wherever a depth of fifty fathoms or more of water are found, the black cod abound. They are occasionally taken in Alaska, in the Prince of Wales archipelago, and other localities, and by the Makahs of Cape Flattery, and by the Indians on the west coast of Vancouver Island when fishing for halibut in deep water, but those Indians do not fish for them as articles of commerce or for a regular article of food as they do for the halibut—they use them as articles of luxury, and whenever sold to the whites they command the highest price; the usual price at Neah Bay, Coupe Flattery, for a black cod or "beshow," as it is called by those Indians, is one dollar. The Haida is the only tribe I know of who take these fish in any quantity, and as their method is peculiar; I will describe it fully.

Their fishing lines are made of the stems of the giant kelp of the coast (*Nereocystis*, Hooker), which, commencing at the root of a size about one-fourth of an inch in diameter, gradually increase till they terminate in a pyriform hollow bulb on the surface of the water, from which extends a tuft of lanceolate leaves. The Indians cut these stems close to the bottom with a simple instrument formed of a V shaped branch, across the smaller portion of which a knife blade is secured, this is lowered over a kelp plant in twenty or thirty fathoms of water, and the stem easily cut off by a sudden pull of the line attached to the cutter.

These stems are then soaked in fresh water to extract the salt, then stretched and dried in the smoke which toughens them, and makes them exceedingly strong. The pieces are then knotted together till they form a line one hundred fathoms or more in length, and are then neatly coiled up for use.

The hooks differ from any fish hook I have seen. They are made of the knots of hemlock limbs cut out from old decayed logs. These are split in pieces of suitable size, and whittled to the required shape and bent, by being steamed, into the form which, in the *skil* hook, resembles the longitudinal section of a goose egg. The lower portion of these hooks are curved inward to form a barb, and when not in use the two ends of the hook are fastened together by a piece of twine, which is also used to tie on the bait. When the hook is to be used, the two parts of the hook are separated by means of a stick or peg, which the fish knocks out when he takes the bait, and the two ends of the hook close together and hold him fast

the peg floats to the surface and indicates to the Indian that he has caught a fish.

The sinker is another ingenious contrivance; it is a large stone weighing from twelve to fifteen pounds and a smaller one to serve as a tripping stone; the line is firmly wound around these stones with many turns and a bight or loop tucked under one of the parts in the same manner a signal officer rolls up a flag in a ball and tucks a bight of the halyard under a turn, which, when pulled out sets the flag free, so when the Indian fisherman thinks, from the number of floating pegs that he has enough fish, he pulls out the loop of his line, the stones become loosened and fall out, and he hauls in his line relieved of their weight.

The Haidas frequently put on one hundred hooks to a single line, which acts like a trawl, and so plentiful are the black cod that often from fifty to seventy-five are hauled in at one time. The bait used, seems to be anything handy, as the *skil* is a greedy feeder and will take either fresh herring, squid or a strip of the white skin from a halibut's belly. The Indian, however, has enemies to contend with; one of the most formidable is the ground shark, or *nurse fish* as the sailors call them, which will eat off the bodies of a whole line full of fish, leaving only their heads; there is a small fish of the cottoid or sculpin variety (*Blepsius cirrhosus*—*Nukaio, kaiungo*—), Haida which will steal the bait and sometimes gets caught. Dogfish also are at times very troublesome. Whenever the Indian is sure of the presence of these pests, he goes to another place to fish.

As the hooks for the *skil* differ in shape from those used by the Haida for halibut, I inquired of the Indians the reason, and was informed that they do not get fast to the bottom so easily as their common hooks or as the steel hooks of the whites. Whether this is so or not I have had no means of judging, but presume, as the Haidas are the most successful in that kind of fishing, they probably have some reason for adopting this peculiar shape. Of the method adopted by the Haidas to extract oil from the *skil*, I cannot speak positively, as I had no opportunity for observation, but I presume it does not differ from that adopted at Naas River for the extraction of oil from the eulachon, or the method of the Makahs for extracting oil from dogfish livers, which methods are by employing heat; either boiling in kettles, or by means of hot stones placed in some large receptacle like a canoe or large wooden box; but as my desire is not so much to speak of the black cod for their oil producing qualities, as how to obtain them in sufficient quantity for market, I will pass to the consideration of this latter question.

I have shown that the Haida method of capturing the black cod is by the trawl, a long line to which many baited hooks are attached, which are sunk to the bottom in very deep water, from forty to one hundred fathoms; experience having proved, that with the *skil* as with the true cod, the largest fish are invariably found in the deepest places. I do not think, however, that trawl fishing on the west coast of Queen Charlotte Islands would be attended with success if common steel hooks are used, as the bottom is rocky, with a deal of coral formation, and common steel hooks would be very liable to get fast, and thereby occasion the loss of the line and gear. It has been suggested to me by Joseph Spratt, Esq., of Victoria, who takes a great interest in the development of the black cod fishery, that perhaps steel

hooks can be made somewhat approximating the form of the Haida hook, which would not be liable to get fast to the bottom, and would be quite as effective as the Indian form. I fully agree with Mr. Spratt in this matter, and hope to see the experiment tried; this can easily be done on any of the sealing schooners which cruise for fur seal at the entrance of Foul Strait, and off the harbors on the west coast of Vancouver Island. During foggy or calm weather, when the vessels cannot go to the sealing grounds, they might occupy their time profitably by setting trawls in the deep water off the strait and west coast harbors, and, as every schooner takes a crew of Indians, either Makah, Nittinat or Clioquot, they would always have some one or more among them who could point out the best localities for the black cod. This would be an inexpensive method of testing the question as compared with the cost of fitting out a vessel expressly for the fishery. But I am strongly of the opinion that the best method of taking the black cod will be that which is now almost universally adopted by the fishermen off the New England coast, and that is by gill nets, the use of which has long been adopted in Norway for the capture of cod, and considered quite indispensable by the fishermen of that country and is said to have been introduced into Norway about 1685, and are extensively used in the great winter cod fisheries that are carried on at the Lofoten Islands. These islands are situated on the west coast of Norway, north of the Arctic Circle; and the banks in that vicinity are the favorite resort of the immense schools of cod that gather there to spawn. Gill nets have also long been used in the Newfoundland cod fisheries, especially on the east and south coast of the island, but the exact date of their introduction is unknown. It is asserted, however, that this method of fishing has been pursued since early in the present century, and is still carried on to some extent.

In the Bulletin of the United States Fish Commissioner, vol. 1, 1831, from which I have derived the above information, is also stated that the first introduction of gill net fishing into the United States was in 1878, when Professor Baird, U. S. Commissioner of Fisheries, knowing how profitably these were employed by the Norwegian fishermen, decided to make experiments with them at Cape Ann, Massachusetts Bay, with a view to their introduction among the American fishermen. He accordingly secured a set of the Norwegian nets, which were sent to Gloucester and there tested by the employees of the Commission, the nets varying in length from fifty to eighty fathoms long and two fathoms deep. The first experiments made were not satisfactory, owing chiefly to the fact that the net was found far too frail for the large cod which frequent the New England coast in winter, the nets being frequently torn by the large fish forcing their way through; but even under such unfavorable circumstances, nearly one thousand pounds were caught on one occasion.

The opening of the International Fishery Exhibition at Berlin, Germany, in the spring of 1880, presented a favorable opportunity for studying the Norwegian methods of netting cod, and a careful examination was made by Capt. J. W. Collins and Pro-

fessor Good of the U. S. Fish Commission, who were sent by Professor Baird to Berlin for the purpose. The result was, that nets of requisite strength were made by the American net and twine company of Boston, for the Fish Commission, and in the fall of 1880, Capt. George H. Martin, of Gloucester, Mass., master of the schooner *Northern Eagle*, fitted out with them for the winter fisheries for cod off Cape Ann, and in Ipswich Bay.

Captain Martin began fishing with nets November 27th, 1880, and up to the 20th of January, 1881, had caught 111,000 pounds of cod. None of the trawl fishers took more than one-third of that amount, though fishing at the same place. The netted fish are larger than those caught on trawls, averaging during the first week's fishing, twenty-three pounds apiece, but no small fish, such as are frequently taken on trawls, and can be sold only at a reduced price, as the small fish pass through the meshes of the gill net. On a trip ending January 11th, 35,000 pounds of cod were taken by the *Northern Eagle*, 8,000 pounds of which were caught in a single morning. Two other vessels, which were absent the same length of time, fishing at the same place with trawls, got only 4,000 and 8,000 pounds respectively.

Since that time she has made another trip, taking the same amount, 35,000 pounds in four days' fishing, taking 18,000 pounds in one day. On this day the schooner *Christie Campbell* of Portsmouth, N. H., set ten trawls, (each trawl having 1,000 hooks) close to the nets. The 10,000 hooks caught 2,000 pounds of fish to the 18,000 pounds taken in the nets. Since these facts were made known, quite a lively interest has been manifested in fishing communities, and many vessels both of the shore and bank fleet, are being supplied with this kind of apparatus for the cod fishery.

These nets are set and hauled on any part where cod are now taken. They are set in the following manner from the boat in which they are taken from the fishing schooner: The anchor for the net is first thrown overboard, having a line fifty fathoms long attached to it; when 25 fathoms of the line are paid out, the buoy line is bent to it and buoy and line thrown over and the remainder of the anchor line, the end of which is made fast to one end of the net which follows next. When the net is run out, another 50-fathom line is attached and with an anchor at its end is thrown over and finishes the work, the boat all the time drifting or being pulled with the tide. These nets are set parallel with the flow of the current, and when both anchors are down, remain in one position whether the tide be ebb or flood; the nets are weighted with sinkers of stone or other material which keep them on the bottom at any required depth, and the floats keep them in a vertical position, thus forming a wall at the bottom of the water. The nets are usually set in the afternoon, and allowed to remain setting for several days, unless for some reason the vessel leaves the fishing ground, experience having proved that most fish are taken at night.

Each morning the nets are under-run, by lifting one end across the boat, and following along to the other end, taking out the fish as the net passes over the boat and into the water on the other side. When

the boat has passed entirely under the net, it remains just as before lifting, as in the process of under-running, the anchors at each end are not raised.

No Bait Required for Net Fishing.

One great argument in favor of net fishing for cod is that no bait is required, which, in the trawl, or hand-line fishing, is a great expense, and it is apparent that even if the daily catch should be smaller than when trawls are used, the profits of the trip would be much greater. These nets could be undoubtedly used with great advantage in all the inlets of the mainland, where the eulachon are accustomed to run in the spring; they form for the cod, halibut, black cod, and other fish of the North Pacific, a bounteous supply of food, and at the time of their appearance are followed by innumerable swarms of the larger species, in the same manner that the capelin of the North Atlantic furnish food for the myriads of cod which follow them into the various bays, where they are taken by the net fisheries.

I have spoken particularly of the black cod, or *skil*, fishery at Queen Charlotte Islands, because the Haidas are the principal fishers for them; but it must not be understood that Queen Charlotte Islands is the only place where these fish can be taken—all the deep waters of the Province, particularly along the west coast of Vancouver Island, and the inlets of the mainland, clear to the Alaskan boundary, teem with these fish, offering to the fishermen of the Province a rich and lucrative harvest, awaiting the gathering, to add to individual wealth, as well as the wealth of the Province, and representing a new industry, by which the Indian population can be greatly benefited.

I look forward with confidence to the time, which is in the near future, when we shall see settlers at Kioosta and North Island, at Athlow or Port Louis, at Port Chanal, Skaloo and other inlets, harbors and bays on the extensive coasts of the group, who will develop the fisheries, the lumbering interests, and open up the unknown interior of the islands to the development of the products of the earth. But to produce these results there must be a thorough hydrographic survey and a reliable chart made by which the settlers can be directed to the most desirable locations, and a geodetic survey of the interior to discover and make known the varied elements of wealth now lying dormant in that interesting group.

Leave Kioosta for Skidegate.

After remaining in camp at Kioosta village in Parry Passage from August 7th till the 14th I broke camp and started at 10.20 A. M. with an ebb tide, and calm weather, and paddled along the shore to Cape Knox, which we passed at 11.30 A. M., and met the southeast wind, which commenced blowing fresh, accompanied with rain. This compelled me to seek a camp, which we found at a place called Klikakoon, when we landed at 1:30 P. M., and scrambled over a reef of rocks which extended along the shore for several miles, and is about half of a mile wide, making a very dangerous landing for any one but Indians, who are accustomed to its dangers.

At this place I remained wind-bound till the 17th.

The coast, for miles, shows evidence of violent volcanic action; the country is densely covered with spruce and hemlock trees, and the heavy beach grass extends far into the timber; but the general appearance is of a rock-bound coast, which, with the exception of the timber, is worthless to a degree, and shows the general character of the extreme north-west coast of Graham Island.

At this place I saw drift logs and planks of California Redwood, showing the drift of the inshore current, which almost invariably sets to the north, from Lower California. The southern, or offshore current, caused by the impinging of the *kuro shimo*, or Japanese gulf stream, on the north-west coast in the latitude of Queen Charlotte Islands, which takes a bend to the south, and another to the north past the Kurile Islands. The southern current seems to produce an eddy in shore which almost invariably sets to the north, as before remarked, bringing all sorts of drift wood from California and Oregon, and casting it ashore on Queen Charlotte Islands; where an interesting collection of debris may be found in all the coves of the group. It is the influence of the Japanese warm stream which affects the climate of the whole north-west coast, particularly modifying that of Queen Charlotte Islands, which resembles that of Neah Bay, Washington Territory.

At 9 A. M. on the 17th of August, I left camp Klikakoon, and at 2:30 P. M. again made a landing at a place called Tledoo, a summer camp for sea otter hunters.

I remained at this place till the 21st, being detained by constant rain and head wind, with heavy sea. At 5:20 A. M. I broke camp and started for Hippah, or Nesto Island, as it is called by the Haidas.

In the afternoon we passed T'si-kwa-koon Point, near which, on its northern side, is a stream of water which, I think, is the Otard Creek of Chanal.

From T'si-kwa-koon to Shoot-koon, is an inlet which, Edinso told me, is named Athlow. This has a small island at its southern entrance, and is, I judged, the Port Louis described by Chanal.

From Shoot-koon Point we passed across the entrance of an inlet which I believe to be Port Chanal, but the fog setting in thick, I could see no more, but kept on and made camp for the night on the east side of Nesto Island, at an old Indian camping ground, named Ta-wa-tise. Directly opposite our camping ground, I saw the entrance to a fine inlet, the Indian name of which is Ska-loo. This inlet has never been described or surveyed, and I recommend it to the particular attention of the government as a place eligible for settlement, as well as Ports Louis and Chanal.

From Hippah, or Nesto Island, I continued my course towards Skidegate, passing, on the 22d, the mouths of two inlets, Kung-wa and Chathl, in the former of which, I was informed by Edinso, is plenty of yellow cedar, and both inlets are good harbors, well protected and safe. There is also a small bay making in between Skwa-ka-tance and Na-wa-dun Points, called T'kiew.

As the fog commenced to obscure the land, we ran across Rennell Sound, and made a camp at a most dangerous place, called Tehnwa, a mere cove, where we remained, amid much discomfort, till the 25th,

when we started for Skidegate, and reached the oil works of the Skidegate Oil Company, Sunday morning, August 26th, after a tedious and dangerous canoe voyage of twenty days from Massett. As Skidegate channel and inlet are fully described by Dr. Dawson in his report before alluded to, it will be only necessary for me to state, that I found his report correct.

Besides the harbors and inlets I have named, which are not laid down on the chart, I discovered that Buck Point, of Vancouver, as shown on the Admiralty Chart, is a point or peninsula, and not an island as the chart shows, but there is an island three miles due south of Buck Point in the entrance of Skidegate Channel, named Kwigets, and some rocks inside of it bare at high water. I also discovered an inlet making in on the north shore of Skidegate Channel west of the North Arm, as laid down on Dawson's map.

I am of the opinion that when the west coast is surveyed, many of the openings to harbors, bays and inlets, as mentioned in this paper, will be found as simply channels around islands, like those on the east coast of Moresby's Island, and further south toward Cape St. James.

Cruise to Laskeek.

I remained at Skidegate till September 4th, when I went to visit the villages of Skadana, Cumshewa, and Laskeek or Tanoo, and was absent a week. I found more of interest at the village of Laskeek than at any of the Indian towns I had visited. The reason for this is, that Massett and Skidegate, the principal villages, are under the influence of missionaries who have succeeded in inducing the Indians to abandon many of their superstitions, and dispose of their masquerade dresses; but at Laskeek, everything seems in its primitive condition, and I was enabled to see more of the ancient customs than elsewhere, and to study their strangely carved columns, many of which bore emblems different from anything I had before seen. There were, however, but few Indians in the village, as most of the inhabitants were absent at the canneries on the main land, or at the oil works at Skidegate. I believe if there could be settlements of whites on the Queen Charlotte Islands, who would furnish means of employment to the Indians, they would be induced to remain at home, and not flock to Victoria and other places to engage in questionable means for securing wealth, which is lavishly thrown away at their ceremonials and masquerade dances.

The Haida Indians have a marked talent for the fine arts, as is evinced by their carvings in wood and stone and the precious metals—in their works of sculpture, their architecture, their paintings and drawings. Their imitative talent is excellent as shown in carvings in ivory and stone from designs found in pictorial papers and magazines. Some of their stone work which I sent to Washington, such as caskets, plaques, columns and images, elaborately and elegantly carved in high relief, showed genius and talent of a high order, that should be encouraged. All writers upon the natives of Queen Charlotte Islands are agreed in describing them as of superior intelligence. Fleuriën, the editor of Marchand's

voyages, says of them: "The French* never saw them either armed or distrustful; they followed them into their family circles, and found them good husbands and good fathers; they lived several days as it were in intimacy with them; they studied them as much as it is possible to do when people can explain themselves only by signs; and everything that they relate of their manners, their customs and their character, announces a hospitable, mild, intelligent, laborious and industrious people, endowed with great good sense, to whom the useful arts are not unknown, who join to these even the agreeable ones, and who may be said to have already made considerable advances towards civilization."

This is what Marchand thought of the Haidas in 1791. Dixon, who traded with them a few years before, from his vessel's deck, and did not set foot on shore, considered them, without any proof, as cannibals. I can safely assert that there is no evidence, nor is there a scintilla of reliable evidence, that the natives of the Northwest coast ever were cannibals, or ever feasted on human flesh like the natives of the Fiji and other South Sea Islands have done. I can truly say in the language of Flenriem: "I am not an apologist for savage people; never have I fallen into ecstasies before the men of nature; never have I participated in the opinion of certain philosophers who have racked their imaginations and put in play the illusion of eloquence, for the purpose of showing him to us as the most excellent of men. I am not here examining whether man be good, or whether he be wicked through his nature, nor what he might have lost or gained in the state of great societies." But let us not judge too precipitately of the character or real worth of the natives of Queen Charlotte Islands, or what they are capable of doing, by the representatives of that tribe to be met with on Victoria streets.

The limits of an evening's reading will not afford me time to say more upon this subject at present, but in my official report of my visit and observations made last summer on Queen Charlotte Islands, I intend to discuss this question at length, and endeavour to show that, with the aid and the fostering care of the Government, the Haidas of Queen Charlotte Islands, and perhaps other tribes on the main land, are capable of making a great stride towards civilization.

Fruits.

While at Laskeek, I noticed the salal (*Gaultheria*, Shallow), which grows there in rich profusion, and yields the largest and finest of these wholesome berries I have seen. The salal seems to be but little appreciated by whites, but is in reality one of the most delicious of berries for cooking purposes, either in the fresh state or dried for winter use, like currants. Strawberries also abound on Queen Charlotte Islands and at Massett, and along the northern shore of Graham Island they are in greater abundance than in any place I have seen, and from the size of the berries and their abundance, they seemed quite equal to some of the cultivated varieties. The plants, as is usual with the strawberry, are low, and the berries often found quite hidden in the mossy covering of the ground, but where the soil is rich, particularly in those places

where the sod has been removed and piled around a cultivated patch, as is usual with the Indians, I notice the strawberry plants attain great size. I gathered one specimen at Yakh village, Parry Passage, which, when dried, measured more than seventeen inches from root to flower, and the plants look healthy and vigorous. Other small fruits, such as are common on the main land are found on Queen Charlotte Islands, such as the salmonberry (*Rubus Spectabilis*), thimbleberry (*R. odoratus*), Raspberry (*R. Uruinus*), crab apple (*Rynus rivularis*), and a coarse species of black currant, which is of disagreeable taste and odor. Red and black huckleberries also abound, but of all the fruits, I think the wild strawberry in the early summer, and the salalberry in the fall, are the finest and most plentiful. I was told that cranberries are found in some of the islands, but I did not see any. I believe they can be profitably cultivated in many places on the islands, particularly Massett Inlet.

Potatoes and root vegetables of all kinds thrive well, but the climate is too humid for cereals to ripen well. Grass, both native and cultivated, yields good crops, and Mr. McKenzie, at Massett, finds no difficulty in curing all the hay he requires, but no systematic agriculture has been attempted, and until it shall have been tried, no one can say with certainty what those islands are capable of producing. Queen Charlotte Islands are well adapted for a home for the fishing population, either of Scotland, Ireland or Scandinavia, but before any emigrants are invited there, the island should be thoroughly surveyed, and the interior fully explored; all the information now known is of a very narrow belt of land on the immediate coast, but there is much of value yet to be developed in the interior, of mineral wealth in coal and precious metals, and magnificent forests of timber. The great drawback to the growth of these islands in commerce and agricultural importance at present, is the uncertain and difficult means of communication; when that can be remedied, and monthly transportation of passengers, mails and freight, be assured, there is no reason to doubt that the islands will soon be visited by persons who will make permanent settlement there, and develop the fisheries, the lumbering, and the agricultural interest, and build up thriving communities to add to the wealth and importance of the Province.

I take this occasion to tender my thanks to the officers of the Hudson Bay Company in Victoria, and their agents at Port Simpson and Massett, and to the officers of the Oil Company at Skidegate, for their courtesies and assistance in enabling me to make my explorations of Queen Charlotte Islands; to the Indian Commission, and the Inspector of Fisheries, for valuable information; to the Collector of Customs for courtesies rendered me at the Custom House; to the Provincial Government for doing me the honor of inviting me to read this essay before them this evening; and to the members of the Legislature, and the audience, for their kind attention.

I shall feel that I have effected some good, if what I have said to-night may be the means of awakening an interest in those beautiful islands in this Province, so that they may become tenanted with a prosperous community, or communities, of settlers.

*Marchand's Voyages, vol. 1, p. 24.



