

POPULATION AND RESOURCES OF ALASKA.

LETTER

FROM

THE SECRETARY OF THE INTERIOR,

TRANSMITTING

*A preliminary report upon the population, industry, and resources of Alaska.*

JANUARY 15, 1881.—Referred to the Committee on the Census and ordered to be printed.

DEPARTMENT OF THE INTERIOR,  
*Washington, January 13, 1881.*

SIR: I have the honor to transmit herewith for the information of the House of Representatives a copy of a preliminary report upon the population, industry, and resources of Alaska, by Ivan Petroff, esq., special agent of the census, appointed under the provisions of the eighth section of the act relating to the census, approved April 20, 1880, and the accompanying map of Alaska, together with a copy of the letter of the Superintendent of the Census, dated the 4th instant, forwarding the same to this department, and suggesting that the report be laid before Congress with reference to propositions now pending concerning the District of Alaska.

The information obtained by Mr. Petroff is of great value, much of it being upon matters and concerning regions not previously the subjects of investigation, and I have, therefore, to recommend that the report be printed.

Very respectfully,

C. SCHURZ,  
*Secretary.*

To the SPEAKER  
*of the House of Representatives.*

DEPARTMENT OF THE INTERIOR, CENSUS OFFICE,  
*Washington, January 4, 1881.*

SIR: I have the honor to forward herewith a preliminary report upon population, industry, and resources of Alaska, by Ivan Petroff, esq., special agent of this office, appointed under the provisions of the eighth section of the act of April 20, 1880.

Mr. Petroff has in the course of the season now closed made a very remarkable expedition through the northwestern parts of Alaska.

The Sitka and Wrangell region still remains to be visited before Mr. Petroff can render a final report, but it has seemed to me that on account of the very high value of the information which Mr. Petroff has obtained, much of it touching matters not previously investigated, and concerning regions not even visited by the officials of the Russian state or of the Russian church, it is desirable that the matter now communicated should be laid before Congress with reference to propositions now pending concerning the district of Alaska.

I have the honor to be, very respectfully, your obedient servant,

FRANCIS A. WALKER,

*Superintendent of the Census.*

Hon. C. SCHURZ,  
*Secretary of the Interior.*

## LETTER OF TRANSMITTAL.

WASHINGTON, D. C., December 28, 1880.

General FRANCIS A. WALKER,  
*Superintendent of the Census.*

SIR: In obedience to your instructions of the 20th of April, 1880, under which I am directed to ascertain and report as far as possible the number of inhabitants of each geographical and ecclesiastical division of the Alaskan districts, with the distinctions of race, color, country of birth, with an account of the occupations, mode of subsistence of the people, their dietary, dress, &c., indicating the proportional consumption of domestic and imported articles; their religious and educational institutions, with all statistical information relating thereto which is available, together with such matters of economic and social importance as should seem to me to fall within the scope of my labors, I have the honor to report that in compliance with these instructions I have, during the past season, succeeded in making a very careful, and, I trust, authoritative enumeration of the people of all Western Alaska, together with the facts and statistics bearing directly upon their condition, and the volume of trade in that region. Of the southeastern, or "thirty-mile strip" of Alaska, in which the great bulk of the "Indians" proper reside, and where the towns of Sitka and Wrangell are located in close juxtaposition, containing, as they do, the major portion of the white people of that Territory, I am unable to present to you in this report of progress an authoritative statement in response to your letter of instructions. The reason for this, in brief, is due to the fact that the assistant agent designated for this service in the Sitkan district, failed to render timely recognition of his appointment, or to send in to the Census Bureau a single figure or line bearing upon the subject in season for this report. Of this omission, or dereliction, as the case may be, I naturally was ignorant until my return from Alaska and reporting at your office. The season now being so far advanced, and the necessity of my remaining here long enough to properly collate and arrange my field notes, make it impracticable for me to proceed to Sitka and there finish this work before the expiration of this year.

Therefore, in accordance with your kind suggestion that I should prepare, for the use of your office and for the instruction of the public, a report of progress, I will undertake in this writing to give a succinct and connected account of the people of Alaska and their condition as viewed by myself, and from information which I have necessarily been obliged to rely upon in regard to the remote and far distant tribes. In order that I may present the facts and ideas which I possess the more clearly and intelligently to you, I have arranged my notes under several heads or chapters, as follows:

First. The country of Alaska.

Second. The Alaskan people, and their numbers.

Third. The trade and resources of Alaska.

I have the honor to be, very respectfully, your obedient servant,

IVAN PETROFF,  
*Special Agent.*

## CHAPTER I.

### I.—THE ALASKAN COUNTRY.

The Territory of Alaska, so called, embracing as it does an area nearly equal to one-sixth of the whole United States and Territories, is a region to which the attention of the American people was very suddenly and earnestly directed in the summer of 1867, when it was secured as a measure of diplomacy and good will between the American and Russian Governments. The Russians, who occupied the land with an eye primarily to the fur trade and its dependencies, retired from that country, leaving us a generally correct map of the vast extent of rugged coast, locating its people in a measure correctly, with some facts and figures bearing upon the resources, natural history, and trade, which have since been found to be quite accurate, but which at the time of the transfer were so clouded and distorted by the rival advocates of the purchase and its opponents that the real truth in regard to the subject could scarcely be observed. Since our acquisition of this new land much activity and much enterprise on the part of our people have been manifested in the way of the development of the fur trade, the prospecting of mountain ranges and valleys for gold, silver, and other precious minerals, the labor of cod-fishing, and the scrutiny of other resources supposed to exist in the form of coal and timber.

When we took possession of Alaska a great many active and ambitious men on the Pacific coast were imbued with the idea that much that was really valuable in Alaska in the line of furs and the precious metals would be developed to their great gain and benefit if they gave the subject the attention which it deserved. Accordingly, many expeditions were fitted out at San Francisco, Puget Sound, and other points on the Pacific coast, and directed to an examination of these reputed sources of wealth in that distant country. Twelve years have rolled by, and in that time we have been enabled to judge pretty accurately of the relative value of this new Territory in contradistinction with that of our immediate possessions. We now know that the fur trade of Alaska is all, and even more than it was reputed to be by the Russians.

The most notable instance, perhaps, in this connection, of the great value of these interests may be cited in the case of the Seal Islands. It will be remembered that at the time of the transfer, when the most eloquent advocates of the purchase were exhausting the fertility of their brains in drumming up and securing every possible argument in favor of the purchase, that though the fur trade of the mainland, the sea-otter fisheries, and possible extent of trade in walrus oil and ivory, was dwelt upon with great emphasis, these fur-seal islands did not receive even a passing notice from their hands as a source of revenue or value to the public. Yet it has transpired since the government has been wise enough to follow out the general policy of protecting the seal life which the Russians inaugurated on the Pribylov Islands, that these interests in our hands are to-day so managed and directed that they pay into the Treasury of the United States a sum not alone sufficient to meet all the expenses of the government in behalf of Alaska, but a large excess is left in the Treasury of the United States every year.

But when we come to speak of the other resources, such as the adaptation of the country for settlement by any considerable number of our people as agriculturists or husbandmen, or its actual value as a means of supplying gold and silver, coal or timber, we have to say that as yet no remarkable mines have been discovered, nor have there been any veins of coal worked that would in themselves sustain any considerable number of our people or give rise to any volume of trade.

The timber of Alaska in itself extends over a much larger area of that country than a great many surmise. It clothes the steep hills and mountain sides, and chokes up the valleys of the Alexander Archipelago and the contiguous mainland; it stretches still more scant, but abundant, along that inhospitable reach of territory which extends from the head of Cross Sound to the Kenai Peninsula; where, reaching down to the westward and southwestward as far as the eastern half of Kadiak Island, and thence across Shelikof Straits, it is found on the mainland, and the peninsula bordering on the same latitude; it is confined to the interior opposite Kadiak, not coming down to the coast as far eastward as Cape Douglass. Here, however, it impinges on the coast of Cook's Inlet, reaching down to the shores and extending around to the Kenai Peninsula. From the interior of the peninsula above referred to, the timber line over the whole of the interior of the great area of Alaska will be found to traverse the coast line, varying in distances of 50 to 150 miles from the seaboard until we reach that section of Alaska north of the Yukon mouth, where a portion of the coast of Norton Sound is directly bordered by it as far north as Cape Denbigh. From this point to the eastward and northeastward, a line may be drawn just above the Yukon and its immediate tributaries of the northern limit of timber to any considerable extent. There are a number of small water courses rising here that find their way into the Arctic, bordered by hills and lowland ridges on which some wind-stunted timber is found, even to the shores of the Arctic Sea.

In thus broadly sketching the distribution of timber over Alaska, it will be observed that the area thus clothed is very great; yet, when we come to consider the quality of the timber itself, and its economic value in our markets, we are obliged to adopt the standard of the lumber mills in Oregon and Washington Territory. Viewed from that light, we find that the best timber of Alaska is the yellow cedar, which in itself is of great intrinsic value; but this cedar is not the dominant timber by any means; it is the exception to the rule. The great bulk of Alaskan timber is the form known as Sitkan spruce, or balsam fir. The lumber sawed from this stock is naturally not of the first quality.

The fisheries, which I shall speak of hereafter, as also of the fur trade, cover a very large area. Their value and importance, in consequence of the limited market afforded for exportation on the Pacific coast, has not been fully developed. The supply certainly is more than equal to any demand.

The soil of Alaska is not sterile. It exists at many points in that region of the requisite depth and fertility required for the production of the very best crops of cereals and tubers. The difficulty with agricultural progress in Alaska is therefore not found in that respect; it is due to the peculiar climate.

Glancing at the map, the observer will notice that hydrographers have defined the passage of a warm current, sufficient in volume and high enough in temperature to traverse the vast expanse of the North Pacific from the coast of Japan up and across a little to the southward of the Aleutian Islands, and then, deflecting down to the mouth of the Columbia

River, where it turns, one branch going north up along the coast of British Columbia by Sitka, and thence again to the westward until it turns and bends back upon itself. The other grand arm continues from the first point of bifurcation, in its quiet, steady flow to the Arctic, passes up to the northeastward through the strait of Bering. This warm current, stored with tropical heat, gives rise naturally, as it comes in contact with the colder water and air of the north, to excessive humidity which takes form in the prevalent fog, sleet, and rain of Alaska, as noted and recorded with so much surprise by travelers and those unaccustomed to it. Therefore at Sitka, and, indeed, on the entire seaboard of South Alaska and the Aleutian Islands, instead of finding a degree of excessive cold which the latitude would seem to indicate, as it does, carried over to the mainland, across the coast range, we find a climate much more mild than rigorous; but the prevalence of fog clouds or banks either hanging surcharged with moisture or else dissolving into weeks of consecutive rain so retard and so arrest a proper ripening of fruits and of vegetables in that climate that the reasonable certainty of success in a garden from year to year is destroyed.

When we look at Alaska we are impressed by one salient feature, and that is the remarkable distances which exist between the isolated settlements. It is not at first apparent, but it grows on the traveler until he is profoundly moved at the expenditure of physical labor, patience, and skill required to traverse any considerable distance of that country.

In order to give a comprehensive view of the land as it lies, we must speak of the country under the head of four great divisions: the Sitkan or southeastern extremity, comprising the 30-mile strip and the Alexander Archipelago; the Aleutian or Peninsula district, comprising the Aleutian chain of islands, together with the Peninsula and Kadiak with its numerous contiguous islets; the Yukon district, which embraces all that country from Norton Sound to Bristol Bay, reaching back as far as Nulato on the great river bearing the name of this district, and the Kolmakovsky Redoute on the Kuskokvim River; and last, the Great Interior, which includes all that portion lying north of Cook's Inlet to the Arctic, and returning east and west from our boundary line with British America and the Nulato and Kolmakov points above referred to.

The Sitkan district is essentially one of rugged inequality; it is mountainous on the mainland to the exclusion of all other features. It is equally so on the islands. It is literally set up on end; it is traversed here, there, and everywhere by broad arms of the sea and their hundreds and thousands of lesser and tiny channels.

Land travel there is simply impracticable. Nobody goes on a road; savages and whites all travel by the water. Here perhaps the greatest humidity and the heaviest rainfall occurs in the Alaskan country. The equable and not rigorous climate there permits of free navigation at all seasons of the year. It is seldom indeed that the little lakes and shallow lagoons near the sea level there are frozen so firmly as to allow of a winter's skating.

The Aleutian and Peninsular district is in its turn quite as peculiar to itself, as much individualized by its geological age and formation as is that of the Sitkan division. It holds within its boundary a range of great fire mountains—grumbling, smoking, quaking hills; some of these volcanic peaks so lofty and so impressive as to fix in the explorer's eye an image superb and grand, and so attractive as to render adequate description quite impossible. Like the Sitkan district, the Aleutian and Peninsular region is exceedingly mountainous, there being also very little low or level land compared with the sum total of its

superficial area; but that portion of it extending for 1,100 miles to the westward of Kadiak, nearly over to Asia, being bare of timber, a skeleton, as it were, is presented to the eye and strikes us with a sense of its own individuality in decided contrast with that of the Sitkan country.

These hills, not clothed with timber, are covered to their summits in most cases with a thick crop of circumpolar sphagnum interspersed with grasses, and a large flora, bright and beautiful in the summer season. To thoroughly appreciate, on an occasional bright and pleasant day in this country, how much moisture in the form of fog and rain settles upon the land, no one can do better than to leave the ship in the harbor, or the post where he is stationed, and take a line of march up through one of the narrow valleys near by to the summits of some of the lofty hills. He will step upon what appeared from the window, or the vessel, mere firm greensward, and stepping on it sink to his waist in a quaking, tremulous bog, or he will slide over moss-grown shingle, painted and concealed by the luxuriant growth of cryptogamic life, where he expected to find a free and ready path.

Passing from this district, we are brought into the contemplation of the very remarkable region which we have called the Yukon division. The writer has, during the past summer, traversed the major portion of it—from the north to the south—and he has confirmed many new and otherwise mooted points. Here is a region covering the deltoid mouth of a vast river—the Yukon; the sea-like estuary—the Amazonian mouth of another—the Kuskokvim; and the extraordinary shoals and bars of Bristol Bay, where the tides run with surprising volume. The country itself differs strikingly from the two divisions we have just sketched, consisting, as it does, of irregular mountain spurs, which are planted on vast expanses of low, flat tundra. It is a country which, to our race perhaps, is far more inhospitable than either the Sitkan or Peninsular divisions, yet, strange to say, the writer has found the greatest concentrated population of the whole territory therein. Of course it is not by agricultural, or by mining, or any other industry, save the aboriginal art of fishing and the traffic of the fur trade, that they live; and then, again, when the fur-bearing animals are taken into account, the quality and the volume of that trade is far inferior to either of these previously-named divisions, and we find them existing in the greatest number where they have the least to gain, according to our measure of compensation, were we obliged to live in their places as Alaskans.

This country, when you leave these detached mountain regions and spurs, is a great expanse of bog, little lakes, and larger ones, thousands of channels between them, sluggish currents filled with grasses and other aquatic vegetation, but indicated to the eye by the presence of water-lilies.

The traveler, tortured by mosquitoes in summer—blinded, confused, and disturbed by whirling "purgas," snow, and sleet in winter—the coast rendered almost inaccessible by the vast system of shoaling, which the current of the great Yukon has effected during past time, as it is doing now—passes to the interior—the superficial area of which comprises nearly five-sixths of the landed surface of the Territory.

Here is an immense tract reaching from Bering Straits in a succession of rolling ice-bound moors and low mountain ranges, for 700 miles an unbroken waste, to the boundary line between us and British America. Then, again, from the crests at the head of Cook's Inlet and the flanks of Mount Saint Elias northward over that vast area of rugged mountain and lonely moor to the east—nearly 800 miles—is a great ex-

pansé of country, over and through which not much intelligent exploration has been undertaken. A few traders have gone up the Tananah, over the old established track of the Yukon. A few traders have passed to the shores of the Kotzebue Sound overland from the Koyukuk. Dog-sled journeys have been made by these same people among the natives of the Kuskokvim, and the coast between Bristol Bay and Norton Sound. But the trader as he travels sees nothing, remembers nothing, but his trade. With rare exceptions he is incapable of giving any definite information beyond the single item of his losses or his gains through the regions he may traverse. We do know, however, enough to say now, without much hesitation, that this great body, this great extent, which we call the interior, is by its position barred out from its occupation and settlement by our own people. The climatic conditions are such that its immense area will remain undisturbed in the possession of its savage occupants—man and beast.

The subject of the agricultural resources of the country will, however, form the topic of another chapter in this report.

It thus becomes apparent that we possess in Alaska an immense area of land and sea which, during the last twelve years of our occupation, has impressed our people with one very truthful idea, and that is that though, as far as we know, it does not invite emigration from our more favored States and Territories, yet there is about it, still stored up in the recesses of its lonely coast and deep interior, resources of economic value which may prove of great value to our people.

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## II.—THE PEOPLE OF ALASKA.

In taking notice of the inhabitants of the Territory we find that they are scattered in isolated villages and scanty settlements over the entire reach of its extensive seaboard. They are living, with the exception of the Aleuts and the Kadiaks, in a purely aboriginal state, as much so to-day as they were when first noted and commented upon by the old employés of the Russian American Company, the English navigators like Cook, Portlock, and Dixon, and as set forth by writers who had served on the coast under the auspices of the old Hudson Bay Company.

The attempt to convert to Christianity the Eskimos and Indians of the north, as well as the Koloshians of the south, was never successful, or even partially so. These nomadic tribes of roving, unsettled Indians of savage life could not be subverted by the priests in days, months, or years; but the people of the Aleutian Islands and those of Kadiak and contiguous islands were subdued first by the hand of power, and with their subjection became speedily harmonious, and, to all outward forms and ceremonies, perfectly converted Christians.

In viewing the natives, therefore, of Alaska, while we find them divided into two sections, as it were, of Christians and aboriginés, yet when we come to enumerate their numbers and to describe them as they live, we find the following distinctly defined tribes or tribal relations—races of people, in fact:

First. The Innuít or Eskimo race, which predominates in numbers and covers the littoral margin of all Alaska, from the British boundary of the Arctic to Norton Sound, the Lower Yukon and Kuskokvim, Bristol Bay, the Alaska Peninsula, Kadiak Island, mixing in, also, at Prince William Sound.



Second. The Indians proper, spread over the vast interior in the north, reaching down to the seaboard at Cook's Inlet and the mouth of Copper River, and lining the coast from Mount Saint Elias southward to the boundary and peopling Alexander Archipelago.

Third. In numbers, but first in importance, the Aleutian race, extending from the Shumagin Islands westward to Attoo—the ultima Thule of this country.

Of these people we naturally turn to the Aleutians first, because, as we have stated at the outset, they are the Christian inhabitants of the Territory. They are living in fixed places of abode, in little villages; they conform to all the outward signs and practices of civilization, with rare exceptions.

These people when first surprised and located by the Russians were living then as they are living now, on the great Aleutian chain of islands, a few of them scattered up the Alaskan Peninsula as far as Port Moller on the north shore and the Shumagin Islands on the southern coast. When first surprised they were living to all intents and purposes as savages. They so impressed the Russians.

They were living then in far greater numbers, if we can believe the records and the legends of the Russians, and themselves, populating their country to the extent perhaps of 20,000 or 25,000, yet in the light of the present, with due regard to the old and abandoned places of residence, the ruined barrabaras or subterranean dwellings, and the ruined communal dwellings, or "oolagahamah" houses, leads the mind of the inquirer to doubt very strongly whether they ever at any time in the history of this race exceeded in numbers a population of 10,000 souls.

The record is quite full and bitter which the Russians made as they possessed themselves of the lands. They themselves in many instances cried aloud against the course of their own countrymen; but the subjection of the Aleutian race and its complete subserviency to their conquerors speedily became a matter of fact. To-day the observer, as he views an Aleutian village, finds it difficult to associate in his mind the idea of the people before him ever having been a warlike, ferocious race, though he can discern evidences of hardihood, patience, and much acumen, when he comes to study the characteristics of the leading men among them.

It must not be inferred from the foregoing that the Aleutians made a desperate, stubborn, or bloody resistance to the Promyshleniks; they did not. The first organized and warlike struggle which occurred took place at Oonalashka and Oomnak, and this not arising until gross abuses and ill usage from the hands of the Russians spurred them to war.

We will not dwell in detail upon the characteristics of their lives when first discovered as savages. It has to a measure already been well described and set forth by the eloquent and conscientious labors of Bishop Innokentius.\* This we will translate and append when the final report shall be presented. We have now to describe them as we have seen them this past season, and we shall proceed first to sketch the salient features of these interesting people and then consider them by settlements as they exist.

The average Aleut is not a large man; he is rather below our medium standard—say 5 feet 5 or 6 inches. There are exceptions to this rule both ways, some going as high as 6 feet and some dwarfs. The women in turn are proportionately smaller. The Aleut wears the expression which we note and ascribe to the Mongolian race—to the Japanese, perhaps, more particularly. The hair is long, coarse, and black; the beard

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\* Veniaminov.

is scanty; the face broad; the cheek bones high and very prominent; the nose is insignificant, flattened; the eyes are black and small, set wide in the head, under faintly-marked eyebrows—just a suggestion of obliquity, and that is all; the lips are full; the mouth large, and the lower jaw square and prominent; the ears are small, and the skin a light yellowish brown. In youth sometimes fair, with a faint blush in the cheeks, but with age becomes seamed with wrinkling and decidedly leathery. They have full, even sets of teeth; they are, as might be inferred from their constant habituation to the bidarka, or "kayak" in our vernacular, very well developed in the chest and arms, but sprung at the knees, and slightly unsteady in walk. Their hands and feet are small and well formed, some of them exceedingly so. While the women when young can scarcely be called handsome, the best of them, yet they are very far from being hideous or repulsive. They partake, slightly softened down, of the same characteristics which we have sketched in the faces and forms of the men. The Aleuts are in disposition amiable, docile, law-abiding, and respectful people; they are living, in the ten or fifteen settlements which we shall enumerate, as Christians to all outward signs and exercises. They hunt and depend upon the skin of the sea-otter as their staple commodity to barter with traders for a few of their necessaries and all their little luxuries in life. There is nothing else in the line of fur-bearing animals or other economic treasure that they can secure in their own country, save a few red and cross foxes; the blue fox is found on the western islands, especially Attoo and Atkha.

As they live to-day, they are married and sustain the relation of husband and wife, with families, more or less; each family, as a rule, living in its own hut, or barrabara. They have long, long ceased to dress themselves in skins and their curious primitive garments made from the intestines of sea-going animals, save at one or two points where extreme poverty still compels them to wear bird-skin garments and other patterns handed down from ancestral times. The visitor to most any one of these Aleutian towns will find its people dressed in our store-clothes, and on Sundays will notice a great many suits of tolerably good broadcloth; the women in silks occasionally, but more often and generally in gowns of cotton fabrics made up with special reference to the "mode," for they have a keen eye to the cut and style of San Francisco fashion-plates. Although in their hunting excursions, and a great part of their time when about the village, they still wear the ancient "kamleyka," or water-proof garments, made from the intestines of marine mammalia, and also torbassa, or boots, made in the same manner and soled with the tough flippers of the sea-lion, yet they all dress up on Sundays and on the holidays of their Church in San Francisco calf-skin boots and ladies' kids and slippers. On account of the prevalence of high winds, instead of using our conventional and aristocratic "beaver," they affect caps. One peculiar weakness among the males is to get a red ribbon, or something of the kind, around it, suggested, no doubt, by the gay appearance of the Russian army cap in times gone by, when the officers of the old company used to appear among them in full regalia. The males dress soberly, very little attention being given to display or color or ornamentation, as is the custom of semi-civilized people, though they lavish some care and skill in the ornamentation of their water-proof garments used in the chase of the sea-otter and kindred occupations, the seams of the kamleykas, skin boots, and other water-proof covers, including those of their bidarka, being frequently embellished with tasty tufts of gaily-colored sea-bird feathers and lines of goose-quill embroidery.

The women naturally desire bright ribbons and all the cheap jewelry

which the traders spread before them. Their means only limit them in decking their persons with all these little gewgaws of this kind, which the traders carry up there for that purpose. They dress the hair in braids, as a rule, and tied up behind. They seldom wear bonnets or hats; as they go from house to house, or to church, they have handkerchiefs, principally of cotton—in many cases of silk—tied over their heads. When they go from house to house to gossip, or on little errands, a shawl is usually thrown over the head and held with one hand together, under the woman's chin. As we have said before, they dress principally in cotton fabrics, with skirts, overskirts, cotton stockings, &c.

The domestic life of an Aleutian family typifies the life of this whole people, for they are in fact living with but one idea mainly, and as one lives they all live. The barrabara, or house of the Aleut, is half under ground, or in other words it is an excavation on the village site of a piece of earth 10 or 12 feet square to a foundation 3 to 4 feet below the surface. Some of these houses are very much larger, having two or three rooms on a floor. This earth as it is excavated is laid back and upon a wooden frame and lining built within and above the excavation, forming a wall of sod and earth 2 and 3 feet or more in thickness. The native architect enters this dwelling through a little hall at the outside and to the leeward from the prevalent winds which may occur in the locality. The door is low, and this corridor or hall itself joins on to the structure which we have just described, just as a storm-door is placed upon one of our approaches, only, of course, rather rude and careless in its shape. The floor of the house is either covered with boards which the hunter has secured from the trader, or, if the man is a very poor or unsuccessful hunter or thriftless specimen, it is simply earth trodden down. The natives to-day use for fire, as a rule, the old Russian "petchka," or they have a diminutive cast-iron stove, such as we use ourselves, lately introduced. The latest addition to the hardware of the Territory is a small but neat wrought-iron cooking-range, made wholly with an eye to service in that isolated region. Of course the larder of the family is never very extensive or varied. The barrabara is usually divided into two rooms, not wholly shut out one from the other, but a partition either of timber or hanging curtains which conceal the bed-room—if it may be so called—from the cooking-room. They are fond of comfortable beds, having adopted the feather beds of the Russians.

Soap being an expensive article, the native housewife naturally economizes in the laundry, and though she may very much desire to spread over this luxurious couch the counterpane and fluted pillow-shams of our civilization, yet with rare exceptions these are missing, though colored spreads made especially for that trade, are almost always on these beds. The furniture in this hut usually consists of one table, store-boxes, and rude benches for seats; the beds themselves being placed upon a frame of their own manufacture and well raised above the floor, sometimes with curtains around them—again a practice undoubtedly borrowed from the Russians.

The table ware and household utensils do not require a large cupboard for their reception. A species of large, flowered, white crockery cups, saucers, plates, &c., pewter spoons, and some imitation or sham silver ware, will be found in sufficient quantity for the use of the family and its neighbors during occasions of festivities. They evince a strange antipathy to any and all species of tinware—probably due to the fact that it is necessary to keep them clean or they rust out. The latest desideratum of the Aleutian housewife is our own recent agate or granite ware. They have come into the general use of coal oil for purposes

of illumination; the glass lamps and odor suggestive of that article can be plainly detected by any stranger who goes into the village for the first time, in spite of the strange fishy and other indigenous odors, which are in themselves as odious as they are penetrating. Occasionally, however, an old stone lamp, with a strip of cotton wick or moss, will be used in some emergency.

These people are very fond of pictures, and whenever they can get them they take great pleasure in pasting or otherwise fastening them to the walls of the barrabaras. The Russians early took cognizance of this trait, and the priests made good use of it by distributing to the eager hands of their new converts the richly colored and striking pictures of the church saints.

The barrabara built in the above manner and occupied by the Aleut, his wife and children, and a relative or two, perhaps, is a warm and thoroughly comfortable shelter to him as long as he keeps it in good repair. It is true that the air within is close, and that in case of sickness it is even foul; yet, on the whole, the Aleut may be safely said to have a house in which he can live with comfort to himself and his family. He never stores up much food against the morrow. He does not keep it in a cellar; it is usually found that the surplus stock of fish, fowl, or meat that he may have is hung up outside of his door, on a wooden frame, or "*labasa*," out of the reach of dogs, where it is secure, inasmuch as he lives in no dread of theft from the hands of his neighbors. He subsists principally upon fish—cod, halibut, salmon, trout, and the like—which he takes the year round as they are in season and succeed each other. He varies this diet with tea, sugar, and hard bread or flour, and some other little articles in the grocery line, perhaps canned meats, fruits, or vegetables, which he purchases at the trader's store. They prefer the hard bread, or sea biscuit, not because it is better to their palates than flour made up and baked into bread, but on account of a difficulty in securing fuel for baking. Among the luxuries which nature provides for them, the chief article is the sea-urchin or echinoderm, and the eggs and the flesh of the various species of sea-fowl peculiar to the waters of the Aleutian Archipelago. These people, when they rely upon their own resources for fuel, are compelled to make tedious journeys along the coast for drift-wood, which is found here and there in scant quantity; or else the women repair to spots on the mountain sides where the growth of the *empetrum nigrum* is thickest, and where the slender strawberry-like runners of this plant have grown and intergrown in thick masses, so that they pull them up from the earth as we would gather dried grasses. Large bundles are made up of this "*chicksha*" by the women, under which they stagger back to the village. This material is air dried, or weathered rather, for a few weeks or months, and then it is used in the peculiar Russian stove, or oven, by igniting a wisp or two at a time and closing the door on it. A hot fire is made, the heat absorbed by the thick walls of the "*petchka*," and the small apartment within the barrabara's earthen sides is kept at a tropical heat for many hours without renewal of the fire. Latterly, however, and to day at many of central point, natives are buying cord-wood of the traders, and coal imported from San Francisco, the former being brought over from Kadiak.

The family live here; children come and grow up, marry, branch out into houses of their own, of the same character as they show themselves capable of living by their own exertions as hunters and fishermen, or they inherit the paternal roof. In a normal condition the Aleutian is a peaceful, affectionate, though undemonstrative, parent, and a kind

husband, or at least he imposes no burden upon his wife that he does not fully share in kind. The children grow up not subjected to severe or harsh discipline; nor are they the recipients of excessive attention. The life of the family when the hunter is at home is a very quiet routine; the topics of conversation are very few, and, save the ordinary rising and retiring of the family, and the cooking at irregular hours of their daily meals, nothing occurs beyond the exercise of fast or feast days of the church, or some "name's day" in their own family, to vary its monotony, day in and week out; but, when they meet in their houses or their neighbor's, on the occasion of festivity as suggested, their tongues are loosened and the conversation between them, the old men and women in especial, is active and incessant. Latterly these occasions of enjoyment and religious convocation in many instances have been turned into orgies and disreputable carnivals by overindulgence of the people in home-brewed beer, or kvass. It is said, upon good authority, that the brewing of this liquor was taught to these people by the earliest Russian arrivals in their country, who made it as an anti-scorbutic, and it certainly has not proved to be to these people a blessing in disguise. The abuse of it has brought upon them nearly all the misery that they are capable of understanding or conceiving. As this beverage is a peculiarly Alaskan intoxicant, it is perhaps not superfluous to give a slight history of its manufacture and the consequences of its abuse.

The Russian kvass, as made at home, is a pure malt liquor, without the addition of hops—a cooling and slightly acid drink. The Promyshleniks were obliged, in default of the regular ingredients, to use rye-meal; this was mixed in casks with water in right proportions, and allowed to remain and ferment in the cask until it was soured and lively enough to draw. Latterly, however, the natives have been enabled to use sugar, especially that strong and potent Sandwich Island brand; this gives the kvass, as made by the Aleutians to-day, a highly alcoholic power. They take the sugar, with a larger proportion of flour, put it into a barrel or cask with a few handfuls of dried apples or rice—hops, if they can get them—bung up the barrel, and allow fermentation to go on. They seldom wait for it to work entirely clear, but usually draw it when it is thick and very sour. This is the root of all evil among these people; its abuse gives rise, nine times out of ten, to the disturbances among them; it transforms the quiet husband into a howling brute; he becomes fired to a state of mind bordering on frenzy, drives his wife, flying for her life, screaming, from the hut, and the children hiding like little chickens in the grass. Yet, it is a significant fact that, with all these savage demonstrations, pulling of hair and beating in these drunken rows, there is no record of any man's life being actually taken or even serious bodily injury occurring to the drunken disputants; but wives are beaten shamefully, and the native's house is desolate for weeks and for months as the result of these orgies; his health is shattered by repeated excesses of this kind; he rapidly deteriorates as a hunter, and he suffers just as keenly with his family all the pangs of poverty as can any of our own people.

Mention has been made of the fact that in every one of these Aleutian settlements a church or chapel will be found, no matter how poor or isolated these little communities may be. The Greek Catholic Church, which is the established religion adopted and preferred to-day by these people, to the exclusion of all other sects, bears this relation to them. The Greek Catholic bishop of the diocese of Alaska, who resides in San Francisco and directs the conduct of affairs of all Alaska from that point, is empowered by his home church in Russia to sustain and support

certain churches among them at his own expense. He is supplied with money for the purpose, and he expends it in maintaining what he calls parish churches. Two of these parish churches out of seven belonging to his diocese of Alaska are located in Aleutian villages, namely, Oonalashka and Belkovsky. The natives at other points hereinafter enumerated, including the Seal Islands, have built for themselves, at their own expense, and sustain also in the same manner, chapels or little churches in which they worship, and many of the forms of the Greek Catholic Church are religiously observed throughout the year by them. They are, of course, unable in these outlying, far-distant settlements to secure and pay for the services of a regularly-ordained priest, so that the parish priest at Oonalashka, for instance, or Belkovsky, makes a tour of his parish once every year at least, by which the higher ceremonies of the church, such as the offices of baptism, marriage, &c., are dispensed to the people who crave them. The piety of the Aleutian people is very pronounced as far as outward signs and professions go; they greet you with a blessing and a prayer for your health; they part from you murmuring a benediction; they never sit down to the table without invoking the blessing of God upon them, and in a great many other respects, down to trifling details too numerous to mention, they carry the precepts and phraseology of the church upon their lips incessantly. In this way, strange as it may seem, a large number of these people have learned to read and write in the Russian and some of them in the Aleutian language, for the services of the church are conducted in both languages. An Aleutian grammar and alphabet adapted to the phonetic power of the Russian tongue is used in all these churches, and the exercises thereof are generally conducted in both languages. The young men and boys are taught, as they grow up, by their parents, especially those who have some connection with the church either as a deacon or preacher or something, to read first in the Aleutian and then promoted to an understanding of the Russian. This Aleutian grammar and alphabet was prepared by Veniaminov, and in this way the Russians drew these people and their fortunes to them so firmly that no trouble or dispute ever occurred after its introduction between them. It is idle, therefore, to talk of the necessity of any new missionary work among these people.

At irregular though frequent intervals the Aleutian hunter is obliged to make long journeys to and from the sea-otter hunting-grounds, being absent, according to the circumstances and location, from one to five months from his family. We shall have to speak of him and his practices at length when we come to give the statistics of the fur-trade and its condition. While he is absent his family usually enjoys a letter of credit at some trader's store, or, in other words, the wife is allowed to draw therefrom those supplies of sugar, tea, and cloth goods which they have come to regard as indispensable to their existence. The traders have found it the happiest way of continuing their influence and at the same time aiding the best hunters in the different settlements. Many of the hunters make a special point before they leave on these journeys of putting a limit upon the extent to which their wives shall draw in the way of little luxuries and other things not absolutely necessary. The improvident extravagance of these people as a rule is strikingly illustrated by the conduct of the hunters who return from these long voyages successful or very successful. They first religiously settle all outstanding obligations; they then make a heavy draft upon their surplus, going in some cases so far as to purchase on the spur of the moment \$200 music-boxes. Sugar and flour are very promptly cov-

ered into the kvass barrel, and invitations are sent out to their friends and neighbors, though in many instances the odor arising from the fermenting contents in question is sufficient to gather them all in, and the orgies begin, passing rapidly from stupid intoxication to frenzied riots and a runpus. The first stages of this excitement very often open with hilarious dancing, for these people are exceedingly fond of that amusement when they are slightly under the influence of beer. It is only then that the old people can ever be induced to waltz or shake out the figures of the old Russian quadrille which they have learned in days long gone. These dances are stimulated also by the music of an accordion or concertina usually played by the women, occasionally by a man.

Speaking of music, these people possess a keen appreciation of it and enjoy it; have a quick ear, and in many instances pleasant voices. A favorite song of the Aleutians was brought up there by soldiers, and strains of "John Brown," "Marching through Georgia," and latterly whole strains of Pinafore, are hummed among the earthen barrabaras, from Attoo clear to the eastward.

A marked feature of improvement in the condition of these people has been very evident to the visitor who contrasts their living a short decade ago with what it is to-day. It consists principally in the fact that the thriftiest and most energetic hunters are building and have built frame houses, the boards and other material for the purpose being brought up from San Francisco by the traders. Many of these houses, perhaps the majority of them, have been built by the rival traders themselves and given as presents to the best hunters in the settlement as a means of securing their services and continued co-operation in the sea-otter business. The frame house, or cottage rather, because it is never but one story high, possesses this great advantage over barrabaras, especially when it is lined with tarred paper, that it is much easier kept in repair, and in long protracted damp weather the sharp refractions of heat and cold, or moldy exhalations and peculiarly sour sweating of the barrabara are absent. This cannot do otherwise than have a very beneficial effect upon the health of the hunter and his family especially.

We will pass next from this sketch of the leading characteristics of the Aleutian people to a rapid review of them as they live in their several villages.

Attoo is the extreme western settlement on the North American continent. It is the first land made and discovered by the Russians as they became acquainted with the Aleutian chain, Nevodzikov, in 1747, being the first to land. At that time the sister island Aggattoo, was also inhabited by the Aleuts, but to-day the only settlement is a village of 106 souls, on Chichagov harbor, at the rear of which high hills and mountains abruptly rise. These people are perhaps the poorest, pecuniarily speaking, of the whole Aleutian race to-day. The sea-otter, upon which they depend entirely for the means of purchasing those articles of dress and diet, which they have learned to regard as necessaries, in part, and all their luxuries—these animals have dwindled down to a mere tithe of the numbers in which they were primarily found on the hunting grounds; they are now only able to secure an average of 20 or 26 sea-otter skins each year. Though they are deprived in a great measure, or almost wholly, of any important or commercial activity in the line of trade, yet nature supplies them with a profusion of food, such as fish—cod, halibut, algæ fish, and a few salmon. They have an abundance of water-fowl eggs in season, and they are the only people of the group who have domesticated and reared the wild goose about their huts. They have a liberal supply of drift-wood landed by the currents upon the shores of this and

the contiguous rugged islands. They are so strongly attached to the land of their birth that they have resisted and declined many offers made by the traders to remove them to more favored localities for hunting the sea-otter. The village consists of one frame chapel with a thatched roof, and eighteen barrabaras grouped together as above mentioned. They also have an abundance of sea-lion meat, the skins of which, the intestines and sinews, add very much to their comfort and success in life. Though poor, they impress the visitor, in many respects, more favorably than do their wealthier and better situated brethren in other parts of the chain. The chief of the village or toione acts in the dual capacity of their leader in the chase and in the church. The men hunt sea-otters on the outlying reefs and rocks awash, seldom getting farther away from the village than 25 or 40 miles. Naturally their consumption of flour, sugar, and tea, cloth, woolen goods, &c., is limited by the causes above referred to, and they have recourse, in a great measure, for clothing, to the primitive bird-skin, "parkas," and other skin dresses, and garments such as were made and worn by their ancestors. In addition to the scanty yield of sea-otters they have turned attention to the protection and conservation of the blue foxes (*Vulpes lagopus*). They kill about 200 of these now annually, and hope to increase the stock for the future. The island itself supplies them with nothing except a great plenty of "moroshkies" (*Rubus chæmavorus*) and "yagodies" (*Empetrum nigrum*). The grasses which grow on the sand-spits and sand-margins above the wash of the sea and tide-level, being the points where the greatest warmth is found in the soil during the growing season throughout this whole Aleutian chain, spring up very rank—as high as the waists and heads of the people themselves—a species of elymus. These grasses are used largely by the people in the construction of mats, rugs, screens, &c., adding very much to their creature comforts. They weave and work up a great many handsome specimens of grass work in the line of baskets.

We pass now to the next settlement in order as we go to the eastward, which is the village of Nazan, on Atkha Island. Here is a settlement of 235 souls, now the only location occupied by these people, where heretofore, coming from Attoo, many settlements existed on the different islands and islets. They are living here, with a church, in 42 barrabaras, and as they secure the large number, relatively, of 175 to 200 sea-otter per annum they are comparatively rich, and much activity and interest exists at the traders' stores. Possessing the means, as they do, they are all well dressed in garments of our own cut and pattern, and they use groceries in the line of flour, sugar, tea, and many canned fruits, &c., to a very large extent. It is a remarkable ethnological fact that the Atkha people, and Attoo also, spoke in early times, as they do now, an entirely different dialect from the one used by their brethren to the eastward; and it is still more singular that while these people are scattered here and there, even out as far as Kadiak, they still preserve intact their own peculiar idiom. So marked was this difference between the Aleutian tongue of Oonalashka and that of Atkha that the priest in preparing the grammar for service in their church recognized the incompatibility of the two tongues to the extent of making a grammar for each people, and it is employed to-day.

The inhabitants of Atkha embody, perhaps, the finest sea-otter hunters in the country. They make long journeys from their homes, carried on the vessels of traders, with all their hunting paraphernalia, bidarkas, &c., to far distant islands, where they establish camps and search the outlying reefs and points, as they learn by experience where



the shy sea-otter is wont to repair. They remain in camp, engaged in the chase, over extended periods of months at a time, when, in accord with their understanding with the traders, the vessels that carried them out return and take them back. Then the trader's store is made the grand rendezvous of the settlement. The hunters tally their skins, settle their outstanding obligations, make their donations to the church, and promptly invest the surplus, frequently large amounts.

They also have other natural resources here at Atkha. They have drift-wood for fuel, perhaps not to so great an extent as those of Attoo; and they have a monopoly of the fine skill and beautiful workmanship in the grass trade. There is no question or manner of argument in favor of the work as made up by any other people on the northwest coast, or in Alaska, which is at all equal to their own manufacture. There is something exceedingly subtle and exquisite in the delicate blending and weaving which the grass-workers of Atkha employ in the production of grass cloth and grass ware. This work is done by the women exclusively, and all credit should be given to them. They gather the grasses, prepare them with exceeding care for their primitive needles, and they spare no amount of labor and unlimited pains in the execution of their designs, which take the form of cigar-holders, basket-work, baskets, mats, &c. As an evidence of the exceeding labor and time required, a case is authoritatively cited wherein a trader ordered a native woman to make him a basket as the very best evidence of her skill; she was six years engaged upon the labor, and we need not say that the basket was a remarkable exhibition of beautiful handicraft. The visitor to the ethnological hall of the Smithsonian Institution can see for himself, and will instantly pick out from the many samples spread before him, embodying the grass work of all savage people, the Atkha specimens, conspicuous in their superiority of execution.

Berries, indigenous fruits, such as the berries mentioned at Attoo, are found here also, together with the fish and water-fowl; and it might be mentioned in especial that at these places, Attoo and Atkha, the Alaska mackerel (*Labrax monoprygis*) is most abundant, and is caught in the harbors where it is found.

The people of Atkha lived formerly and until quite recently at Korovinsky Bay, on the north side, where a church was established as long ago as 1826, but fish and drift-wood becoming very scarce, they moved over to the present site of Nazan. So thorough were they in this removal that they not only carried the church itself over with them, but even disinterred the remains of their first spiritual director and reinterred them in front of their new chapel—a delightful exhibition of fond memory and respect where we might perhaps have least thought to find them.

At one time, when under the control of the old Russian régime, Atkha was a very important place. It was the central depot of the western district, the jurisdiction of which extended over as far as the Kurile Islands, and the Aleuts now on the Russian Seal Islands of Bering's and Copper, off the coast of Kamschatka, are principally these natives and their descendants. They had cattle here as an experiment in those days, and goats; the latter became very unpopular with the Aleuts on account of their pugnacious disposition and their morbid propensity to feed upon the grasses that grew on the earthen roofs of their barrabaras. This stock-raising experiment may not have been a practical success, but its theoretical application was kept up until the time of the transfer, when the last of the bovine race disappeared. The fur-bearing animals of Atkha, outside of the marine visitors, are confined entirely to black and red and cross foxes.

The next settlement we find to the eastward is that of Nikolsky, on the southwest coast of Oomnak Island, a village fronting upon the straits of Oomnak. Here are 127 souls, living after the manner of the Aleutian people, with a church and 16 barrabaras. They, too, depend exclusively upon the sea-otter as their staple for trade. Of these animals they secure on an average about 150 yearly. This is their relative wealth, and they liberally purchase the usual supplies referred to at the trader's store. The island itself was the chief center and the main ground of that stubborn resistance which these Aleutian people made to the authority and gross usage of the Russians in early days. During those periods the island of Oomnak was the site of no less than eleven Aleutian villages, and the islands again, between it an Atkha, contained many settlements; but to day they are all embodied and consolidated in the village of Nikolsky. They, too, have fish in comparative abundance, but not to such a marked degree as that enjoyed by their western neighbors. There are several large lakes back of the village, fresh-water lakes, from which a small shallow stream meanders down through the settlement to the sea, and at certain seasons of the year salmon run up in such numbers and with so much persistency that they fairly crowd themselves out upon its banks, rendering it a thought of no concern whatever to the natives as to how many they shall take; it is a mere matter to them of stooping down to pick them up.

The usual characteristics of these people as portrayed heretofore exist. They have berries, water-fowl, and scant drift-wood, this being, perhaps, their only hardship, since loss of fuel in this respect entails great labor upon the women, who have to gather the "chicksha" or creeping tendrils of the *empetrum*. They have red, cross, and black foxes on the island, not to any great number, however. They have to make long journeys to other islands to capture sea-lions, and on that account they are not as well supplied with boats as they would otherwise be. The island of Oomnak was disturbed in 1878 by the upheaval and emission and exhibition of volcanic energy, which took place between the village and the prominent volcanic peak of the island, resulting in the erection of a small mud volcano, both of which are still smoking, and the latter sputtering. It is a curious fact that whenever there is any volcanic action on these islands the natives experience great difficulty in getting fish, which seem to be driven off, as it were, by the trembling of the rocky shores. So marked, indeed, is this effect upon the fisheries of these disturbed localities that native villages, to escape fish famines, have been moved to other points beyond their influence.

The natives here secure annually quite a number of the young fur-seals, as these animals are passed down from the waters of Bering's Sea into the North Pacific during the autumn and in early winter. They set great store by the flesh of these animals, and the skins are all used in the manufacture of rugs, blankets, and dress, none being exported.

We pass now to the consideration of Oonalashka and its outlying settlements. The village of Iliuliuk or Oonalashka, is the central point and chief village of the island, and, indeed, the main port of entry for all Western Alaska. Here is a village on the land-locked shores of Captain's Harbor, inhabited by 406 souls, who live in the settlement, including a large church, together with a fine building occupied by their priest as his residence, a school-house, 18 frame dwellings or single-story cottages, 50 barrabaras, and the stores and dwellings of the traders. The people of Oonalashka are living, perhaps, in

the most favored section of their district. They are sea-otter hunters by profession, as are all their brethren, making long journeys to Sannakh and its immediate vicinity, which is the great sea-otter hunting-ground of Alaska Territory, carried thither and brought back by the vessels of traders. Brought into contact, as these people are here, more frequently and closely with our own people than with their kith and kin to the westward, they are, if anything, more Americanized, and the expressions of "pigeon English," and other little signs of attention to and sympathy with American people, are manifested more frequently than elsewhere. Indeed, their participation with and exhilaration on the Fourth of July has become a matter of Alaskan notoriety; their foot-races, canoe-races, pole-climbings, wrestlings, and dances on that occasion surpass any other festivities created by or participated in by the people of Alaska. Another feature noted here is the extraordinary fact that out of these 406 souls 205 read and write—of course principally in the Aleutian language.

The town of Iliuliuk has a school-house in which a regularly-employed Russian and English teacher serves, but the attendance of the rising generation is very poor indeed; the youngsters seemingly regard the education which they pick up on the wharf among the sailors as far more congenial and satisfactory to their minds. This difficulty, however, of getting the young Aleuts to attend school was experienced before in this settlement by Father Veniaminov. The priest of the district residing here, Innokenty Shayashnikov, is an elderly man who has always lived among these people, and who primarily sprang from them. He is a man of real worth, and he is very much respected by his own people, and also by the traders. In this connection it may be well to say that the Russian bishop of the Alaskan diocese, who now resides in San Francisco, has taken the preliminary steps toward erecting for himself here a residence where he intends to live as soon as it shall be ready for his reception, thus removing from the "City of the Golden Gate" in order to be nearer the field of his spiritual labor.

The island of Onalashka is one of the largest of the chain, with a singularly rugged, cut-up coast, deep indentations or fiords, which, in many instances, nearly sever these arms from the mainland. In many of these harbors are little settlements, all in close communication with Onalashka, namely:

Makushin, a small settlement located in a sheltered bay on the west coast, immediately under the steep slopes and vast proportions of the smoking volcano Makushin. It consists of 62 souls and a chapel. It contains the oldest inhabitant of the island, who has an undisputed chronological record of 83 years, Peter Castromittin, born in 1797. This old man is a living witness to that remarkable geological convulsion which occurred in 1806, whereby a new island was lifted bodily from the sea, 22 miles north of Oomnak Island. He was one of the individuals who first noted the strange phenomenon, the darkening of the sky and the flaming of the fire, which so filled him with astonishment and terror that his trembling knees scarce could carry him back to report.

The people of Makushin are mere auxiliaries of the inhabitants of Onalashka village, and furnish a contingent every year for the regular sea-otter hunting party that leaves Iliuliuk for Sannakh. They have an opportunity better than that enjoyed by any other settlement in their country to capture the young fur-seals in their passage through the straits of Oomnak in the fall, securing between 1,000 and 1,300 of these animals every year. Their fishing-grounds were so disturbed in 1878, by the volcanic eruption on Oomnak Island, that they were compelled

to move their old village to the present site, and here they will undoubtedly remain.

The Russian chroniclers tell us that their first acquaintance with the Oonalashka Island natives dates on their touching at this point in 1857, when they found the people here numerous and warlike, and they had a great deal of difficulty with them. To-day their descendants have the unenviable reputation of being the very worst of their class on the island—not vicious, but indolent and generally good for nothing; They trap foxes on the flanks of this great mountain which rears its fuming head high above them 5,000 or 6,000 feet, and they secure a small, but to them very precious, supply of drift-wood from the sea.

From Makushin, the next in order as we go west is Koshigin, an insignificant settlement of 73 people, on the bay of the same name, on the northwest coast. They have a small chapel, and are living in 17 barrabaras. They are sea-otter hunters, searching the coast of Oomnak, and going to Sannakh. They secure annually of these animals about 20. They trap between 300 and 600 red, black, and cross foxes; they enjoy good fishing opportunities—cod, halibut, and salmon in season. In the summer they repair to Chernovsky to make their small purchases at the trader's store, but in the winter a small branch of this store is located for their convenience within their village.

Chernovsky is the next settlement again to the westward and southward, situated on a very beautiful little bay and harbor of the same name, opening directly into Oomnak Parish. It consists of 101 souls, the usual chapel, and 16 barrabaras. The natives, as at Makushin and Koshigin, supply a regular number of hunters, who go over to Oonalashka and join the great sea-otter hunting party that leaves for Sannakh once or twice a year. Occasionally a party of 6 or 7 bidarkas is made up here, and they go in search of the sea-otter down the straits of Oomnak and around the reefs and small rocky islets found there. It is, however, considered the most dangerous bidarka journey in quest of otters that is taken by the hunters in that Territory, because they are exposed to the unbroken roll and wash of the vast Pacific. This is also an old settlement, one of the first known to the Russians. It is endowed with much ethnological interest by the presence of a cave, a little more than half a mile from the village, in and from which many of the peculiar Aleutian mummies, skulls, &c., have been taken. Apropos of this subject, in 1874 a trader of the Alaska Commercial Company was induced by Mr. Elliott, who was at that time in the Territory, to make an effort towards the exploration of the celebrated Kagaymil Cavern, on an island of that name in the "Four Mountain" group. This was done. Fine weather favored the attempt, and 13 mummies were taken from it, 11 of which reached the Smithsonian Institution in safety. They constitute the first examples of this kind that had ever been brought down and placed within the reach of scientists in this country; and they certainly presented the most interesting ethnological basis of comparison of the peculiar coincidence which exists in the methods of burial belonging to widely-separated places. The mummies of Peru and the mummies of Alaska, crouched in their exhibition cases as they are exhibited in the National Museum, are almost identical specimens.

The next settlement we find after traversing the entire southern coast of the island and reaching Beaver Bay, where we locate the village of Borke, on a small island called Spirkin, with a population of 139, a chapel, and 28 barrabaras—the old settlement at Bobrova was vacated in favor of the present site during 1848. The natives are in very close communication with their kindred of Oonalashka, who are distant

only a few hours' journey by portage and canoe. In some respects this village is the most remarkable one that we shall come to notice or have observed. The strange and subtle influence of the method and manner of living practiced by an old trader who was and is their leader, one Gregory Krukov, is strikingly illustrated there to-day. This man and his wife are singularly neat in their manner of living; they keep everything clean about them, and in the summer decorate their house tastefully with wild flowers. The natives, under the influence of his example, are living in their barrabaras, the neatest and cleanest of their people in all Alaska. They are living so without an exceptional instance, every house being as orderly and as tidy as its neighbor. They put large windows into their barrabaras, sand and scrub the floors, and their furniture, their beds, and window-panes tidy and bright, while pots and tumblers filled with wild flowers stand on the tables and window-sills. This is the point, or rather the old settlement, where Captain Cook first came in contact with and noted the Aleutian people, they being then only half an hour's portage from his anchorage in Samganooda Bay. Since that time they have called it "Anglieski Bookhta." There are people there to-day who recite the legend of Captain Cook's appearance with great earnestness, circumspection, and detail. So faithfully has the legend been transmitted from father to son that they still tell the story of how an "English captain came there, unloaded his ships, and then became frightened at the people and the Russians, reloaded them, and sailed away." Of course we know that Captain Cook made here a temporary transfer of his cargo and ship's stores, in order that he might stow them anew and better.

These people hunt the sea-otter here, securing annually about 20, and furnish also the regular quota to the Oonalashka hunting parties. They have also an equal or nearly quite as good an opportunity to get the young fur seals *in transitu* through Oonalga Pass, securing of these animals as many as 1,200 or 1,400 in good seasons.

From Borka we turn to Oonalashka, having thus made a circuit of these settlements on the most important island in the Aleutian archipelago.

The settlement of Illiuliuk, or Oonalashka, is destined to be in the future—as it has always been in the past—the principal port and rendezvous for all trade, of whatever character, which may be developed in that portion of Alaska.

From here we pass in review to the eastward, and we have to note the first settlement which we meet with on the island of Akutan, a settlement of the same name on the southwest shore, consisting of 64 souls, possessing the customary chapel, and living in 13 barrabaras. The men are all sea-otter hunters, ranging in pursuit of their quarry around the numerous contiguous smaller islands and the south end of the great island of Oonimak. The average catch of sea-otter reported here is 26, together with a few cross-foxes. They meet on their hunting grounds with their brethren of Akoon and Avatanak. They secure by diligent search a limited supply of drift-wood, and they have in the summer season, especially the months of June and July, an abundance of water fowl and their eggs.

They are closely joined on the neighboring island of Akoon by a settlement situated on the northwest shore of that land, where a village of 54 people, living in 12 barrabaras, and a chapel may be found. These people hunt and deport themselves in the same general method spoken of in regard to the Akutan settlement. They enjoy, however, the satisfaction of living nearer than their neighbors to the small rug-

ged island of Oogamak, which stands in the path, as it were, of the great Pass of Oonimak. Here, on the low rocks, a comparatively large number of sea-lions repair, and many hair seals are found throughout the year (*phoca vitulina*). The skins of these animals are secured by them and used in the manufacture of bidarkas, which they sell to the Sannakh hunters.

From Akoon we turn to the Avatanak, close by, and to the southward, where another small settlement of the same name is located on the western margin of the island, consisting of 19 people and 5 barra-baras, and, strange as it may seem, without a chapel, but it is true nevertheless. In hunting and living they do not differ from the method and action described with regard to the people of Akutan and Akoon. They do not participate in the chase of the sea-lion and the profit that arises from it, and the fact that among these 19 people there was but one child living this season speaks eloquently of their poverty and degenerate condition. In this respect we may include, perhaps, the inhabitants of Akoon, who appear somewhat enfeebled.

With this statement of the condition of the settlements last named, the enumeration of the Western Aleutian people and their villages ceases, and we subjoin a recapitulation of their numbers and divisions, for the more comprehensive understanding of it, in the form of a table; first stating, in explanation of the terms used therein, namely, "Creole," as distinct from "Aleut," the fact that the people are not of pure blood, nor have they been so for a great many years. They are mixed to such an extent that it is almost impossible to draw a line with absolute certainty between the pure native and the half-breed, or "Creole," as he is termed, though he may be only a quadroon. The term "Creole," therefore, is used here to signify all those natives who have positive traces of white blood in their veins.

Population of Oonalashka Parish.

Settlements.	Whites.		Creoles.		Aleuts.		Total.
	Male.	Female.	Male.	Female.	Male.	Female.	
Attoo .....	1		15	17	39	35	107
Atkha (Nazan) .....	2		6	8	106	114	236
Oonmak (Nickolsky) .....	2		4	4	59	58	127
Iliuliuk (Oonalashka) .....	14		80	82	126	104	406
Makushin .....	1		13	17	12	19	62
Koshigin .....	1				81	42	74
Chernovsky .....	3		1	3	45	49	101
Borka .....	1		3	3	65	68	140
Akutan .....	2				33	30	65
Akoon .....	1				25	29	55
Avatanok .....					8	11	19
	28		122	134	549	559	1,392

We now pass to the second topic under the head of this chapter, by considering the people of Belkovsky Parish, directly to the eastward and in this same district. The chief settlement of this division is the town of Belkovsky, situated on the mainland of the great Alaska peninsula, midway and well to the northeast of the celebrated Sannakh sea-otter hunting grounds in the west, and the equally well-known cod-fishing banks of Ounga. Here is an Aleutian village perched on the summit of a bluff and clinging to the flanks of a precipitous mountain,

consisting of 268 souls. They rejoice in the possession of a church, and are busily engaged in the construction of a new edifice this summer of a similar character, in which they have invested the sum of \$7,000. They are famous sea-otter hunters. They are living in 30 frame cottages and 27 barrabaras.

These people are actively engaged in the sole industry of the place—sea-otter hunting—securing, within a radius of fifty miles, the large number of 1,900 or 2,000 of these rare and costly peltries every year. Under some civilizing influence or home restraint, they ought to be, comparatively speaking, a wealthy community; but, as the case now stands, every cent of their surplus earnings is squandered in dissipation such as we have described as the course of these people. They are dressed in garments similar to our own style and make, seldom using those of olden time unless driven to do so by stress of poverty. The natural food resources of the locality—fish, berries, &c.—are abundant and somewhat varied, and until quite recently they used to have an opportunity of getting an abundance of reindeer here; these animals coming down at regular intervals from the great land to the northeast in droves, extending as far as the westernmost point of the peninsula, and running over the narrow shoal water and straits of Morzovie to the rugged and extended mountain sides and valleys of Oonimak Island. Latterly, or within the last year or two, the reindeer, from some cause or other, have ceased to make their appearance.

These people—fifty per cent. of them—are keen enough to read and write, principally in the Aleutian dialect, however. They support a school of their own volition, and a semi-official report of the teacher thereof for the past year gives an average attendance of twenty-seven males and twenty-three females, which would indicate a very fair proportion of the youth.

For fuel, the people purchase wood brought from Kadiak Island, or coal brought hither from Nannaimo, the natural resources in this respect being confined almost entirely to stray sticks of drift-wood and the "chicksha," which the women gather on the hillsides, and to which we have already referred as the fine trailing vines of the *empetrum*.

The large capture of sea-otters, and consequent flow of the traders' money, excites a degree of extravagance among these people which is not witnessed elsewhere in the Territory; and it is a very strong proof of the old saying that wealth does not bring content to the human mind, be it ever so high or ever so low.

The harbor of Belkovsky affords but a dangerous anchorage for a sailing-vessel, and it is therefore barred out from the path of commercial interest. Only those vessels belonging to the rival traders located there make the landing.

From Belkovsky as the center, we turn to Nikolaievsky, a small village located on an indentation of this same peninsula, some 29 miles away. It contains 43 people, living in 9 barrabaras, together with the usual chapel. They are simply adjuncts of Belkovsky village, immediate but poor relations, enjoying the same natural advantages and no more.

From Belkovsky to the westward and on the mainland near its farthest extremity, we find the village of Protassov, a settlement consisting of 99 people, living in 5 frame dwellings and 14 barrabaras, together with the ever present chapel. This settlement, in its method of living securing through its hunters an average of about 500 sea-otters every year, is equally opulent and equally extravagant and just as dissolute as its neighbor Belkovsky. It is said, and we ourselves have

witnessed the fact, that in spite of an average revenue of nearly \$1,000 per annum to each family, the whole place, without a single redeeming case, presents an aspect of great misery and debauchery, which has put its stamp more firmly and more shamefully upon the people of this place than it has made its mark elsewhere in all Alaska. They have their dietary varied by their juxtaposition to the walrus banks, sand-bars, spits, and islands to the north, where these *pennipedes* are found at times in large herds. The flesh, blubber, and oil are considered by the people of Protassov great luxuries. The reindeer, and brown bears following in the wake of the reindeer, used to supply them with an abundance of meat, but as we have said before in noting the disappearance of this animal during the last two years, this supply is failing.

Near this village, less than half a mile off, are a series of warm sulphur springs which would afford the sickly natives partial or permanent cures, could they only be induced to bathe therein, but it is said, and we believe it, that while there is not a man, woman, or child in the village free from disease, yet not one of them can be induced to the exertion necessary to try the efficacy of the waters.

From Belkovsky to the northward and eastward about 60 miles, on Peregrebnoi Islet, is the little village of Vosnessensky, embracing 22 people who live in 5 barrabaras, and worship in a chapel. They are also sea-otter hunters, reaching out within a radius of 50 miles from home, searching the reefs, rocks awash, and little islets, for this quarry, securing an average of 50 or 70 skins every year, which in proportion to the small number of people there bring them a very large revenue. This they expend on the counters of the rival traders in their stores in the village, for clothing and groceries, as before mentioned in the case of their kindred elsewhere. The old men and boys trap foxes, but this is only incidental, a side issue as it were, to the great business of sea-otter hunting. Fortunately for them the situation of their islet is such that it intercepts and retains for them drift-wood sufficient to supply them with fuel.

The next contiguous village is the settlement of Ounga or Delarov village on the island of Ounga, one of the Shumagin group. This is a place almost if not quite as large as Belkovsky; in fact it is a rival metropolis. It has a population of 185 souls, living in the usual way, a church, 14 frame dwellings, and 21 barrabaras, and a number of new frame dwellings this year in the course of construction. The occupation of these people is centered in and devoted to the chase of sea-otter, of which they gather about 600 skins every year, and for which they range in their hunting trips over the Shumagin group, a very large area of hunting grounds. They, too, consequently enjoy a revenue, if it may be called enjoyment, of about \$600 to each family per annum from this chase, but it brings with it the attendant curse of dissipation and low debauchery.

They have been re-enforced here in a somewhat unusual manner by 15 white men, who, in order that they might remove themselves beyond the pale of the law—which requires that none but natives shall hunt the sea-otter—have married native women and are admitted by special authority of the Secretary of the Treasury to the same privileges of the people themselves. It is said that these white men have been so successful during the past two or three seasons, that word of it reaching their friends, is bringing more re-enforcements of the same character rapidly into the country. It is easy for an impartial observer to take notice of the fact that with the rapid substitution of the superior acumen, energy, and vitality of the white race in this matter on the sea-otter grounds of



Alaska, it is only a question of a comparatively short time ere the Aleuts themselves will go to the wall. It can be readily inferred from parallel cases where white men have lived in contact with an inferior race after this fashion, that the methods and the manners of these white proselytes tend never to elevate the mind or strengthen the hand of their dusky neighbors, at least we deem it well worthy the attention of the Secretary of the Treasury, who undoubtedly has the well-being and future prosperity of these Aleutian people in his keeping.

The next settlement is the village of Korovinsky, on a small island of the same name, consisting of 44 creoles, to the exclusion of all other races, living in 5 small frame dwellings, with a chapel, but no barrabaras. This settlement was originally founded by retired employés, or those who had served out their time under the old Russian Fur Company. Their descendants to-day, above enumerated, are supporting themselves here in comfort, principally by close attention to little gardens, where they raise potatoes, radishes, and turnips, and by keeping a small number of hardy Siberian cattle, chickens, and ducks, together with incidental trapping of foxes during the winter. They also hunt the sea-otter, but do not get a great many. Some of the young and hardiest men are occasionally employed at the cod-fishing stations in the Shumagin group.

With this description of Korovinsky and its people, the notice of the Belkovsky Parish closes, and we again submit, as a concise recapitulation, the following table showing the numbers, races, &c., therein:

*Population of Belkovsky Parish.*

Settlements.	Whites.		Creoles.		Aleuts.		Total.
	Males.	Females.	Males.	Females.	Males.	Females.	
Belkovsky .....	9	2	39	50	82	86	268
Nikolaievsky .....					22	21	43
Protássov (Morshévoi) .....	2		12	9	41	36	100
Vomessensky .....	1				8	13	22
Ounga .....	15		30	39	46	55	185
Korovinsky .....			26	18			44
Pirate Cove .....	7						7
	34	2	107	116	199	211	669

Before ending this chapter on the Aleutian people proper, we are obliged to take cognizance of the natives living on the Prybilov group, or seal islands, of Alaska. These islands are situated 190 miles northwest from Oonalashka, in Bering's Sea. Their inhabitants were primarily taken in early time by the Russian traders from the Aleuts of Atkha and Oonalashka, and up to the time of transfer in 1867 were frequently changed or relieved. They are living on the islands of Saint Paul and Saint George, in villages of the same names. The people of Saint Paul and their peculiar industries we shall have occasion to speak of at length and in detail in our chapter upon the trade and resources of Alaska. Suffice it here to say, that the village which they occupy to-day of Saint Paul is entirely Americanized, and resembles a new England hamlet, laid out in regular streets, consisting of sixty-four or sixty-six cottages, with a large church, a school-house, and priest's dwelling.

Saint George, 27 miles as the crow flies, to the southeast, is a smaller

village but essentially of the same character, the earthen barrabaras being replaced by snug cottages. There are 279 souls in the Saint Paul village, and Saint George possesses 88.

The peculiar relations existing between these people, the Government of the United States, and the Alaska Commercial Company, are such that in one sense of the word they are part and parcel of the triumvirate, and we shall in speaking of the wonderful seal life and its wealth hereafter, take occasion to allude to them and their characteristics. They are so much better off, in a worldly sense of view, wealthier, happier, and in every respect physically superior to their brethren elsewhere in Alaska that they come under a separate head, and are indissolubly bound up with the business on the islands to the exclusion of all other interest whatsoever. The following brief table sets forth their numbers, &c.:

Settlements.	Whites.		Aleuts.		Total.
	Males.	Females.	Males.	Females.	
Prybilov group:					
Saint Paul.....	13	1	128	156	298
Saint George.....	4		85	53	92
	17	1	163	209	390

#### RECAPITULATION OF ALEUTIAN DISTRICTS.

	Whites.	Creoles.	Aleuts.	Totals.
Males.....	79	229	911	1,219
Females.....	3	250	979	1,234
	82	479	1,890	2,451

## CHAPTER II.

### THE KADIAK PEOPLE.

The district of Kadiak, which comes now in order for review, is essentially embraced by the scope and area of the great island bearing that name, on the northeast point of which, up an arm of the sea called Saint Paul's Harbor, is situated its commercial center, the village of Kadiak. These people who live in this district—nearly all of them—are entirely different from the Aleutian stock, with whom they have no blood or linguistic affinity, and with whom they have scarcely mixed. They are of the Inuit race and can only be considered as next in order from the simple fact that they are Christians as a whole, and, after the Aleuts, were most passive under the control of the Russians, though they made at first bloody and stubborn resistance.

Kadiak Village, or Saint Paul Harbor, is the central and all-important settlement in the district. It was the first grand depot in which the

governor of the old Russian Trading Company made his headquarters and controlled the business therefrom of the whole region of Alaska. In many respects it enjoys climatic advantages, more sunshine and less fog, more clear weather and less tempest than any other section save the region of Bristol Bay and portions of Cook's Inlet. It was styled by the Russians, after they had made a very exhaustive test of the comforts and natural resources of living through the Territory, as the garden of Alaska; and when they were compelled in self-defense to remove their capital down to Sitka, in order that they might thereby better supervise and resist the encroachments upon their own domain by English and American traders, they did so with many regrets and frequent allusion to the sad contrast between the two places—always in favor of Kadiak.

Before enumerating the Kadiak people as they live in the villages of their country, we will describe the typical features of the race. The Kadiaker has a fairer skin than the Aleut; he stands higher in stature, approaching an average of, say, 5 feet 7 or 8 inches; he has a broader face relatively, and his whole "make-up" physically is more powerful than that of the Aleuts. Like them, he has small feet and hands, small black eyes set in heavy sockets; like them, he has little or no beard, with an abundance, as all those people have, of coarse black hair, which he cuts off just above his shoulders. A nice distinction will be made in looking at the moustache—the native of Kadiak wears more hair on his upper lip than we observe among the Aleuts.

They are distinguished in disposition by being light-hearted, freer, and more jovial than their neighbors above referred to; and, on the other hand, they have less patience during seasons of suffering and privation. When they gather together they are conspicuously talkative, abounding in jokes and the recitation of funny legends or stories applicable to the subject. As they paddle their canoes or shoulder them in making long portages, they enliven their labor by continuous songs, snatches from church tunes, or lively airs picked up in the settlements. They are in every respect much more emotional than their kindred to the westward.

The traders say that the Kadiak hunter is just as brave as his Aleutian brethren, yet, owing to the more clumsy construction of his bidarka, or canoe, he is not nearly as skillful in the pursuit of his quarry; in other words, that the extraordinary journeys and landings made by the Aleutian hunter in the path of howling gales of wind, enveloped in driving sleet, and whirled by furious gusts as he goes down to some rock awash, or to steal upon a reef or tidal bar—that these frequent exhibitions of extraordinary hardihood are never made by the Kadiaker.

With respect to their method of living in their settlements, what we have said of the leading characteristics in the Aleutian settlements is and will be wholly applicable to these, with this difference and the influence that it may have in modifying to some extent the comparison; they spend more time on land, traversing mountain trails in quest of bears, wolves, foxes, and the land-otter and marmot. Crossing over Shekhov Straits to the mainland, they, in addition to this list of land mammalia, hunt the reindeer for its valuable desiderata of flesh, skin, and sinew. Such exercise on the land undoubtedly gives them their superior physical stature and development from head to foot when contrasted with the physique of the Aleutian, who seldom or never looks to the land either as a foothold for a journey or as a means of subsistence.

Another feature in all these Kadiak villages, quite distinct from those which we have been describing, is the presence in most of them of the

“kashima,” or public dance, work, and council house, which in itself points to the enhanced social disposition of these people.

Having thus called attention to the points of more striking similarity and dissimilarity existing between the Aleutian and the people now under discussion, we will proceed to notice the villages in their district.

First in order is the central point of Kadiak. Here is a settlement of 270 inhabitants. They are living in 101 frame houses, all in good condition, and many of them legacies of the old Russian company. The houses are clean and neat as a rule, the windows bright, and the visitor is led to exclaim that it would not suffer in comparison with a Swedish or an English fishing village. It supports a large church and its priest. Its people are, as a rule, devoted to sea-otter hunting; but they find a great deal of transient employment in loading and unloading the small shipping that repairs to and belongs to that port. They maintain little gardens, and cut cord-wood for the trade elsewhere in the Territory, which is a very considerable industry. They keep a small number of cattle, descendants of Siberian stock, and with that better success that attended the efforts of the Russians here than elsewhere and which now seems to attend the people here also to-day. The herds of cattle, however, are necessarily small on account of the great trouble of providing for them during the winter and in protecting them from the ravages of bears, as they wander in the valleys throughout the summer. A singular instance of the difficulties attending the stock-herders here is related of one owner of five head of cattle who lost them in the following manner: They were away from his house, some little distance, near a small pond of water, and some bears—how many deponent saith not—came down from the mountains and drowned these unfortunate bovines by ducking their heads, with their powerful arms, beneath the surface of the pool. This subject of stock-raising, however, as well as that of gardens, we shall refer to in another chapter.

There are at Kadiak 20 or 30 white men, Russians and our own people, who have in reality settled, many of them married, living there and calling the place home.

From Kadiak we are next led to review the settlement of Wood Island, opposite, where 156 people are living in 13 frame and log houses and 8 barrabaras. They are engaged in sea-otter hunting during the summer, and cutting up and storing ice during the winter. Here are kept the only equines of the Territory, four horses being stabled and sheltered. They have cattle—the largest herd in the Territory—as many as 20 or 30 head; and they also have the only road in the Western Territory worthy of mention, one running around the island 12 or 13 miles in length, made principally with a view to exercising the horses aforesaid in the summer time when they have no ice to haul. They also have a small ship-yard here, where little vessels of 25 or 30 tons are built for fishing and trade.

From Wood Island the next settlement in order is on Yelovoi or Spruce Island, where to-day we find a village in which 78 creoles alone are living. These people live in 15 frame houses, have a church and a little school-house, in regard to which mention may be made of the fact that for thirty consecutive years during one period of the past history of this place a Russian monk made his abode therein, teaching school for the children of the town itself and neighboring villages as they came; giving instruction also in rudimentary arts, agricultural industry, &c. The people of this settlement are principally engaged in small gardening and the care of little bands of cattle, and some of the young men follow the chase of the sea-otter.

From Spruce Island we cross the straits between it and Kadiak Island, back to a little village thereon named Oozinkie, where there are 45 creoles living in 10 frame houses; and strange to say, they have no chapel, though their method of living is just the same; they do, however, avail themselves of sacred privileges and enjoyments found beneath the shelter of the church of Yelovoi. They do not differ in any respect from the Spruce Island people in regard to their occupation and method of living.

We again pass from the straits of Oozinkie to the Afognak village on the southern shore of the island of the same name. The settlement consists of what used to be not long ago two distinct villages, but which are now almost united by the erection of dwellings in between, closing the gap as it were. Three hundred and thirty people are living in 32 good substantial log and frame houses. They have, of course, a large chapel, though they have no school-house or school. The exercises of the church have enabled a number of them to read and write. They are principally the descendants of the old "colonial citizens." They have here the greatest extent of land under cultivation found at any or all of the settlements combined elsewhere in the Territory. In the care and conservation of these garden patches, attending to little herds of cattle, together with small flocks of chickens, ducks, &c., they pass their time, but they are employed in boat building, at which they are expert, and for which they have many orders, chiefly in the line of row-boats for the fishermen. Many of the young men are sea-otter hunters, more so now than formerly. They also cut a great deal of wood here which the traders buy and sell in less favored sections.

These villages which we have just cited, it will be observed by reference to the table following this chapter, are peopled by very few of the Kadiak natives themselves, the inhabitants being nearly all creoles.

From Afognak the next settlement in order is Ooganak Bay, where there are two little villages on the opposite sides of the shores in the deep indentation of the coast line. Here are 41 and 32 people respectively, living in the upper village with 6 barrabaras, and in the lower with 3, but the dwellings are large family barrabaras after the old style. They are true natives, and are without a chapel, though they are all Christians. They are engaged in sea-otter hunting in the hunting grounds of Shelikhov Straits, from Cape Douglass to the southward and westward.

These people, in common with the natives of Kadiak, are land hunters to a great extent, trapping and shooting foxes, bear, &c., and the land-otter, while for their own immediate subsistence they draw largely from the sea, such as codfish, halibut, mussels, &c. They have an abundance of fuel, timber everywhere being common, but at their settlement the extreme western limit of timber on the island is reached.

From Ooganak we go down to the Ooyak Bay, which is the largest indentation of the sea made in the coast of this large island, a deep gorge and arm of it nearly subdividing Kadiak itself. Here is a settlement, situated on the western shore of the bay where it narrows into a fiord or channel directly opposite an island in the passage. Seventy-six natives live here in 10 barrabaras, and they have a very small chapel. During the winter season they hunt the sea-otter, but the major portion of the able-bodied natives of the village are engaged as employés of the salmon fishing and trading companies. They have an abundance, as might be inferred, of natural food in the line of fish, and they have their share of land mammalia, bears, wolves, &c. They also, in common with the people of Ooganak, frequently take journeys across the straits to the mainland in quest of reindeer.

From this place, five miles over a trail made expressly for this purpose, these natives go to Karluk River, where we find a settlement of the same name, of 201 natives and creoles, living in 10 frame houses and 11 barrabaras, with a church or chapel included. This has been from ancient time of Russian occupation the salt-house and packing headquarters for the preservation of their salmon used in the trade. They then put up here their air-dried salmon, or "yukala," with which they feed the people away over at Sitka. All dried fish, such as codfish, halibut, &c., are called "yukala" in this country. These natives are living here principally employed and engaged under the auspices of the several fishing and trading companies, who make this their headquarters for the purpose of preparing the salmon for the San Francisco market, and the "yukala" which the traders use in the progress of their trade throughout the Territory. In the winter season, when these operations are temporarily suspended, the men devote themselves as a rule to sea-otter hunting, with the usual side issues of bears, wolves, and other hunting and trapping.

From this busy little place we pass clear around the whole extent of the southward and southwestern coast of the island until we reach Alikak Bay, wherein the first settlement from our last point of departure is situated on the eastern shore of the bay near its head, where these people are living in a village called Akhiok, embracing 114 people, residing in 7 barrabaras, together with a chapel. They, too, are sea-otter hunters—altogether, for that matter—with the usual diversion of fox and bear hunting. These people, like those of Ooyak and Karluk, are deprived of forest timber; they get a scanty supply of drift-wood, and depend mainly upon the luxuriant "chicksha" and the talnik or creeping willow. The traders, however, ship a good deal of wood to Karluk.

These people last specified have a very extensive range of sea-otter hunting grounds, reaching as far down to the southward and westward from their home as the barren island of Ookamok, where, in olden times, the Russians had a sort of penal settlement, placing their refractory and vicious employés here as another Botany Bay, with the sole resources thereon of trapping the ground-squirrel or Parry's marmot, which was made up into "parkas" that were valued very highly by certain tribes on the mainland. The marmots from this desolate island possess a peculiarly bluish ground tint not characterized by those found in any other district. This color made them popular and prized. The last of these people, or rather their descendants, in 1870, growing thoroughly aware of their lonely existence, removed *en masse*, in two huge bidaras, in which they made the long sea voyage from their desolate homes to Kadiak, loaded down with their goods and chattels almost to the water's edge. The story told of their reason for removal is both amusing and instructive, as it throws a certain amount of light on the practical workings of misguided though benevolent intention. A certain representative of one of our Protestant boards of missions, who was charged by the government with an examination into and the duty of making a report on these people of Alaska and their condition, in the course of his peregrinations through the Territory touched at this island in 1869, ignorant of the fact that he beheld before him the survivors of a penal colony. They came to him and told him a pitiful story of their poverty and privation, whereupon he landed on the beach stores from the reserves of the United States stock belonging to the vessel on which he was traveling, and left them to eat, drink, and be merry. They did; and months passed by in which they fared sumptuously. The end was reached; the reaction was great; they determined to pack up and move

somewhere near to such kind benefactors; and hence the hegira. Of late many of these emigrants have been taken back to their former home to hunt sea-otters, these valuable animals having increased during the temporary abandonment of the island.

A small settlement is contiguous to Alitak and close by, named Ayakhtalik, where, on a little islet called Goose Island, live 101 souls in 8 barrabaras, without a chapel. They are also sea-otter hunters, joining in with the people of Akhiok in the making up of all their hunting parties. They have, of course, an abundance of fish and water fowl, and drift-wood in great plenty. They also make little fox-hunting excursions, and the like, and living, as they do, so close to Sitkhiak Island, are enabled to secure quite a number of the valuable skins of the sea-lion.

The next settlement in order, as we turn this extreme southwestern point of the island and proceed up, is Kaguiak, a small settlement situated immediately in the rear of what Captain Cook called "The Two-Headed Cape." Here are 132 creoles and natives, living in 12 barrabaras and 4 frame houses, with a church and 3 rival trading stores. They also join in sea-otter hunting, participated in and directed by the combined effort of the natives of the south-shore settlements. It should be borne in mind that these people do not pretend to make this great sea voyage down to Ookamok and elsewhere on those hunting grounds in their open bidarkas; they are all carried to and from such places on the decks of traders' vessels. It has, however, been done by exceptional examples of what these people can do, but it is not the practice—far from it. They fish, have a few head of cattle, keep chickens, have plenty of eggs, and the flesh of wild fowls beside. It is the habit of the "tundra" goose (*B. canadensis*), which breeds in the far-off Yukon country, to spend the winters in this neighborhood, where, on the hill-sides, they rest in extensive flocks, and where they seem to find, during their sojourn in these lofty places, an abundance of food; for, as the natives capture them, they are always found exceedingly fat. Large numbers of these geese are annually prepared, by a rude system of air and smoke drying, for exportation; principally to Kadiak. They also capture a few sea-lions on the outlying capes and islets; and they have an abundance of fuel in the form of drift-wood, "talnik," and "chick-sha."

In this connection, as we view the evidence of great abundance of natural food here secured, we turn back to the consideration of the fact that the first Russian hunters who ever landed on Kadiak Island stepped ashore on the beach at the extreme southern head of Allitak Bay. They were under command of Stepan Glottov, who has been rendered notorious and infamous by the Russian records of his cruelty and inhumanity on the Aleutian Islands. He landed here in 1762, with his "Promyshleniks," late in the season. They were attacked during the winter with scurvy, and in the spring, when thus enfeebled, were attacked by the natives here and obliged to put to sea with less than a fourth of their original numbers.

From Kaguiak we pass on up to the site of the first permanent or fixed settlement of the Russians on Kadiak Island, at Three Saints Bay, where Shelikhov landed from the vessel of that name, the Three Saints, and founded the post on which the present settlement is based. Shelikhov, from these headquarters, transmitted several bulletins to the home government, in which he claimed to have successfully fought and stormed the natives' strongholds, slaying them by hundreds, and finally had conquered and subdued 50,000 people to the Russian rule. Of

course, in the light of recent facts and records, it is safe to divide those figures by ten, in order that a true estimate of the number of natives then brought by Shelikhov within Russian order may be known.

To-day the settlement of Three Saints Bay consists of 293 creoles and natives, living in 2 log houses and 19 barrabaras, together with a church. They are engaged principally in sea-otter hunting, and in all respects are equally favored by products of land and sea, such as we have noticed as peculiar to the other settlements just below them. They have a little advantage in the possession of fine halibut fishing grounds beneath the surface of the bay, where they live. They have an abundance of drift-wood, which is very acceptable to them, because they live just far enough away from the western limit of timber on this island to render its use practical. The first scattered clumps of forest trees lie back and away from them 10 or 15 miles. Baranov, in 1796, removed the headquarters which Shelikhov established here for the Russian Fur Company to the present village of Kadiak, which in turn was removed, as we have before cited. Shelikhov established this post in 1785.

The next inhabited point above and beyond Three Saints Bay is Orlovsk village, situated on the deep indentation of Eagle Harbor. Here is a large settlement of 278 natives and creoles living in 2 log houses and 19 barrabaras, with a church. They are primarily sea-otter hunters. They also enjoy the opportunity of successful sea-lion hunting, securing annually a great many of these animals, the skins of which are so precious for the construction of their canoes, to say nothing of the intrinsic value of the flesh and sinews. There is a small herd of cattle here which contribute in a great measure to the better and more comfortable existence of the people. They enjoy the same fishing advantages, having perhaps the best grazing country on the coast; they keep poultry, and have an abundance of wild fowl in season.

At Orlovsk we complete the circuit of the island, returning to Kadiak; and now we pass over on to main land in rapid review of the settlements which we shall find there.

Beginning with Mitrofanía, a small islet right off and to the southward of the mainland, a little hamlet of 22 souls is found living in two or three log houses and given entirely to sea-otter hunting.

From Mitrofanía we go to Kaluiak, another small village in the western bight of the large bay of Chigmik. There are 30 people here living in 4 barrabaras, and are without a chapel. They are engaged in hunting deer back in the mountains, and have the usual supplies of fish and the natural products which we have referred to in this section.

From this point we pass over to Sutkhoom Island, closely adjoining the mainland and near the head of the large bay opposite. Here is a settlement of 25 people living in 4 barrabaras, and are without a church. They are sea-otter hunters.

From Sutkhoom the next point in order is the village of Kuyukuk, on the mainland, under the shadow of Mount Chiginagak, consisting of 18 people, who live in 2 barrabaras; they have no church.

Then we pass over quite an extended reach of the coast, where we meet with no permanent or fixed villages until we come to Katmai, directly opposite and across the straits from Ooyak Bay, on Kadiak. This is a point where we find a village of 218 people, creoles and natives, who are living here in 20 barrabaras, and have a church. These people are all engaged, as a rule, in sea-otter hunting, sending out large parties north and south from there up and down the coast. This point formerly was the center of the mainland coast trade as far down as the Shumagin Islands and up to the northeast as far as Cook's Inlet; it was



the gate through which parties making the portage to Bristol Bay by the Igageek route and returning therefrom by the way of the Naknek portage, taking the first line of travel when they are loaded heavily, and coming back by the latter when they have no burdens; but now a rival trading-post has sprung up at Cape Douglas and Katmai's glory has departed. The Katmai people have timber at their command, such as poplar and birch, which grows in fair abundance along the Katmai River, reaching up a little way on the hill sides. They have an abundance of fish, plenty of water fowl, and in the mountains, which rise abruptly around them, bear, deer, land-otter, among the animals, and the ptarmigan (*S. albus*) and ruffed grouse (*Bonasa sabinii*) are found. At this point excellent cranberries are gathered abundantly by the people. When we made this portage last October, we were struck by the fact that the tourist might land at Katmai, and in one day's foot travel stand with us at the summit of a mountain pass, the divide proper of the peninsula, where he would be compassed on every hand by the grandest visions of Alpine scenery, snows, and glaciers.

The next settlement beyond, and on this coast, is on Kukak Bay, a little further up the coast, where we find a small settlement of 37 souls, living in 4 barrabaras, without a church. They are sea-otter adjuncts and contingents of the Katmai people.

From here we pass rapidly up to Cape Douglas, within the shelter of which, and on the north side of a little bay, is the settlement of Cape Douglas. It has 46 souls, with a chapel, 7 barrabaras, and 2 trading stores. This is also the terminal point of a portage over to Bristol Bay, but it is much longer than the Katmai lines of traverse and is not favored. The Cape Douglas people are sea-otter hunters, with the same natural advantages as those enjoyed by the people of Katmai.

With the mention of this settlement we complete the circuit and enumeration of the people of Kadiak Parish, and we now pass to a view of the Cook's Inlet district, or "Kenai mission," as it is called by the Russian Church.

*Population of Kadiak Parish.*

Village.	Whites.		Creoles.		Kodiak Inuits.		Total.
	Males.	Females.	Males.	Females.	Males.	Females.	
Saint Paul Harbor .....	19	1	124	129	6	9	288
Wood or Liessnoi Island .....	2		24	32	54	45	157
Yelovoi or Spruce Island .....			40	38			78
Oozinkie .....			20	25			45
Afognak .....			104	91	76	68	339
Ooganak North .....					20	21	41
Ooganak South .....					17	15	32
Ooiak .....					36	40	76
Karluk .....			12	12	139	138	301
Akhiok .....					66	48	114
Ayakhtalik .....			2	2	48	49	101
Kaguiak .....	1		3	6	67	64	141
Three Saints Bay .....			13	10	109	87	219
Orlovsk .....			10	7	123	138	278
Mitrofanía .....			10	12			22
Kaluiak .....			1		19	10	30
Sutkhoom .....					12	13	25
Kuyukak .....					10	8	18
Katmai .....			19	18	94	87	218
Kukak .....					20	17	37
Douglas .....			2	4	22	18	46
	22	1	384	386	938	875	2,008

## CHAPTER III.

## THE KENAI MISSION OR COOK'S INLET.

In reviewing this division, which is so compactly compassed by the lofty mountain ranges to the westward and northward, closely bordering on that great estuary known as Cook's Inlet, and hemmed in to the eastward and well to the southward by the Kenai Peninsula, we have to take notice of a district much inferior as regards its wealth in trade, but in itself quite as interesting and as instructive—a portion of the Territory which will always possess a position of prominence whenever the subject of Alaska and its resources is considered.

When the Russian traders first penetrated into the uttermost recesses of this region under the lead of two rival companies in 1787-1789, they literally made war one upon the other, scenes of piracy and bloodshed being enacted in swift succession for ten long years, until old Baranov with his iron hand took the disputants by the throat and sent them to Siberia for their judgment.

The natives of Cook's Inlet are strongly defined as a separate people from those of Kadiak, both in language, disposition, and appearance. They are rather more like what the sea-coast people of British Columbia call "Stick" Indians, a name by which all are called who live back from the sea. The average man in the Kenai tribe is an Indian of medium height, according to our own standard, say 5 feet 8 inches, well built, lithe, and sinewy; the eyes are black and small, the nose rather prominent; indeed the observer will be surprised at the number in this tribe who have a nose like that ascribed to Julius Cæsar. Their mouths are large, lips rather full, with a chin perhaps not so prominent as that of the Aleutian or Kadiak type. Their skin is darker, a shade or two, very perceptibly darker, though examples of comely young women can be met with frequently, exhibiting a very fair complexion with rosy red lips. Their women are as a class much more prepossessing in personal appearance than are those of the people we have just described in the preceding chapters. They wear their hair, which is thick, coarse, and black, much longer than the Kadiaker; the males gather it into a thick stubby braid hanging back of their heads, thickly larded with grease and sometimes powdered over with feathers and down. They seldom paint their faces or their bodies, nor do they tattoo.

As we pass from Kadiak Parish, leaving Cape Douglas to our back, and going north up along the western shore up Cook's Inlet where we first meet these people, finding them in their greatest number and primitive simplicity at the head and northern limit of the gulf in the Sushetno and Kinnick River valleys, we see them all dressed in buckskin shirts and trousers, men and women alike. The practice here of clothing the females in trousers is doubtless borrowed from the Kutchin tribes over the Divide. Many of their hunting shirts and breeches are tastily embellished with porcupine quill and grass braiding or bead embroidery; while the ears and noses of the men are pierced for the insertion of the pearly white shells of the *Dentalium*. Their appreciation of this shell is such that the traders now find it almost the only portion of the Territory where they have a steady call for them. The women dress in almost the same cut and fashion of garments as those worn by the men. They have, perhaps, as is the custom of pure Indian people, much heavier burdens in the line of manual labor laid upon them than those imposed by the Kadiak or the Aleutian tribes; these people travel a great deal by land and the women must pack.

As they live in their settlements, we find them distinguished by a peculiar style of architecture, which will be met with nowhere else. They build their permanent dwellings or one-story houses with logs. These logs are so fashioned that the under side of the superincumbent one is always hollowed so as to fit down tight, almost air and water tight, upon the natural round surface of the nether timber. Some of these houses are as large as 20 feet square, generally from 10 to 15 feet. They have regular rafters, with a pitch to the roof sufficient to shed rain and melting snow from the spruce-bark roof. A fire-place is reserved for the center, with a small aperture directly above it in the roof. The door to this structure is a low square hole at one end, large enough to admit a crouching person. It is stopped by a bear skin, usually hung over it. The floor is natural earth, while around the sides—one or two sides—of the room a rude staging is erected a foot or two from the ground, and wide enough for two persons to extend themselves side by side in bed. Upon this staging they lay grass mats and skins; in fact, it is a catch-all for everything.

Their culinary utensils to-day are made up of iron and copper kettles. Many of them have a tea set, cups and saucers, and a few old Russian "samovars" may be found among them. They use tea in a moderate quantity; sugar, flour, hard bread being the principal articles which they look to the trader for their dietary.

They have another peculiarity manifested by those among them who are chiefs or wealthy burghers, in the form of queer little wings or small box-like additions, tightly framed and put together, and joined on to the houses, and an entrance from it directly into the room being cut through the log frame. These little additions are used as sleeping apartments. They are furnished with the luxury of a rough plank floor and a little bladder-plate window in many instances. These are considered reserved and special apartments on occasions when a visit of ceremony is paid to them. They are their parlors or drawing rooms, in fact. Their idea in these tight little dormitories is to have them so snug and warm that they may sleep therein without any burdensome covering, in many cases without any clothing on at all. This is a great luxury. The usual furniture which we find in the Kenai house consists of these bed frames, and now and then a few blocks, or seats of that character, in lieu of chairs. They have boxes, most of them—store-boxes; and a late introduction, which has spread with great rapidity, and is universally liked by them and all the people of their character in Northern Alaska, is the traders' miniature imitation of a Saratoga trunk, a box somewhat smaller than the genuine article, but faithfully duplicated in its contour, and supplied with a lock and key. This will be found now in almost every house. They put their valuables into them, such as charms, toys for their children, flashy handkerchiefs, small tools fashioned out of bits of iron and steel, bags of sinews, thread, needles, lead, and percussion caps, the latter being to them pearls without price—nothing so precious. At their meals, and in living together, they do not differ much from the usual habit and manner of Indians proper, and familiar to us for the reason of repeated description and observation published and made of our own savage tribes living near by us.

The men are in their disposition much more taciturn than their western neighbors, but they are ardent hunters, spending most of their time and energy in the chase on land, where the fur-bearing animals peculiar to their country are numerous, varied, and valuable. They make journeys, long journeys, into the interior, up and through mountain defiles, and build on the tracks of their travel, at intervals here and there, houses

of refuge and shelter, in which they live with their families sometimes the major portion of the year. These shelters, or sheds rather, wide open at one side, are fashioned rudely of logs thatched with bark, and sometimes two camps will join together and close the open faces of their sheds, nearly joining, so as to leave merely room enough for a passage and a fire-place between them.

These people build birch-bark canoes with which to navigate the numerous swift and brawling rivers in their Territory, and they go down to the seaboard, buy skin canoes of the Kadiak pattern, and navigate to some extent on salt water, in quest of fish, in this manner.

In this connection we wish to call attention to the fact that these people do not make in any form whatever wooden canoes; for that matter the explorer will find no wooden canoes north of Mount Saint Elias in this whole region.

They are expert fishermen, and they certainly enjoy an abundance of piscatorial food, salmon of fine size and quality running up their rivers, trout in the thousand and one lakes of their country, finding them there all through the winter, fishing through the ice; and with a certain degree of contempt for the salt water, which is the treasure-trove and life-trust of the Kadiaker and the Aleutian, they spend no time there unless the steamboat-puffing of an approaching school of white whales attracts their cupidity and supplies them with a rare feast. These animals (the "beluga,") are found here running up some of their river quite a distance.

The variety of the mammalian resources extended by nature to these inhabitants of the Kenai district is, as we have said, very great. Bears, brown and black, the former of great size and ferocity, the skins 10 and 12 feet in length, strongly suggestive of the grizzly itself (if it may not be), are brought in by the hunters every year. The deer, which they find, are the large cousins of the reindeer, the woodland caribou. They get specimens of the mountain sheep (*ovis montana*), though the hair is surprisingly long and coarse, perhaps indicating another variety of the genus. They trap beaver, the land otter, porcupine, the "siffleur" or whistling marmot, wolves (the large gray), the lynx, the wolverine, the marten, a few mink, muskrat, and last, though not least, the ermine. Of wild fowl they have the grouse—both the white ptarmigan, so called, and ruffed grouse; wild geese are very plenty, ducks, and the great sand-hill crane, together with the frequent presence of the northern "buccinator" or great white swan. The natives, however, regard these swans of poetry with rather practical eyes, as they fill their larders, while the skin, with the down attached, is highly prized for its non-conductive qualities.

Of berries and roots they make a selection in the jungles and thickets and on the hillsides, of whortleberries, salmon and gooseberries, a kind of small raspberry, and fine cranberries in great plenty, which they mix in with their fish oil.

The skins of animals and the breast of many birds are used in trade, and to clothe themselves, for they seldom wear anything except such outer garments unless a chief or some wealthy head of a family sports a cloak, or something of that kind, over his skin costume—no San Francisco fashions here. What they perhaps crave most from the trader are lead, percussion-caps, good rifles, tobacco and calico. Another point in this connection may be made: these Indians are not "blanket Indians;" rare examples only occur of this covering being used as a garment or even found in their possession.

We pass now from this sketch of the pure or primitive Kenai people

to those who have become civilized by the influence of the church and long association with the Russians. They are living mainly on the eastern coast of Cook's Inlet, and are found between Cape Elizabeth and the settlement of Kenai, including that place. Here they have become so much modified and ameliorated in their tastes and disposition that, were it not for their language, we might take them to be quite another people; it is superficial, however, for they are the same, but living and dressing very much after the fashion, or wholly so, which we have set forth as peculiar to and characteristic of the Kadiak Christians.

An enumeration of the villages and settlements is now in order, and those we find on the coast of Cook's Inlet are as follows:

Alexandrovsk at Port Chatham, and near the site of the old Russian coal mines, is a settlement of 38 sea-otter hunters, who are mixed natives. They are living in a few log-houses, with a chapel.

From that point due northward we locate another settlement called Seldovia, of 68 Kodiak natives and Creoles. They are sea-otter hunters and live here in log-houses, and have a small chapel.

Thence again to the northward on the opposite side of the Chugachik Gulf, near Anchor Point, is the village of Laida, where there are 78 Kenai people, who are all sea-otter hunters, and are the only ones of their race who are, with the exception of a few on the west side of the inlet. They do not get a great many, however.

A short distance again from this point on up along the sea coast, at a point incorrectly marked, on the Coast Survey map, Fort George or Munina, is the settlement of Niniltchik, where 30 people, Russians and Creoles only, descendants of the old colonial citizens, are the first families of the country. There are only four families living in four houses. They are essentially a pastoral people, cultivating gardens of potatoes and excellent turnips, rare and juicy; and watching over a small herd of cattle—and they actually make butter. They also raise pigs and keep poultry, but on account of the hogs running on the sea shore, and the chickens scratching there also, both their poultry and pork are fishy. A little river runs by them from the interior to the inlet here, at the mouth of which is a sand spit, or bar, of considerable width, through which the water is literally filtered into the sea. There has been, of course, an open communication in time not very remote, and the salmon which then ran up on their mission of reproduction annually are still determined to run now; in consequence of this instinctive effort during those seasons when these fish are running they actually leap out onto this dry bar—many of them on and over in a succession of spasmodic wriggling efforts until they reach the river itself, and continue their errand. The people in the mean time have nothing to do save to walk down to the bar and gather up their choice and selection of these fish, which have voluntarily landed themselves, as it were, at their feet, or surrendered themselves into their hands.

From this interesting point we pass on again north, up the coast to Kassilov, situated a little to the southward of the river of the same name. Here is a community of 59 Kenai people living in log-houses. At the mouth of this river are the ruined foundations of an old Russian trading-post which was called "Saint George" from the name of the vessel that landed there with the colonists.

These people, as well as all those we have just cited, enjoy contiguity to an abundance of standing timber, and never suffer for want of fuel. The river itself is quite a resort during the salmon season for Kadiak fishermen, who come up here, as it is an easy matter to secure these fine fish in its waters.

Again to the northward, almost to Kenai, is a small village called Chinila, an insignificant hamlet of 15 souls, living in a log-house or two.

Thence to Kenai, where we find a village called Chkituk, of 68 Kenai natives and a few Creoles. The mission church of this district is also situated here, the unhappy priest last in charge of which was unfortunately shot a year or two ago, while out hunting, by his native auxiliary, who in his excitement and zeal forgot the nice distinction existing between a missionary and a bear.

As might be inferred from this slight digression, the people are hunters going back into the interior for their quarry—bears, wolves, deer, &c. They make an annual trip or excursion over to Kalgin Island in the straits opposite, where they get a considerable number of hair seals.

There is here a vast moor or level bog abounding in lakes or sloughs, lying between them and the mountains back from the coast to the inlet. This locality and immediate neighborhood was the site of an old Russian trading-post in early times. The bluff on which this first post was built over the river has been nearly all washed away, and a few timbers protrude from the shelving banks. Here it is interesting to note, was the site of an old Russian brick-yard where these materials were put into shape for use throughout the territory, the principal object of which was to set up and endow the trading-post with the Russian oven or "petchka." This clay bank is the only one that the Russians could find in the territory fit for the purpose of fire and brick, the clay at Kadiak and elsewhere being so permeated with salts and soda as to be unfit for the purpose.

After the transfer of the Territory to our hands, and during the period when the American notion was prevalent in this country that it was necessary to patrol Alaska with soldiers to protect the people, one of the several detachments of troops which were ordered into this country was located here, and they have left traces which still endure since they abandoned the post in 1870.

We have referred to the fact, and laid some stress on it, that these people of Kenai are Christians. They are so, with one or two exceptional exhibitions, however, of a relapse to their faith in savage Shamanism. Of this we were strongly and disagreeably impressed by the following occurrence, which we witnessed. A Kenai native came to us one afternoon when we were here, and asked us to come down to his hut, where he said that they were "going to have a good time"—some fun in fact. Curious to know what this man intended we accepted his invitation, and on repairing to the place found a woman lying in the last moments of earthly existence—his sister—while her husband stood in the doorway of the house loading and firing his gun, shouting between the discharges at the top of his voice, accompanied by a chorus of yells, gestures, and numerous other indescribable motions and noises. His neighbors joined him to soothe and comfort his wife's dissolution. There may have been feeling here such as we would expect to find characteristic of sorrow and grief, but, if there was, it was impossible for us to detect it anywhere in that assemblage. They told us afterwards, however, that this exhibition of great bravery and shooting in the air, and shouting, storming, and stamping around the death-bed, was to secure the way and drive cut the evil spirits which they supposed were waiting without, eager to seize the soul of the expiring woman.

We now turn to a review of the wild Kenai people, the first village or settlement of which we find directly back in the interior about a hundred miles, on a stream emptying into Skilakh Lake. Here is a village

of 100 Indians, who are living in the log houses of the country. They are easy, shiftless, happy-go-lucky hunters. Their great staple is beaver and marten.

From here we go back to the coast and up the inlet, to Nikishka, a short distance below East Foreland, where there is another village, of 138 people. They also are hunters.

From Nikishka we pass along the mouth to the Kinnick River, where we pass a settlement of 254, in three villages. These people of Kinnick in olden time, and even to the transfer of the Territory, have conserved and claimed the profits of middle-men, or commission merchants, in the trade which the Indians of the far interior brought down to the coast before the development of the trade on the Yukon; but now the opening of the Yukon and the Tannanah Rivers draws its own legitimate current in that direction, and these people have no more emolument from it.

The next congregation of these people we meet with directly to the westward, on and up the valley of Sushetno River. Here is a large aggregation of the Kenai Indians—146 of them—who are living in small scattered settlements everywhere from the mouth of the river to a long distance up the valley, and when they come in contact with the white traders they meet them at North Foreland, or Toyonok, down the inlet, some little distance, on the mainland. They range here, hunting the animals which we have enumerated before in some detail. Their savage neighbors west of them and right over the Chigmit range, the lofty snow-white peaks of which form an insuperable boundary and a very safe one, say, without any affectation of charity, that the Kenaitzi know no fear and are deadly foes. It amuses us, therefore, not a little when among the Kenai Indians to hear them say that the Innuits were brave and reckless in facing death; they, too, know no fear; they were dreadful people, cannibals, &c., and thus we find two savage races, separated by a natural barrier, who have resolved themselves, as it were, into a mutual admiration society, in which their hate is only equaled by the fervor of their protestations of respect.

The Kenai people, with whom we have closed at Toyonok an enumeration of their numbers and location, live perhaps in the most romantic and picturesque portion of the Territory. Burning volcanoes smoking and grumbling, a great inland sea, rolling for miles and miles therein, lies at their feet; great plains, moors, and lakes, timber, and tundra. They have, perhaps, in this respect the most striking natural scenery in Alaska. It is also interesting to notice the rather abrupt lines which exist, as it were, so strongly defined, between the Indians of Cook's Inlet and the Innuits of Bristol Bay. There is no breaking down of the division, although it can be passed by an active man in a single hour.

*Population of Kenai Mission, Cook's Inlet.*

Villages.	Whites.		Creoles.		Kodiak Inuits.		Kenaitze.		Total.
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	
Alexandrovsk.....	1	.....	4	4	13	17	.....	.....	39
Seldovia.....	2	.....	1	2	38	30	.....	.....	73
Laida.....	.....	.....	.....	.....	.....	.....	40	38	78
Niniltchik.....	.....	.....	16	14	.....	.....	.....	.....	30
Kassilov.....	.....	.....	.....	.....	.....	.....	30	29	59
Chinila.....	.....	.....	.....	.....	.....	.....	7	8	15
Chkituk.....	.....	.....	2	3	.....	.....	38	30	73
Kenai Station.....	2	.....	1	7	.....	.....	.....	.....	10
Skilakh.....	.....	.....	.....	.....	.....	.....	48	52	100
Nikishka.....	.....	.....	.....	.....	.....	.....	37	31	68
Kinnik.....	2	.....	.....	.....	.....	.....	138	116	256
Sushetno.....	.....	.....	.....	.....	.....	.....	78	68	146
Toyonok.....	2	.....	3	7	.....	.....	12	13	37
	9		27	37	51	47	428	385	984

## CHAPTER IV.

## THE GREAT INNUIT PEOPLE.

## THE BRISTOL BAY SUBDIVISION.

In portraying the physique, physiognomy, and disposition of these people whom we first encountered in the Kadiaks, we find in the common Innuait a man who stands a little below the average height of the Anglo-Saxon race, namely, 5 feet 6 or 7 inches. These are Eskimos, strictly speaking, only possessing this marked difference from their brethren who are confined to the ice-bound coasts of the Arctic and north of Bering Straits by being taller and more shapely, a climatic modification, undoubtedly, and nothing else. The Innuits possess a fair skin, slightly Mongolian in complexion. They have a rather broad face, prominent cheek bones, large mouth with full lips; small black eyes, set rather prominently in their sockets, almost on a line with the bridge of their insignificant and much depressed noses, although there are tribes in this subdivision of the Alaskan people who have straight, prominent noses, and who, if they were dressed and barbered in San Francisco, might pass up the streets as Anglo-Saxons. They have the customary abundance of coarse, black hair, which the men up to the age of thirty years usually keep shingled close to the scalp. After this period in life it is allowed to grow as it will, and is worn by them in ragged, unkempt locks, hanging as they may. They have in many instances remarkably well-developed beards and always a moustache; every young man is as proud of its possession as his Caucasian brethren. They have shapely hands and feet, limbs well proportioned and duly muscled. The women, as is customary in proportionate stature among the human race, are smaller than the males, and when young some of them are fair and comely. The skin of their cheeks is frequently suffused with attractive color, not artificial, lips pouting and red, and hands and feet are small and very well shaped. They seldom pierce their lips or disfigure their noses. They lavish upon their children a wealth of affectionate atten-



tion, endowing them with all of their ornaments, piercing the noses and the ears of infants, into which they insert ivory and silver ornaments, strings of beads, &c., but as the child grows up to either man's or woman's estate these attractions are removed and never returned to the vacant orifices in these organs. The women allow their hair to grow to its full length, part it in the middle and gather it up into thick braids, or else it is confined in ropes or cables, as it were, by lashings of copper wire, sinews, &c. They seldom tattoo their faces in any shape whatever; the only work of this kind that is done is the drawing of some faint, transverse blue lines under the lower lip and on the chins of the married women.

These people, in dressing, use the primitive garments of their ancestors to-day as a rule; the only exceptions are a few individuals living constantly about the scattered trading posts, and about the missions in their Territory. The conventional coat of the Inuit is the "parka," with sleeves, and compassing the body without an opening either before or behind from the wearer's neck to his feet, the head being thrust through an aperture left for it, fitting snugly around the neck, and in the winter compassed with the cowl or hood. This "parka" is worn with a singular ease and abandon; frequently the arms are withdrawn from the sleeves and pulled up within and under, allowing these appendages to dangle. As they sit down, they draw the "parka" about and over their knees, with the hands, in turn, around them underneath; or else, when the native is on the trail and moving, the "parka" is gathered up around and about his ankles, to which it reaches, and bound as high as his knees by a leather or sinew girdle around the waist, the folds of the "parka" dropping in clumsy effect over the frequently highly ornamented girdles. These "parkas" are made of skins of animals, and, in rare instances, the breast skins of birds. The most favored and valuable perhaps are the reindeer styles for winter use, while the summer "parka" is a lighter one, made of the marmot and mink skins. The hood about their heads is only attached to the winter "parka"; it is a capacious pouch, which, when not in use, lies in thick folds back of the head and on the shoulders, ornamented in various ways, but usually with a thick fringe of dog-skin hair, which, when drawn into position, encircles the wearer's face, giving him a wild and unkempt appearance.

The leg-covering of both male and female consists of either skin or cotton drill trowsers, which are puckered at the ankles, and bound about with the uppers of their moccasins (where they wear moccasins), or else inclosed by the tops of their reindeer boots, which are the prevalent covering for the feet. Their underwear is limited to that garment, or apology for a garment among them, which we call a shirt, made also of light skins or cotton goods; if it is made of skin (dried skin) it becomes an heirloom in the family, highly polished and redolent of the national Inuit odor.

Their places of residence may be described as follows: The Inuit house is, in outward appearance, a circular mound of earth, grass-grown and littered with all sorts of Inuit furniture; a small spiral coil of smoke running up from the apex; a dog or two crouched upon it; children climbing up and down upon it or rolling down; stray tit-bits left from one meal until the next shall be in order. An entrance to this house is a low, irregular, square aperture (it cannot be called a door), through which the owner stoops and passes down a foot or two through a short, low passage on to the earthen floor within, where an irregularly-shaped circle or square 12, 15, or 20 feet in diameter, as the case may be, is found, and in which the only light from heaven comes from the small

smoke-opening at the apex of the roof, which rises tent-like from the floor, the fire-place directly in the center. The rude beds or couches are of skins and grass mats laid upon clumsy frames slightly elevated above the floor, small logs and saplings, rough-hewn planks, and sometimes mere platforms built up of peat or sod. In many instances a small hallway, with a decided bulge amidships, is erected over these entrances, where, by this expansion, room is afforded in which to shelter their utensils, water-vessels, &c., and in which the everlasting dogs congregate.

Immediately contiguous or close by most of the houses will be found a small summer kitchen or cook-house fashioned in very much the same shape and style as is the residence itself, only it is not excavated under ground, and is but 5 or 6 feet in diameter; it is also rendered offensive to our senses by being the inevitable dog rendezvous.

We have here to note, in speaking of the dogs, the omnipresent canine in this country, the remarkable distinction which exists between the method of dog handling in this country and that characteristic of the Kenai people and those of Kadiak. For example, the Innuits always makes his dogs beasts of draught; they are harnessed and made to drag sleds and canoes; the native of Kadiak seldom harnesses up his dogs, while the Kenaitze, endowed with a great abundance of dog life in their villages, use them almost entirely on the bear trails, and the like, dragging with their own hands sleds laden with their paraphernalia and supplies. Perhaps two or three exceptions to this rule may be found. The dogs are the same in every instance. The people of Kadiak have few sleds, or rather they have no use for them, but those of the Kenai country do use them as much as do the Innuits, but dragging and pushing them as they travel.

The dietary of the Innuits, with reference to what he purchases from the traders, embraces a modicum of small supplies of tea and sugar, the coarse Graham flour, and a few crackers. This flour is made up by them into pancakes fried in oil, and is about the only staple in our line of groceries that they value; they also boil it into a thin hasty-pudding or mush, using no salt whatsoever in anything that they eat.

Their natural food supplies are large and varied. They have reindeer meat, the flesh of moose, bears, and all the smaller fur-bearing animals peculiar to that region, of which there are quite a number, viz: the land-otter; foxes, red, cross, and black; the mink, marten, marmot, and the ground-squirrel, or "evrashka," which is the most plentiful of the two. The bears are all brown—no black bears are found here; wolves, the large white and grey and the smaller white wolf on the mainland, while on the coast they secure the walrus, male and female; the large maklak seal (*Phoca barbata*), and the hair seal (*P. vitulina*).

They have a great abundance of water-fowl, such as geese and ducks, and the small waders. In addition to the above, they occasionally secure a "beluga," or white whale, and at still more rare intervals, which perhaps enhances the glory of the feast, they kill a stranded whale.

The oil of marine mammals they carefully treasure up, bottling it, as it were, in seal-skin vessels or bags, which are placed on a frame cache, high above the reach of dogs, adjoining the house. This oil, like the scriptural wine, can never be put into old bottles; it is greatly too strong to be compassed by any transfer whatever.

The fish oil serves a threefold purpose—it answers for food, for fuel, for light, and is a luxurious skin and hair dressing among them. Of fish they enjoy the greatest abundance, and a fair variety; salmon in all the thousand and one lakes and sluggish streams leading from them,

to the great run of the same fish in the mighty rivers of their land. Of the Pelagic fish at their command we may mention a very small list; the great shoals of Bristol Bay and Nushegak ward out and fend out, as it were, the approach of the deep-sea fishes to their coast; but of the lake or fresh-water forms we find quite a number of the salmoid white-fish in the large rivers, and its smaller forms in their lakes and lakelets, trout and salmoid trout, a number of cotoids, and quite a number of less important species rather local in their distribution.

An evidence of the dissimilarity of taste, even in a savage life, is very well exemplified here by the disdain these people have to fresh fish, not that they do not eat them when first caught, but that they prefer them buried for a while under ground until that process which we call decay gains great headway. Their exquisite epicurean sense in this respect has often driven the writer from the completion of his meal, even when sore pressed by hunger.

In their cookery and cooking we find them using iron and copper kettles. They boil or stew almost everything. In those houses wherever they can afford to use tea, a small supply of earthenware cups and saucers in a little cupboard will be found; but they make no pretenses toward setting a table, save those few who live about the missions and trading posts before alluded to, where they do, boil the "Samovar" (teurn) and spread a cloth over the top of a large box, or rude table, perhaps, on which to set their tea-cups.

The natives are hunters and fishermen. The land animals to which we have made allusion are pursued by them at the proper seasons of the year, and a small revenue is also derived by them from the marine fauna, principally in the shape of oil and walrus ivory.

They also have earned the reputation of being the sculptors of the North. Their carvings in ivory are exceedingly curious, skillful, and in many instances very attractive. The patience and fidelity with which they cut out from walrus teeth delicate patterns furnished them by the traders closely approach those manifested and so much admired by us in the Chinese. Time to them is evidently of no moment. A considerable revenue is derived from this occupation among them.

In hunting, with the exception of some fish-spearing and bird-lancing, they employ fire-arms of the modern patterns, though considerable numbers of them to the westward of Bristol Bay still employ the primitive spear and lance for seal and land mammals.

The disposition of the Innuits people is one of great independence, without being taciturn or vindictive; they are light-hearted, enjoy conversation among themselves, telling jokes with great gusto, singing songs with much animation—less music and better time—dancing with exceeding exhilaration during the progress of their games and feast days.

The Innuits are, as a people, savages, not Christians; those who are being marked exceptions to the rule. The fact that the Russian priests have not subverted more of these people to their church is no proof whatever that the priests aforesaid have been laggard in their attempts; it is owing, perhaps, chiefly to a misconception of the Innuits character.

They are a brave people and have fought with great energy and frequent success for their right of way into the Territory. The Koltchanes, or Ingaliks, of the interior, who disputed this privilege with them, brave as they are themselves, bear cheerful witness to this fact; but all this only comes to us in legends of ancient times. No trace of recent wars can be found among them.

There is not much evidence of their power or appreciation of music,

were they cultivated, beyond the beating of perfect time to tunes and melodies. They have, in a few instances, secured musical instruments like the concertina, or accordeon, upon which they made some progress, but there is little or nothing of the kind to be heard in the Bristol Bay country. The Innuít song is essentially the Indian song—a weird dirge, monotonous in the extreme, accompanied by regular and rhythmic beating of a rude drum or stick. Some of the native Innuít songs, when rendered intelligible to us, have a plaintive pathos running through their simple composition quite attractive, but such songs are infrequent, the majority being a boastful recital of the singer's achievements on land and water.

Their rude mythology, or rather daimonology, seems to fill the measure of their minds to the exclusion of Christian doctrines, if not their comprehension.

They are living, as a whole, free from kvass or whisky until those tribes are reached bordering on Kotzebue Sound and Bering Straits, where the civilized influence of our whalers is exerted upon them and the demoralizing orgies of intoxication prevail.

With this brief yet salient mention of their leading characteristics we now turn to a succinct enumeration of the numerous tribes and sub-tribes of this great branch of Alaska population, beginning with the Bristol Bay district or Nushegak Mission of the Russian Church.

The first introduction which we have to these people is met with as we cross the divide from Katmai, in a little village on the Mukshat River, which empties into Lake Walker, where there is a settlement of 162 souls living in aboriginal simplicity at their village, which they call Ikkhagmute. They have a chapel here. They are Innuíts, but all their business in trade goes to Katmai.

As an illustration of the fervor and indifference to physical hardship characteristic of these people, an old man of this settlement, the keeper of the church, walked in company with the writer over to Katmai—a four days' journey through rugged defiles, fording seven rapid mountain streams, waist deep every one of them, exposed to inclement weather—for the purpose of purchasing fifty cents' worth of nails with which to fasten the door of his church. If this is not a shining example of self-denial and self-abnegation for a trivial service in behalf of his charge, then it is a difficult matter to discount it by parallelism among our own people.

From the Lake Walker settlement, or Severnovsky Village, we pass to the outlet of the lake, the Naknek River, at the mouth of which we find the village of Paugwik. This pass, or portage, from the North Pacific to Bristol Bay and Bering Sea is one that usually requires from three to seven days, according to the weather. It will give to the traveler a lasting impression and a correct idea of the Alaskan Peninsula, seeing as he travels from Katmai to the bay all the phases of the country. The numerous and strikingly beautiful land-locked lakes may typify in Lake Walker, where abrupt mountains rear themselves to Alpine heights, falling in steep succession to the lake shores, wherein the clear waters mirror them back again. Grassy slopes reach out on which thickets and clumps of graceful birch and poplar nod and waive their tremulous foliage as the wild gusts sweep ever and anon over them from the funnel-like passes of the mountains.

The timber on the hill slopes is also of birch and poplar principally, but the rolling uplands themselves are covered with a monotonous spruce. The immediate banks of the river through which this crystal lake discharges its surplus water are low, flat, and covered with a luxuriant

growth of bushes, grasses, and amphibious plants, semi-tropical in their luxuriance and vigor of growth, but everywhere that the foot goes down it is moist, damp, even to swamp.

At the débouchure of the Naknek River we find the vestiges of the first settlement, Taugwik, which was destroyed in 1839; and the deserted site to-day is marked by the presence of the crosses and grave-sticks, showing that it must have been a very large and populous village; and right there in this cemetery the present descendants, living in an adjoining village, have excavated their salmon-holes where they keep the fish-heads until they become gamy.

The present settlement consists of two sections, Kenigayat and Kenuyak, on opposite sides of the river, and at its mouth, of 192 inhabitants, all living in barrabaras (such as we have described as peculiar to the Innuited race), and a chapel.

The wife of the chief of that settlement is the daughter of that celebrated old Russian trader and explorer in this country, Kolmakov, who opened the Nushegak and Kuskokvim Rivers to Russian trade and influence.

From this point we turn immediately down the coast as far as Igagik, where we find a settlement of 118 souls, living in the customary manner, and principally devoted to the chase of the walrus, at the mouth of the Igagik River, which is the principal route of portage across the peninsula, where the travelers are heavily burdened. They also have a chapel here.

From this point we again turn to the southward as far as the mouth of the Sulima River, where we find the settlement of Oogashik, which is a purely Aleutian colony of 125 souls, devoted entirely to the walrus capture and trade. There is a chapel here.

About fifty miles from that location, to the southward, is another Aleutian village, at Cape Stroganov, called Oonongashik, where there are 37 people.

Again to the southward and westward some distance, down to Port Moller, is the village of Mashik, a settlement of 40 Aleuts. They are walrus hunters to the exclusion of everything else. This is the extreme western limit, adjoining, as it does, directly upon the Belkovsky Parish, and we return from our starting point in Bristol Bay, at the mouth of the Naknek River, from whence we proceed on and up to the extreme head of Bristol Bay, over a succession of shoals and sand bars, to the settlement of Kaggiung, where we note the existence of 86 souls, who reside in their peculiar barrabaras, with a small chapel.

From this settlement, at the mouth of the Kvichak River, a deep and rapid stream, up to its source in the great Lake of Iliamna, where we again find, near by, another aggregate of 119 people living in a settlement called Kaskinakh. We are here on the shores of the largest fresh-water lake known in the Territory of Alaska—an inland sea over 90 miles in its greatest length, varying in width from 15 to 30 miles. It is large enough for the wind to play upon and raise a sea that rolls with surf-like beating on its pebbly shores. At the eastern head and side it is barred out from the North Pacific by the abrupt and mighty wall of Alpine peaks of the Iliamna range, hills and spurs of which reach down to the westward in sloping, rolling ridges, covered with a timber such as we have described at Lake Walker. The natives have a legend of what, to them, is a very remarkable natural phenomenon. They say that a species of seal lives in this lake not known to the sea. If this be true, it is paralleled by the "Baikal" seal of Siberia (*P. sibirica*). We were unable, however, to see or to procure a specimen.

From Kaskinakh again to the eastward and along the shore of the lake some 15 or 20 miles is the small village of Chikak, located on a little islet closely hugging the shore, containing 51 souls. This insignificant hamlet possesses the traces of an old Russian stockade or post, of which, however, the natives themselves have no definite knowledge, though they simply aver that it is the wreck of Russian enterprise.

Thence again on to the eastward, about 15 or 20 miles, we reach another settlement on the shore of the lake called Iliamna, where 49 natives live. These people, as do all the natives living on this lake, reside in log houses resembling those of the Kenai people, but, although the church authorities have habitually classified them as Kenai people, they are not such, speaking only the language of the Inuit. In 1796 the first Russian missionary in this country met with his death at one of these three villages—which, we cannot definitely point out. Father Juvenal was the unfortunate man who perhaps, in his religious fervor, clashed fatally with the Shamanism of these people.

From Iliamna a single day's journey up the coast of the lake brings us to the lonely house of a man much noted in these parts, named Rikhterov, a Creole of gigantic stature, who married a woman of the country, and who reared four Anakim sons, who are, like himself, mighty hunters and of great physical powers. The family lives all to itself here, a little back from the lake on the mountain side, commanding a pass over the divide to Cook's Inlet. They control the trade of Iliamna Lake.

From this point the solitude of the lake is not disturbed until we reach its extreme head and pass over a small stream or portage of five or six miles into a lakelet, on which there is a village called Keechik, of 91 souls. These people bear the reputation of being true Kenaitze.

This completes the circuit of the inhabited points on the lake, and we return as we came to Bristol Bay, passing along its northern shores along Etolin Point up to the northward until we reach a hamlet called Eekuk, of 112 natives, perched on the summit and at the brink of a high bluff overlooking the sound, where they are living in Inuit huts, with a large "Kashima" or public dance and council house in the center. The writer remembers the place by the recollection of a very summary serving of attention upon him. A driving gale of wind accompanied by pelting rain was in full fury when he landed there, and his endeavors to pitch his tent in the tempest so aroused these people that they rushed down from their huts to the beach below where he was. Four men seized him—he knows not how many seized his tent and baggage—but up the steep ascent they pushed and pulled him into their dance-house, where they began to set up his tent just as he was trying to set it outside, and spread his goods in order about him. Then, with smiles of intense satisfaction, they arranged themselves in a hollow square (but circular) and feasted their eyes on his strange person and possessions. Their attention and care, manifested by pitching the tent inside their house, soon proved to be not a superficial act of courtesy, for the howling storm without so beat upon the roof that it leaked like a sieve before the night was over.

From this settlement it is only a short distance directly to the northward and up the Nushegak River to the village of that name, also known as Fort Alexander. This was the initial point of Russian influence. It was founded by Kolmakov in 1834, who afterwards found his way up the Nushegak River, and on and over to the Kuskokvim in the northward, where he built the redoubt, that bears his name to-day, in 1839. A monument to his memory, a simple cylindrical shaft of 15 or 20 feet high surmounted with a wooden globe, stands on a terrace overlooking the

village below, where there are 178 Creoles and natives. They are living in barrabaras and log houses. There is a mission here and a church. The settlement stands upon the abrupt slopes of a steep hillside which rises from the river, planted on a succession of three terraces, one immediately behind the other. Communication from flat to flat is effected by slippery wooden stairways. Struck by the danger of going out by nightfall to see a neighbor from the terrace above, the writer asked the old priest how they accomplished a social visit during the winter. Whereupon the philosopher shrugged his shoulders and said, "Ah, we don't go out"; and then muttering with a subdued wink of his eye, "You know the deacon must come to me then."

The Nushegak River, which will occupy our attention now for an extended journey, is, at its mouth, a broad arm or estuary of the sea, abounding in shoals and flats with bars that try the temper of the best navigators. In this connection a reference to the peculiar violence and power of the tide may be in order. It runs over at certain turns of its ebb and flow with the same tide rip-wave or "boar" as is described in the Bay of Fundy. The current of the river itself can be detected for a long distance out into the brackish water, easily marked in its period of high water by the turbid current. The river itself, when beyond the influence of the sea, is a stream that averages for a long distance up half a mile in width, gradually narrowing its banks to its source in Nushegak Lake. It is generally deep, with successions of bars and ripples, until the northern bend is reached, when these become more frequent, making the current rapid and brawling. The water is usually turbid, charged with sediment gathered entirely from the banks of the lower part of the river, and, like the great Missouri of our own land, is at its headwaters clear, but defiled below. Considerable quantities of drift-wood are constantly borne down on its current to the gulf, and its banks are timbered, and the country back from it, which in itself prepossesses the traveler with the idea that something can be made out of it, because it is the only firm land compassing any stream of magnitude in its entire length that we find in this country.

The timber lying on it runs down to the sea on its right or western bank, while on the left it does not reach Port Alexander, some slight difference in the soil perhaps making the discrepancy.

We find lining its banks a number of settlements in order as follows: First, opposite Nushegak is the hamlet Anaknak, with a population of 87, living in the customary Inuit barrabaras. Then again, on up the river on its eastern bank two miles above, is the village of Kanoolik, with 142 souls.

From this point away on and up the river the next place is Kakuak, on the western bank, where 104 inhabitants are located.

Thence again on the same shore is the village of Akulwikchuck, with 72 souls, and on up about 20 miles is the village of Agivivak, with 52 people.

From here on again and up to the junction of the Malchatnah River, an inconsiderable stream joins it from the north. The Nushegak River here makes an abrupt turn to the westward, deflected at right angles from its northerly course, as we have followed it up.

From this junction we pass to the next settlement of Kalignak on the south bank, consisting of 91 inhabitants; thence to the source of the river in the Nushegak Lake, we find no further trace of settled people until we make a small portage to Tikchik Lake, which lies on the Kuskokvim route or portage. Here is a village of 38 people. To the southward of Nushegak Lake a little distance is another body of fresh water

called Akooyukhpak, where another hamlet of 83 inhabitants is located. This lake empties into Bristol Bay through an outlet called the Knag-nack.

The Malchatna River, to which we have referred, has a roving population on it of 180 souls. They have no fixed place of abode, moving up and down the valley as they hunt and fish.

This carries us down to the sea, along the coast of which we proceed to the mouth of the Iigushek River, an inconsiderable stream, up which we go, following its tortuous, sinuous course to the Innuvit village of the same name, where 74 of these people are living. They roam over that peninsula, ending in Cape Constantine, during the summer. This little stream possesses the enviable reputation of winding itself to such an extent that a person is three days in traversing its course, 30 miles in an air-line from the sea-coast, as he goes down to tide-water; and we know it to be so, heightened by the unhappy reflection that though we were so near apparently to food supplies, yet we were so far in reality when our own larder was exhausted. This portage of Iigushek we also remember from the fact that when we made the journey, in the latter part of September, we passed through a charnel-house, so to speak, of the salmon family. Every bar and all the shoals were lined with the decaying and putrefying bodies of these fish, which lay in winrows, and it were, a foot or so deep; while every overhanging bough, projecting rock, was festooned with the rotten bodies of these fish. It so impressed us, and so affected us, that, though we were entirely out of provisions, we did not feel the pangs of hunger there.

Making the portage which takes us over to Kulluk, we passed through two little lakes near the summit of the Divide, remarkable from the fact that girdling them are seen the last of the scanty groves of birch and poplar that we find anywhere near the coast going west. At Kulluk, which is right down on tide-water, is a population of 75. They are walrus and seal hunters to a great extent. They are living here in close contiguity to the walrus bars and spits, on which they find great herds of these animals; seal also are abundant, including the singular saddler seal (*Histriophoca fasciata*), so much sought after by collectors.

From Kulluk, around the point of that same name, and up the coast to Ooallikh Bay and settlement, is a distance of only about 30 miles, yet in traversing this space we rounded seven large headlands, made up of rocks, watered out, in many instances, to fantastic shapes and caverns. The faces of the mural bluffs are covered with screaming flocks of water-fowl. These points or capes, so deeply indented and so prominent in themselves, are not shown on the maps published under the auspices of the Coast Survey.

One remarkable weathering of a peculiar trap or sandstone rock struck us forcibly in calling to mind the Sphinx of Egypt. The settlement of Ooallikh consists of 68 people, who are seal hunters in part. We may say, in this connection, that we left the bidarka of the Aleut and Kadiaker behind us at Nushegak. Here the tribal boat is the "kiak," made of the skin of the "maklak," a large hair seal. It is always a one-hole bidarka, and never made, as the Aleuts invariably do, with two or three holes.

From Ooallikh we pass rapidly up the coast to Togiak station, where we find a small hamlet of 28 people, all told.

Then again a short distance up to the mouth of Togiak River, which is quite an important stream, is another settlement called Togiagamut, of 276 people.

We may preface our remarks on these people whom we are to enu-



merate, up the Togiak River, by stating one or two interesting facts in regard to them and their history. They may be called the Quakers of Alaska; they are the simplest and most unpretending of all her people; they seem to be entirely a law to themselves, living to themselves, and indifferent as to what other people may have and they have not. They seldom ever see a white man; their excuse for this, however, may be pertinent when we come to realize their possession of very inferior peltries. They have nothing but a few inferior mink and ground squirrels to trade. All up this river we will find them living as we shall specify presently, very numerous yet without any appearance of tribal authority or chieftainship. They have no chiefs; each family is a law to itself, and it comes and goes with a sort of free and easy abandon strongly suggestive of primitive man in all his purity. What little they want that they have not got they get from one another, and not being able to get it in that way they do not search for it beyond, unless it is small stores of tobacco which they get through other Indians second or third hand. Whole families of them leave their winter houses in the summer frequently, and go out to the points here and there as the fancy takes them, and pass two or three months there with no other shelter than that afforded by their upturned "kiaks." Were their climate Italian it would not seem to us so hardy, but when we remember the rain and the wind that are so frequent and so tempestuous, we are led to exclaim that their whole bodies must be as insensible to extreme heat or cold as their features are.

An odd feature of their living we also noticed, as they moved from place to place on the river. The men seated themselves in their "kiaks" with the children's heads just protruding from the hole back of them, and would pull and paddle their way up against the current, while the women—mothers, wives, and daughters were turned ashore and compelled to find their way up through the long grass and over bogs—to toil in this manner from camp to camp, singing at the top of their voices to keep bears away, that they might be apprised of their coming and de-camp.

From the mouth of the river and the village which we have just cited, the next settlement we find as we ascend the stream is Ikaliukha, on the west bank, where there are 192 people.

Then again up on the opposite bank a short distance is Toniakhpuk, with a population of 137 souls.

Again up and on the west bank is Kassianmute, which is the largest of them all, embracing a citizenship of 615 souls, and possessing two "kashinas." This is the only village where two of these large dance or public houses can be found in this country.

From this we come to Nulahtuk, where 211 people live.

On the banks of a lake bed tributary of the river, above the junction on this stream proper, we find a short distance on the settlement of Kisiak, with 181 people.

Thence to a point near the head of this intersecting river is the last settlement, Anoogamok, with 214 inhabitants.

Though the course of this river is exceedingly limited in its length, yet the density of its population must surprise the explorer. The river itself, scarcely more than 100 miles in length, is, however, extraordinarily broad, being a mile and a half in width, shoal and shallow, however, with deep pools here and there. The valley through which it runs is broad and flat. The bottom lands of the river are quite extensive, widening out in some places 15 miles between the ridges and mountain purs that direct its course. They are covered with a growth of the

most luxuriant grass, high as the natives' heads and higher, literally concealing, as it were, the dense population of that region.

Great quantities of salmon in their season ascend this river, and in the winter time moose are said to feed through it.

Returning to our starting point on the Togiak, we pass down the coast to the sheltered shores of the mainland opposite Hagenmeister Island, where we find the last village in this subdivision as Aziagvigamute, with 130 souls. They are principally reindeer hunters and fishermen. Here the stream that meanders through the village is clear and rapid, full of trout. The hills are barren, and on them herds of reindeer may be seen feeding; the timber, such as it is—scattered clumps of birch and poplar—being found here and there along the banks of the little streams.

We passed through these settlements on the 7th of September, coming down over the Divide through a blinding snow storm, piercing cold, the snow being a foot deep at the sea level.

With this village our notice of the Bristol Bay or Nuslegak district closes, and we append a table of concise and succinct enumeration.

*Population of Bristol Bay District.—Nushegak Mission.*

Villages.	Whites.		Creoles.		Bristol Bay Innuits.		Togiak Innuits.		Aleuts.		Total.
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	
Ikkhagmute					90	72					162
Pangvik (2 villages)					101	91					192
Igagik					56	62					118
Oogashik									130	115	245
Oonangashik									20	17	37
Mashikh									22	18	40
Kogging					14	15					29
Kaskinakh					68	51					119
Chikak					25	26					51
Ilamna					29	20					49
Kichik					51	40					91
Ekuk					57	55					112
Nushegak	1		50	36	42	49					178
Anagnak					48	39					87
Kanulik					76	66					142
Kakuak					54	50					104
Akulwikohuk					35	37					72
Agivivak					27	25					52
Kalignak					50	41					91
Moltchatna					92	88					180
Kulukhpak					45	38					83
Vulkhtuligmute					27	24					51
Igushek					39	35					74
Kulluk					35	30					65
Ooallikh					37	31					68
Togiak Station			1	3	7	9			2		22
Togiagamute							131	145			276
Ikallukha							101	91			192
Tunniakhpuk							71	66			137
Kassianmute							299	316			615
Nulatok							108	103			211
Kissafakh							96	85			181
Anoogamok							109	105			214
Total	1		51	39	1,105	994	915	911	174	150	4,340

## CHAPTER V.

## THE INNUIT RACE.

## THE KUSKOKVIM DIVISION.

The life and soul of this district is gathered entirely from the great river of this name, which is the only considerable rival of the Yukon in all Alaska.

A glance at the map will show to the observer or searcher after information a very remarkable broad opening, through which the strong current and turbid waters of the river is discharged into the Bering Sea. The tides in the estuary run here with a rise and fall and velocity truly surprising, reaching at Agaligamute the enormous vertical rise and fall of 50 feet. This extraordinary change in tide level is carried up into the mouth of the river, even to the point where the traders' schooners discharge at Shineyagamute, and it does not lose its influence until we reach the point of Mumtrekhlagamute. The whole physical aspect of the country here, under the influence of changing tide level and the sea direct, is strikingly desolate and forlorn.

The settlements which we shall enumerate in this reach along the tributary swamps of this river, as it were, are located on little patches or narrow dikes at the rim of high tide along the banks of the river proper; from here across to the hills in the rear and eastward extends a great swale and expanse of watered moor from 40 to 60 miles in width; at high tide it is apparently largely under water, and when the tide runs out great flats of mud and ooze are bare. A rank and luxuriant growth of coarse water grass, reeds, with little clumps at the tide rim of bush willows, birch, and poplar principally are found. These native villages range in close continuity, each occupying all the dry land in its neighborhood, it being a difficult matter to find a square rod of ground outside of their sites on which to pitch the traveler's tent—it is mud, mud, a whitish clay, through which at low tide it is almost impossible to pass from your bidarka up to the villages. Indeed, if you are unfortunate enough to reach a settlement coming down the river or going up, as the tide is out, you have literally to fold your arms and sit in your cramped boat until the roaring flood carries you to your appointed destination.

The width of this tide reach of the Kuskokvim is so great that the opposite shore, to the westward, as we go down to the sea, can never be seen from these villages, for it is very low over there, even more wet and swampy than here, and in consequence thereof these fish-eating people have repaired to the eastern side as a home.

There is another feature in this country which, though insignificant on paper, is, to the traveler, the most terrible and poignant infliction that he can be called upon to bear in a new land; we refer to the everlasting, blood-thirsty clouds of mosquitoes, accompanied by a vindictive ally in the shape of a small, but numerous and biting black fly, under the stress of whose persecution the strongest man with the firmest will must feel either depressed or succumb to low fever. They open their carnival of human tormentation from the first growing of spring vegetation in May, until it is withered by frosts in September. Breeding here as they do in these vast extents of slough and swamp, they are able to rally

around, and to infest the wake and progress of the explorer beyond all adequate description—language is simply unable to portray the misery and annoyance accompanying their presence. It will naturally be asked how and what do the natives do about this? We make reply that they too are annoyed and suffer, but it should be borne in mind that their bodies are anointed with rancid oil, and certain ammoniacal vapors peculiar to their garments if left hanging about them, of which even the mosquitoes, blood-thirsty and cruel as they are, are hardly equal to meet the repellant power. When they travel here they are however, glad enough to seize upon any piece of mosquito-net, no matter how small, but they usually have to wrap cloths or skins about their heads, and wear mittens, in midsummer. The traveler who exposes his bare eyes or face here loses his natural appearance; his eyelids swell up and close, and his face is one mass of lumps and fiery pimples. Why, they even torture the Indian dogs to death, especially if one of these animals loses an inconsiderable portion, by mange or otherwise, of its thick hairy covering. They drive bear and deer into the water; they are the scourge of Alaska.

The current of the Kuskokvim flows rapidly, and at its source is reported clear. Here, 800 or 900 miles from its mouth, report comes to us, of good authority, stating that twenty days' journey beyond, and up to its source, is over a very broad and very sluggish stream, indicating that the course of the Kuskokvim, as now laid upon the map by most geographers, is not commensurate with its true length. The peculiar whitish, turbid tone given to the stream below is primarily due to the discharge of a tributary which heads in the Nushegak Divide, and is still further aggravated by the clay banks at tide level. The run of salmon up this stream is very grand and great, and is long sustained, the season opening in June and not closing until the end of August.

The density of the population, as so remarkably portrayed in our list of the settlements on the mouth and immediate country adjoining, is such that in their active and energetic fishing for their own consumption they seem to absorb the greater part of this salmon run; at least the natives up on the source of the river complain very often of the scarcity of salmon. Not only the people of the Kuskokvim proper fish here, but even those of the lower delta of the great Yukon. Two thousand of them come over here to fish, making a sum total of six or seven thousand fish-eaters, consuming and wasting a quantity of salmon that should feed at least six or eight times their number were the fish canned or salted, instead of being used in their wasteful processes.

We pass now to an enumeration in sequence of the Kuskokvim villages on both banks in their order as we ascend the river from Good News Bay, pausing first to notice one little settlement, just below this bay, of Tzahavagamute, of 48 people. The Kuskokvim villages, in their order now as we ascend to Kolmakovsky, are as follows. We must remark, however, that at a majority of settlements a strong objection was made to a separate enumeration of sexes, and being alone among a savage people who do not even know the meaning of the word "authority" or "government," the writer was obliged to yield to their unfortunate whim, and be satisfied with totals alone.

## Population of Kuskokvim Division.

Settlements.	Kuskokvim Innuits.	Ingalik tribes.	White.	Total.
Tzahavagamute .....	48			48
Mumtrahamute .....	162			162
Kl-changamute .....	18			18
Takiketagamute .....	21			21
Aguliagamute .....	120			120
Quinehahamute .....	83			83
Shineyagamute .....	40			40
Kuskokvagamute .....	24			24
Iliutagamute .....	40			40
Chimiagamute .....	71			71
Apokagamute .....	94			94
Kik-khwigagamute .....	9			9
Shovenagamute .....	58			58
Kakhuiyagamute .....	8			8
Akooligamute .....	162			162
Naghalkhlawigamute .....	193			193
Taghiaratzoriamute .....	52			52
Lomawigamute .....	81			81
Napahayagamute .....	98			98
Napaskiagamute .....	196			196
Mumtrekhlagamute village .....	41			41
Mumtrekhlagamute station .....	29			29
Koogamute .....	215			215
Kulj-khlugamute .....	75			75
Kik-khtagamute .....	232			232
Paimute .....	30			30
Akkiagamute .....	175			175
Tulnsak .....	150			150
Kwigalagamute .....	314			314
A single house .....	10			10
Tookhlagamute .....	92			92
A single house .....	10			10
Oogowigamute .....	206			206
Kalkthagamute .....	106			106
Okhogamute .....	127			127
Toolooka-anahamute .....	59			59
Kokhlohtokhpagamute .....	51			51
Kolmakovsky Redoute .....	5	2		9
Roaming Koltchanes .....		35		35
Napaimute .....		60	2	62
Village at headwaters .....		50		50
	3,505	147	2	3,654

There are very few Christians among them, not more than 300 all told.

Commercially, they are poor enough to the traders' mind, having but little stores of seal oil (*P. barbata*), the animals being captured by them on the tide banks, principally in the mouth of the river. The seals also being great fishermen, find the Kuskokvim quite as attractive to them as it is to their human enemies. They have of land furs only a few mink skins. They exchange their oil for ground-squirrel parkas with their neighbors in the hills on the upper river. The use of this oil by these people in their every-day life makes them so shiny and so offensively redolent that their places of abode smell abominably rank and acrid.

In these villages above enumerated every one will be found to possess the "kashima," which is their general rendezvous for work and for amusement.

The only berries that nature affords them here in this country is the fruit of the *Rubus chaemavorus*, which they gather throughout the swamps and swales in great profusion, and which they saturate with their rancid oil before they are consumed.

In the winter season, when frost has locked up the miry swale and swamp everywhere about them, and snow lies deep and in vast drifts,

they take their dogs, and, if the weather will permit, spend most of their time in hunting the moose, which comes down to them from the mountains, or in visiting from village to village.

Before we ascend the river in continued enumeration, we desire to present a count and specification of the people who live on the western banks and extend clear around and up the coast upon the mouth of the Yukon River. The people living here do not differ materially from those we have just located, and they are living essentially in the same manner. They are also poor, having only mink skins and some seal oil for the traders.

The list of villages given below with specification of inhabitants is the result of an extended land journey made by Mr. E. W. Nelson, observer United States Signal Service, stationed by the government at Fort Saint Michael. We have entire confidence in his work from our knowledge of the gentleman's character and attainments.

*Population of Yukon Delta and coast extending to right bank of Lower Kuskokvim.*

	Innuits.		Innuits.
Pikmiktalik .....	10	Kaliookhlogamute .....	30
Pastoliakh .....	80	Kashigalagamute .....	10
Kigikhtawik .....	20	Nulakhtolagamute .....	25
Kotlik .....	8	Agiukehugamute .....	35
Fetkina Barrabara .....	30	Chichinagamute .....	6
Village, name unknown .....	6	Chalitmute .....	60
Ingechuk .....	8	Anogogmute .....	75
Kashutuk .....	18	Kongiganagamute .....	175
Chefokhlagamute, three villages ..	15	Koolwagawigamute .....	10
Chefokhlagamute .....	5	Kinagamute .....	60
Chefokhlagamute .....	6	Village, name unknown .....	15
Igiagamute .....	10	Kwigathlogamute .....	30
Askinak .....	175	Nunochogmute .....	40
Kashunok .....	125	Nauwogalokhlagamute .....	100
Kaialiganute .....	100	Villages on Big Lake .....	166
Ookagamute .....	25	Yukon Delta, between Pastolik and Cape Romantzov .....	300
Oonakagamute .....	20	Small places in interior .....	200
Taanak .....	8		
Total .....			2,006

Returning to the Kuskokvim, we again ascend from where we temporarily paused in this description, from the Yukon portage on up the river to Kolmakov R edoute, a point celebrated as the focal center of trade in the district, and, as we have before said, established by the Russians in 1839.

The people above on the river bring down at regular periods many choice peltries, such as the skins of marten, fox, beaver, land-otter, wolf, black bear, moose, reindeer, lynx, &c., though they do not live in fixed abodes right about the post. The country is quite different here in its physical aspect from that which we have noted below; the river flows between high banks over a gravelly bed. The mesa-capped terraces rising from its bed run back some distance to high mountains and sharp peaks, with occasionally a spur, which is cut through directly by the stream.

A great abundance of spruce and other circumpolar timber is found here in size and quality quite large, and much superior to that found on the Yukon. Grass meadows and mossy tundras roll in between the patches of forest.

Reports from mining prospectors indicate that these hills and mountains show more promising signs of precious minerals, including cinnamon, than elsewhere in the Territory.

The situation of this post marks the limit of inland migration enjoyed by the Innuited race. Beyond it the tribes of the great interior have full sway. It is also removed from the disagreeable influence of Bering Sea, having more clear, settled weather here than down there. The prevalence of rain, and furious, protracted gales of wind accompanying it, so disagreeably emphasized on the Lower Kuskokvim, and, indeed, all the coast of Bering Sea, is such as to sorely try the Christian spirit of the best man who may ever make the journey there.

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## CHAPTER VI.

### THE INNUITED RACE.

#### THE YUKON SUBDIVISION.

The people of the United States will not be quick to take the idea that the volume of water in an Alaskan river is greater than that discharged by their own mighty Mississippi, but it is entirely within the bounds of honest statement to say that the Yukon River, the vast deltoid mouth of which opens into Norton Sound of Bering Sea, discharges every hour of recorded time as much if not one-third more water than the "Father of Waters" as it flows to the Gulf of Mexico. There is room for some very interesting measurements to be made in this connection, and we hope that it will soon be done. We do know the number of cubic feet of water which the Mississippi rolls by New Orleans every day, but we do not possess authority concerning the volumes of the flood discharged by the Yukon. Entering the mouth, or rather any one of the many mouths of this large river, we are impressed first, by the exceeding shallowness of the sea 100 miles out from it, varying in depth from 2 to 3 fathoms; and, second, by the mournful, desolate appearance of the country itself, which is scarcely above the level of the tide, and which is covered with a monotonous cloak of scrubby willows and rank grasses. The banks, wherever they are lifted above the reddish current, are continually caving down, undermined, and washed away by the flood. So sudden and precipitate are these land slides at times that the traders and natives have barely escaped with their lives. For 100 miles up through an intricate labyrinth of tides, blind and misleading channels, sloughs, and swamps, we pass through the same dreary, desolated region until the higher ground is first reached at Kusilvak, and the bluffs at Andreievsky and at Chatinak give evidence of the fact that all the land in Alaska is not about to be under water. It is watered here, there, and everywhere; it impresses you with the idea of a vast inland sea, which impression holds good even as far up the river as 700 or 800 miles, where there are many points, even away as far in the interior as that, where this river spans a breadth of 20 miles from shore to shore. As we go, carefully noting the people and country, to its source, we are not surprised, when we view the character of the country through which it rolls, at the vast quantity of water in its channel. It would seem as though the land itself on either hand within our borders of Alaska, and drained by it, was a sponge into which all rain and moisture from the heavens and melting snow never found its release by evaporation, conserved to drain by myriads and myriads of rivulets into the great watery highway of the Yukon. We noticed a striking

evidence of the peculiar non-conductive properties of the tundra mosses, or swale, last summer in passing through many of the thousand and one lakes and lakelets peculiar to that region, where the ice had bound up the moss and overhanging water growth at the edges of the lakes. In the breaking up and thawing out of summer, that ice on which the moss extended failed to meet, and the renewed growth of this season of vegetation reaching out in turn from this icy border, will again prevent thawing, and so on until shallow pools and flats are changed into fixed masses of ice hidden from view.

The borders of the bed of this river alternate from side to side with flats here, and low hills there, the river shifting from one to the other. The hills above the mission are all timbered, as well as the rolling uplands, while the flats are covered with rank grasses and willow thickets. This river is bound by ice in October, and it is not released until the sun of June exerts its power. A very remarkable occurrence in connection with this annual event took place last summer by which a famine ensued, at the mouth of the Yukon, and the people thereof were obliged to repair to neighboring settlements far to the northward or Kuskokvim for food. The ice came down the Yukon in such masses and such profusion that it grounded in the deltoid mouth in the month of July, so as to form a barrier against the running of the salmon.

The Innuits on this river have no permanent places of residence above Anvik, though they frequently come across from Saint Michaels by the Unalakleet portage, over to the river, on various errands. They do not like to go above Anvik, or to roam over the portage even, unless they are accompanied by traders.

The central point and chief mart of the Yukon district, the base of traders' supplies is on Saint Michael's Island, lying close to the mainland, and forming a part of the southern shore of Norton Sound. Here is the old *Rédoute* Saint Michael, named after the Russian admiral and governor of the Territory, Tebenkov, established in 1835. This location is a forced one, because no sea-going vessels can enter the mouth of the Yukon; indeed, did they attempt such a thing they would be hard aground in this soft silt or mud, a hundred miles out at sea in a direct line from the point of their destination, far out of sight of land. It is necessary, therefore, to reach the Yukon either in small, light-draught vessels by way of Saint Michael's and its mouth, or else by the portage of 75 or 80 miles over from Onalakeet to Kaltag, and many other overland portages in the same general direction. The land travel is winter travel, and not made as a rule in the summer, and *vice versa* in regard to the water way. The two trading establishments at Saint Michael and an adjoining Inuit village contain 5 white men and 1 woman, and nearly one hundred natives.

The people of the Lower Yukon, like their neighbors of the Kuskokvim, look to the fish therein for their primary food supply. The excellence of the Yukon salmon, its great size, quality, and exquisite flavor combined, is a by-word and a truism among all the fish-eaters of Alaska; not alone the red-flesh salmon in this river, but several species of the white fish of the salmoid group also, equally large and savory. The run, however, of the salmoidæ in this river is very much shorter of duration than that of the Kuskokvim, and the other principal salmon rivers in the Territory—so much so that in spite of the superior quality of the fish those who are interested in drying, canning, and salting salmon for our trade are afraid to locate on its banks.

The people have, perhaps, on the Lower Yukon the greatest abundance and variety of wild geese and ducks known to any people, savage or



civilized, in our world. Their flesh and eggs go a great way to make their existence more cheerful in our eye.

A number of hair seals (*P. barbata* and *vitulina*) ascend far up 300 or 400 miles; while the white whale bares his milky back as he snorts and rolls in the turbid channels of the delta.

There is a chapel at Saint Michael's, but the headquarters of the Greek Catholic Church, which has the only established mission in this country, is at Ikogmute, on the Yukon River, just opposite that point where the Kuskokvim portage comes over. Here is a church and several church buildings under control of an ordained priest, whose influence over these people is very small. On paper he lays clear claim to the host of 3,000 parishioners, but we were unable to read his title clear, even approximately, at any settlement. The worthy soul abounds in faith, however, and he, in addition to his first-cited claim, also reports that he holds 600 more "nearly persuaded," as if it were a mere question of time to gather them in finally.

The Innuvit villages with their population in order as we find them, from the mouth of the Yukon up to Anvik, are as follows;

*Population of Yukon or Kvikhpak Innuits from Upmoon Mouth to Anvik.*

Settlement,	Innuits.	Creoles.	Whites.	Total.
Komarov Odinothka .....	12	1	.....	13
Alexeiev Odinothka .....	15	1	.....	16
Ehiseiev's Barabara .....	20	.....	.....	20
Chatinakh .....	40	.....	.....	40
Andreievsky Rédonte .....	12	2	1	15
Stari-kvikhpak village .....	90	.....	.....	90
Razboinikskaia village .....	151	.....	.....	151
Ooglovia village .....	102	.....	.....	102
Ingahamé .....	63	.....	.....	63
Single house .....	10	.....	.....	10
Staraiia Selenie .....	55	.....	.....	55
Ikogmute .....	143	5	.....	148
John's Station .....	35	1	1	37
Ruibnaia .....	40	.....	.....	40
Pogoreshapka .....	121	.....	.....	121
Single house .....	9	.....	.....	9
Paimute .....	89	.....	.....	89
Askhomute .....	30	.....	.....	30
Ignokhatskamute .....	175	.....	.....	175
Makeymute .....	121	.....	.....	121
Total .....	1,333	10	2	1,345

Saint Michael's may be called the dividing point between the Innuits of Norton Island, Bering Straits and the Arctic, and those to the southward of them clear to the Bristol Bay. Here we are struck by a saucier race of men who bear the unmistakable impress of the vicious and degrading influences of contact with whalers and rum. These people have for a great many years, especially in the straits and Kotzebue Sound, been thoroughly familiarized with all the tricks and petty treachery of white men. They show it in a very marked degree to-day. They have a few peculiarities also which individualize them from the lower Innuits, in the method of shaving the crown of their heads, many of the males leaving only a frontage of the hair around just above the ears and over the forehead.

They are seamen in the full sense of the word—hardy, reckless navigators; successful, also, making the journey to and fro in the waters between Siberia, Saint Lawrence Island, and our coast contiguous by boldly launching themselves, depending solely upon the frail support and float-

ing of their walrus-skin baidars stretched over wooden frames, securely bound with sinew and whalebone. They hoist a square sail and run before the wind in heavy gales, or they employ oars and urge their course along with paddles when wind and tide are against them. They are, as a people, very poor, having nothing to tempt the cupidity of traders themselves, unless it may be the small stores of walrus oil and ivory which they may possess, with a few red and white foxes, perhaps; but in Kotzebue Sound the natives there get in exchange for what they receive from the traders from the inland tribes some of the choicest furs known to the Alaska mainland; whisky, of course, is the chief and demoralizing base of every bargain; so that these people of Kotzebue Sound and Cape Prince of Wales have in turn been plundered by whalers, and then plundered the whalers themselves; so that their reputation is most unenviable.

The natives of Saint Lawrence Island, who were visited in 1874 by Elliott and Maynard, and reported by them to be singularly fine specimens of their race, perished almost to a man during the winter of 1878-'79; at least as near as we can get at the true facts. The details, to a great measure, will be found in the report of Captain Hooper, U. S. M. R., who visited that locality during the past summer, to the Secretary of the Treasury.

These northern Innuits are not known anywhere to have a village located far back from the sea, save with two exceptions, where settlements are said to be located some 50 or 60 miles inland. These villages are the Selawik, on the river of the same name, emptying into Selawik Lake, and the Nohtagamutes, together with the Killaimutes, to the southward of and up the river. By reference to the map, however, it will be seen that these are only exceptions to the rule, as they are the only instances out of 35 settlements, which are located away from the tide level. These people in the straits, at Cape Prince of Wales and Port Clarence, are fishers and reindeer hunters. Those living on King's Island are seal and walrus hunters, having great trade in their home-manufactured water-proof seal throat and skin boots, which have so good a reputation among the whalers, who prefer them to rubber, being much lighter and far more enduring and equally water-tight, that a ready market for these wares is afforded by them to the natives of this island. On Cape Prince of Wales and the Diomedes the natives are hunters and whale hunters; they are also middlemen, as it were, between the Chukches of Asia and the Innuits of Kotzebue Sound, largely engaged in illicit traffic. Those Innuits living between Cape Prince of Wales and inland rivers around, and compassing the shoals of Kotzebue Sound, are seal hunters and fishermen, varied with a little reindeer hunting.

From there to Point Hope the Innuits catch hair-seal and successfully hunt reindeer. They have a market for shirts and coats of the skins, which they sell to the whalers, and chiefly to the Innuits below. The inhabitants of Point Hope are peculiarly distinguished by their skill as whale-hunters and their energy in securing this quarry. They killed and captured last season five sperm whales. They also hunt walrus.

Along that dreary, low, ice-bound strip of coast, between Point Hope and Point Barrow, the scattered Inuit settlements subsist upon reindeer, seal, and walrus; and from Point Barrow, where they are also successful whalers, and where they secure large numbers of reindeer, making its skins into clothing for sale to natives further south, they reach along in trade with their own people clear over to the McKenzie

mouth. In Kotzebue Sound there is said to be an active and successful hunting of "beluga." The streams or small rivers which empty into Kotzebue Sound mark the extreme northern limit of the run of salmon in America.

The population of the coast of Norton Sound from Saint Michael upward, and as far as Aziak or Sledge Island, was furnished by Mr. W. E. Nelson, Signal Service observer, from careful estimate made during a sledge journey last winter. His figures are as follows:

Oonalakleet .....	100
Igawik .....	6
Tup-hamikwa .....	10
Shaktolik .....	60
Oonakhtolik .....	15
Head of Norton Bay (scattered).....	20
Ogowinanagak .....	20
Kwikh .....	30
Nubviakhchugaluk .....	30
At-nuk .....	20
Ignituk .....	100
Chiokuk .....	15
Tup-ka-ak .....	15
Okpiktolik .....	12
Imokhtegokhshuk .....	30
Chitnashuak .....	20
Ayacheruk .....	60
Oo-innakhtagowik .....	10
Small village opposite Sledge Island.....	10
Aziak (Sledge Island).....	50
Total .....	633

The number of Eskimos from King's Island eastward to Point Barrow on the Arctic coast has been procured from careful count and estimates of Capt. E. E. Smith, who served as ice-pilot on the United States steamer Thomas Corwin, during her Arctic cruise last summer. He reports 32 settlements, as follows:

Okuvagamute (King's Island).....	100
Nook (Cape Douglas) .....	36
Kaviazagamute (Laké Imorook).....	200
Siniogamute (Port Clarence).....	36
Cape York .....	24
Mingigamute (Cape Prince of Wales).....	400
Inalit (East Diomedé Island).....	40
Village opposite; name unknown .....	18
Ta-apkuk (Cape Espenberg) .....	42
Kugalukmute .....	12
Kongigamute (Buckland River) .....	90
Selawigamute (Selawik Lake).....	100
Kikiktagamute (Kotzebue Sound).....	200
Sheshalegamute (Kotzebue Sound).....	100
Tikizat .....	75
An-iyakh .....	25
Cape Sepping .....	50
Ip-Not .....	40
Tikirak .....	276
Cape Dyer .....	15
Cape Lisburne .....	13
Point Lay .....	30
Otok-kok (Icy Cape).....	50
Kolumatourok .....	45
Noona-agamute .....	74
Ootkaioiwik .....	55
Pinoshuragin .....	29
Ootiwakh .....	225

Refuge Inlet.....	40
Kokmullit (Point Barrow).....	200
Colville River.....	50
In the Interior:	
Koo-agamutes.....	250
Noatagamutes.....	400
Killaimutes.....	150
Total.....	2 990

## CHAPTER VII.

### THE INGALIKS, OR THE PEOPLE OF THE GREAT INTERIOR.

With this division we complete the circuit of enumeration and specification of the coast people of Alaska who live north of Mount Saint Elias and Prince William's Sound. The immense area of country which we have bounded, as the Great Interior, at the outset of our remarks, would naturally suggest itself as the home of an immense savage population, where aboriginal men might be living undisturbed by the avarice and cupidity of our race; but we have to record, as far as is known, the existence of a very limited number of people in this extended area. They are all Indians, and as Indians we find them everywhere that the traders meet them. It will seem perhaps an underestimate when we state the figures of this inhabitation at 2,000 souls as the maximum, based upon the very best authority which we can command. Of course, to take a census of these people, who do not live in fixed villages, but rove from place to place, from valley to hillside, and from river to lake, with the exception of those immediately on the Yukon and Tannanah, is an idle and an unprofitable task. But the Indians themselves during the last year, at the principal points where they gather to meet the traders, were patiently labored with in order to ascertain from them an approximate idea of their numbers, and the method employed of first getting the savage to make a line indicating each house in his village, and then again asking him to make as many marks as there might be men, women, and children in that house, so that, by laboriously prodding him through the whole settlement with which he was familiar, a comparatively faithful abstract of the people of his village would be presented—certainly much more reliable than the self-constituted count of any white man could be, for the simple reason that it is next to impossible to find the members of any family or families together in a village at any one time. The same method was employed among the Innuits, where the writer came in personal contact with them.

It is not necessary to enter into an analysis of the appearance and disposition of these people here, inasmuch as in stature and physiognomy, character, &c., they resemble the Indians described in the interior of British Columbia and Oregon; the same little peculiarities are noticed in the methods of their living, their houses, &c., with only this difference, that they are dog-drivers. They rely upon the rivers largely for food, using the birch bark canoes only, but they have an abundant supply of flesh and fowl in the mainland; and when they suffer, as all Indians do suffer in this country, it is due alone to their own improvidence in not catching supplies during the season of plenty. The ethnologist, who may find in the course of this great river the finest field, perhaps, for study and observation, will notice that the Indian features on the Lower Yukon are not, as he

first meets them, as pronounced types of the true face as he expected; but as he passes up the river step by step he will notice the evolution, from village to village, until he arrives at the Tannanah, of the pure North American aboriginal countenance. This suffusion, as it were, of Innuit blood on the Lower Yukon, doubtless arose during the progress of their wars in olden times when raids were made by the Ingaliks upon the Innuits, and their women carried off and up the river—very much indeed as the Romans treated the Sabines.

The Russians say that the Ingaliks have always complained of a scarcity of females, and it may be an interesting point to ascertain whether it is not due to certain practices prevalent among them.

Another noted instance of the peculiar indisposition of the native mind to profit by bitter experience in some regards, is the occurrence every year here, from the mouth of the river up, of the spring famine during the months of April and May, and until the salmon run. One would think that the bitter pangs of hunger which the native endured a few weeks before the arrival of abundant foed would stimulate him to such exertion at least as might insure him and his family against its recurrence next spring; not so, however. The fish come; the famished natives gorge themselves, and thus engorged, loaf and idle the time away that should be better employed, and even before the supply of the fresh fish is exhausted by its cessation of running in the river they actually turn to newly "cached" supplies and eat of them. Such improvidence and reckless disregard of the morrow is hard for us to comprehend. It does not seem to lift their minds to the level of the brutes; the white traders among them, however, are swift to seize upon this peculiarity and its prevalence. They buy up largely of their hard-dried fish during the season of plenty, and sell them back to the starving native in the time of want, at exorbitant advances. It should be said, however, to the credit perhaps of these traders, that the exigencies of fierce rivalries and competition among them for the Indian trade impel them to this species of Shylockism.

In glancing at the map the eye will note a large superficial area on which no habitation is recorded in this district of the interior north of the Yukon River. Were there any considerable habitation therein it is certain that those Indians who live upon the Yukon, and the traders, would be apprised of the fact; while again to the southward, and shut out from the North Pacific by the lofty range at the head of Cook's Inlet and Copper River, is another lonely and uninhabited waste, where, save on the reputed course of the Tannanah, no rumor even on the Yukon exists of any native settlements within its limits.

This great area, wherein we find such scant or utter absence of population, is, on the south of the Yukon, heavily timbered—with spruce on the mountains; with poplar, birch, willow, &c., along the courses of the streams and rivers. Its recesses are doubtless penetrated by roving parties of hunters now and then who leave the great river and the Tannanah for that purpose, but it is literally as well as figuratively a howling wilderness. To the northward of the Yukon, timber extends down towards the Arctic as far as the northern slopes of the low and rolling mountains, which rise in irregular ridges northeast and southwest, trending from 100 to 150 miles north of the Yukon. With their elevation the uniform covering of forestry, such as we have described to the southward, ceases, and only those ridges which are detached from these hills and extend themselves down to the shores of the icy sea possess any timber at all; of course it is stunted, scant, and irregular in its distribution thereon. But that great Arctic moor is a surface of swale

and swamp of mossy tundra and lakes and lakelets during the summer, over which countless, nay, myriads of water-fowl—geese, ducks, and their kind—breed and molt in perfect security and free from molestation. Reindeer in extensive herds troop thereon, while the moose is more confined in its range to the valley of the Yukon proper, and the country to the southward. The musk-ox is no longer found in Alaska.

In the winter the driving storms of snow-gales and the intense cold prevalent in these parts undoubtedly is the secret of its lifelessness, so to speak. Ranges of temperature as low, for weeks and months in consecutive season, as 50° and 60° below zero (Fahrenheit), a degree of cold, which, when accompanied by the least wind, is fatal to human life if exposed.

These Ingaliks of the Yukon and Tannanah, the people of this great interior, are living principally on the banks of these rivers, where they have their villages, consisting of rude log houses, and marked in difference from the Innuvit village by the absence of the "kashima." They are located as indicated on the map, and in the following order, as we understand, from Anvik, with the numbers of most of them definitely ascertained.

Settlements.	Whites.	Indians.
Anvik .....	1	94
Single house .....		20
Do. ....		12
Do. ....		15
Novala .....		52
Single house .....		15
Tanakhotkhaik .....		62
Single house .....		20
Chageluk settlements .....		150
Khatnotontye .....		115
Kaiakak .....		724
Kaltag .....		45
Nulato .....	3	163
Koyukuk River .....		150
Terentief's Barabara .....		15
Big Mountain .....		100
Single house .....		10
Sakatalan .....		25
Yukatat .....		6
Melozikakat .....		30
Mentokakat .....		20
Soonkakat .....		12
Medvednaia .....		15
Nowikakat .....	1	106
Kozma's Barabara .....		11
Nuklukayet .....	2	27
Village above ramparts .....		110
Fort Yukon .....	2	107
Gens de Large .....		120
Tennanah River .....	1	700
Koltchanev, roving between Yukon or Kuskokoim .....		75
	10	2,226

On the Yukon River, above the fort of the same name, we know of the following people trading with Americans at Fort Reliance, who may be on British soil:

	Indians.
Charley's people .....	48
Fetoutlin or David's people .....	106
Fort Reliance (one white) .....	82
Total .....	236

The fact that traders during the last fifteen or twenty years—at least five or six or ten years before our possession of the country—have trav-

ersed the course of the Yukon, and that since our acquisition of the Territory both traders' and other steamers make the trip from the sea, accompanied, as they are, with a retinue of white men, has familiarized the Indians thereon with white men, and into the adoption of parts of their dress; but the people of the Tannanah as yet remain comparatively unknown and undisturbed by them, it being their fashion to come down the river to the junction of the Yukon to meet them; but last summer a trader's steamer pushed up this river with the intention of going some 200 miles; how far they did go we do not know at present.

Three separate counts, by as many different authorities, of the Tannanah people fix their maximum number at 650 or 700 souls. The relations on the Yukon River of chief and people are very loose. The principal authority, if any, exerted among them is in the hands of the shamans or sorcerers, most of whom are unmitigated scamps, and who live largely now by blackmailing the traders. In this connection we recall the murder of Lieutenant Barnard (of the English navy) in 1848 on this river, instigated and perpetrated by one of these rascals. This man, who was the prime factor, or rather the actual murderer of the lieutenant, died last summer. At the headwaters of the Yukon, however, as well as the Tannanah, the Indians living there recognize their chiefs.

The language of trade among the Yukon people is primarily the Russian tongue or a sad imitation of it. The traders in the Innuvit districts of the Kuskokvim and Nushegak usually employ the native tongues, while over the Aleutian, Kodiak, and Kenai districts the language of trade is essentially Russian, spoken in many cases tolerably well.

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## CHAPTER VIII.

### TRADE AND RESOURCES.

In properly estimating and recording the trade in Alaska we have to first form an opinion of its resources. These come under the following heads: first, the fur trade, which to-day is really the only live industry in the Territory of any importance; second, the fisheries; third, the timber, mines, and mining; and fourth, last, and least of all, agricultural capabilities.

That the fur trade should monopolize the attention at first of those who sought to establish themselves by any industry here is most natural. A wild country like this, with scarcely a sign of white habitation, and in proportion to its immense area a scant aboriginal population, would seem and is the appointed home of wild animals.

The fur trade of Alaska to-day is divided under two heads, the land furs and the pelagic peltries. The latter preponderate in value to such an extent that the former sink into insignificance by comparison.

The history of this business, which we shall embody by careful and finished translations and selections from the Russian records in our final report, is being to a great extent repeated by our traders to-day.

The fur-bearing interests of first importance in all Alaska, as far as the United States Government is concerned, are those aggregated upon the Pribylov Group, or Seal Islands, in Bering's Sea, a history of which and voluminous description has been written by Elliott, and his views and premonitions made upon the subject in 1872-'73, based upon stud-

ies of the seal life, have so far been verified by the actual procession of events since then. In other words, on the Seal Islands of Alaska the government possesses a stock-farm, from which it will derive, as it has derived, an annual revenue of \$317,000, without injury to or diminution whatever of the seals on these grounds. When the Congress of the United States passed the law protecting and conserving these interests it acted wisely, for under other and perhaps more popular methods of management the seal life on the Pribylov Islands would virtually have ceased to exist to-day—the same fate overtaking it that has been visited upon those great rookeries in the South Pacific, where to day less than a scant 5,000 or 10,000 seals are taken, when forty years ago millions were secured. To the Russians belongs the credit of having saved and preserved these interests until they fell into our hands, and we have been wise enough to carry them out with some slight modifications in business management better suited to our people and the business itself.

The Russians in their colonial possession under Baranov, made, first, the seal-skin the basis of all transactions with foreigners by buying up whole cargoes of goods and provisions brought into this country by English and American traders, and paying for the same in this way. In other words, the Seal Islands were the exchequer where the Russian authorities could with certainty turn and lay their hands upon the necessary currency. These American, English, and other foreign sea captains having disposed of their supplies at Sitka or Kodiak in this manner, took their fur-seal skins to China and disposed of them at a handsome advance for tea, rice, &c., in exchange. The profits made by these foreigners having reached the ears of the Russian home management of the fur company controlling Alaska, it was ordered then that payments in fur-seal skins for these foreign supplies should cease, and that the Russians themselves would ship their skins to China and enjoy the emolument thereof. The result of this action was that the Chinese market did not prove as valuable to them as it was to the foreigners; it became overstocked, and a general stagnation and depression of the seal business took place and continued until a change of base in this respect was again made, and the skins of the fur-seal were shipped, together with the beaver, in bulk to the great Chinese depot of Kiakhta, where the Russians exchanged these peltries for the desired supplies of tea; the trade thereof assuming such immense proportions that the record is made where in a single year the Russian Fur Company paid to their government the enormous duty upon importations of tea alone of 2,000,000 silver rubles, or \$1,500,000. This was the period in the history of the Seal Islands when, for a second time, and within the writing of Veniaminov, the seal life thereon was well nigh exterminated. The first decimation of these interests took place in the last decade of the eighteenth century and shortly after the discovery of the islands, when, it is stated, 2,000,000 skins of these animals were rotting on the ground at one time. Rezanov applied the correction very promptly in the first instance of the threatened extermination of these valuable interests, and when the second epoch of decimation occurred in 1834 to 1836, Baron Wrangell, admirably seconded by Father Veniaminov, checked its consumption. These are instances of care and far-sightedness which are refreshing to contemplate.

To day, the authority of the Secretary of the Treasury is absolute on these grounds, and the law which limits the annual killing to 100,000 young males is faithfully carried out, together with all the other minor stipulations of the contract made between him on the part of the gov-



ernment, and the Alaska Commercial Company as parties of the second part, who lease the islands.

Detailed description of the method and manner of conducting this business would be superfluous here, as it has been fully set forth through a series of reports made by the officers of the Treasury, and drawn out by the progress of repeated investigations made by Congress into the subject.

The natives living on these islands, and who are descendants of the first imported laborers, enjoy the privilege of being the sole participants in the reward which accrues from the labor of taking and skinning the fur-seals so long as they shall be equal to the prompt and efficient discharge of that duty. Business foresight and sagacity have endowed these people with comfortable frame-houses in which to live, and their villages on each island are laid out in regular streets, kept neat and tidy.

The value of this industry is of course, so far as the traders are concerned, enhanced or diminished at the caprice of fashion, though the fur-seal skin in itself is an article of intrinsic value, as much so as any other article of luxury, such as tea, spices, &c. It furnishes a grade and quality of fur, the adaptation of which for cloaking, sacques, &c., is not equaled or excelled by any other national product. There have been periods in the history of the sales when these skins have been worth no more than \$3 or \$4; and there are instances where large cargoes have been disposed of at even smaller sums. To-day the value of the same has been suddenly and greatly enhanced by the activity of the French leaders of fashion who have put the price up to the high standard of \$15 to \$20 in the London market—a figure which the past history of the trade warrants us in saying cannot be long sustained.

These Alaskan Seal Islands are the only points within our boundary in the North Pacific and Bering Sea to which the fur-seal repairs, but the Russians enjoy control and possession of rookeries situated on Commander Islands, 700 hundred miles directly to the westward, where they are carrying out essentially the same course followed here.

As these seals pass up and down the coast as far as the Straits of Fuca and the mouth of the Columbia River, quite a number of them are secured by hunters who shoot or spear them as they find them asleep at sea—the principal catch of this character being taken between the southern point of Prince of Wales Island and Cape Flattery. Those skins taken by the natives at Prince of Wales Island, and contiguous territory, are sold at the Hudson Bay Factory, Fort Simpson, while the Indians of Vancouver's Island and Fuca Straits dispose of theirs at Victoria and points of Puget Sound. Also, small vessels are fitted out in San Francisco which regularly cruise in these waters for the purpose alone of shooting sleeping seal.

It is, of course, important to give an exact count of the number taken every year. It varies, however, according to the season, some years comparatively few being secured; and then again as many perhaps as 10,000 or 12,000 are taken. The young pups, of which the Aleutian islanders secure a few hundred, are not made the basis of any special trade, being killed mainly for their flesh as a food supply.

The next interest in order of its value and importance is the sea-otter trade. All the world's supply, as is the case in regard to fur-seal skins, comes from the North Pacific and Bering Sea; and when we come to record the sea-otter business with a view to its importance to the people themselves of Alaska, it is the first in order; for on its chase, and from

the proceeds of its capture, it maintains between 4,000 and 5,000 natives in comparative luxury, and enables them to live in a condition of simple civilization.

The sea-otter is a shy, wary animal, and it never congregates, so that where it is found to-day by the hunter it cannot with certainty be found to-morrow, involving by its habit the expenditure of great physical energy and hardihood to effect its capture. The skin itself of the sea-otter is the most valuable of all peltries, unless we cite the phenomenal appearance of a black fox-skin now and then. It was the cause and the alluring guide to the discovery and occupation of Alaska by the Russians, for after they had exhausted, comparatively speaking, the natural supply of the Kamtchatka and the Kurile Islands, they turned their greedy and determined hunt to the eastward and to America. It also drew the ardent Spaniard and the early English navigators, Portlock and Dickson, over the vast expanse of the great Pacific into the intricate and perilous navigation of the strange waters of Vancouver's Island and the great archipelago above it. An interesting point of comparison is instinctively made by us when we associate the fact that the Aleutians and Koloshians, on the Aleutian Islands and the northwest coast, respectively, when first discovered by these fur-hunters, were savages alike and equally prosperous. To-day, where the sea-otter and seal is found—the Aleuts are living as a better people than they were at first, while those natives far to the eastward, to whom we have referred, deprived of their natural source of wealth, are reduced to the lowest dregs of low Indian life—mere fish-eaters. Of course, there is considerable due to the fact that the mind and the disposition of the Aleut primarily was, and is, a better one than that of the Koloshian.

We have carefully noted in our citation of the settlements those points where the sea-otter was hunted, and it only remains for us to say here that the aggregate catch is to-day between 5,000 and 6,000 skins for the year, an astonishing advance over the figures handed down to us by the Russian chroniclers and those which were recorded in the early seasons of our occupation. Nine-tenths of this aggregate are taken in western Alaskan waters, for it is safe to say, from our knowledge of the subject, that the sea-otter is as rare in the Sitkan Archipelago and the coast as it is to-day off the shores of Oregon and British Columbia.

The value of these skins here among the traders reaches the high average of from \$30 to \$50, according to the quality of the skin, paid in cash or trade to the natives, and instances of unabated competition among the buyers have netted the hunter \$80 for his skin. These skins are worth, according to the standard of the London market, from \$80 to \$100.

In order to show the simple increase of the number of sea-otter skins annually taken to-day over the figures of the past, it is only necessary to state that 2,000 sea-otters annually from all parts of the Territory was considered a good catch, while now between 5,000 and 6,000 are purchased every year by traders in Western Alaska, and thus far there is no perceptible diminution of the supply. For the past season the catch has been as follows:

In Kadiak district, reaching eastward to Mount Saint Elias .....	900
In Oonalahka district, from the Shumagin Islands to Attoo .....	4, 850
Total .....	5, 750

We now turn to the contemplation of the land fur-bearing animals, pausing to mention briefly that the hair seals of Alaska are comparatively insignificant in number and commercial importance, not note-

worthy in any respect; while the sea-lions are valuable only to the people of these regions, and are not even sufficient themselves in number to supply the demands of the native boat-builders, &c. The walrus herds, however, principally found in the great shoals of Bristol Bay, along the peninsula of the northern shore, trending also up along the coast as far as Cape Newenham and the mouth of the Kuskokvim Bay, furnish the means of the rendition of a little oil and considerable ivory, of which we are unable to give figures.

The whalers, when idle above Bering Straits and that vicinity, unable to sight their legitimate quarry, spend considerable time in the capture of the walrus there, and trade also with the natives of that region for its oil and ivory.

The land fur-trade of Alaska is not in its aggregate at all equal to either one of the two great industries we have cited, namely, the fur-seal and the sea-otter business. It employs, however, quite a number of our people as traders, either living permanently at the scattered posts, or else frequently visiting Alaska. It gives the natives a few luxuries, but in no case whatever does it furnish their sole means of support. The most valuable district, where the land furs are the finest, is that comprised in the Yukon district, where the marten and the beaver, the bear and the wolf, and the reindeer are the best, although the Kenai foxes and marten are equally good.

The great commoner among the fur-bearing animals of Alaska is the red and cross fox, the skin of which is of inconsiderable value. With the exception of that animal, most of the districts contain some one or more animals peculiar to themselves, and enhanced in value therefor. For instance, the blue fox is found only on the Pribylov Islands, Attoo and Atkha, while the finest white foxes are characteristic of Norton Sound and the Arctic. The black fox, the rarest and the most precious of all known furs, is not found in any one locality, but is an accidental occurrence, and its value is fanciful and extravagant. The silver fox, of which perhaps a few hundred are annually taken in all Alaska, is a very valuable peltry, as high as \$40 or \$50 being paid to the natives for them.

Following the sea-otter, we notice as next in importance the marten, which attains its greatest excellence in the mountainous districts of the interior, the headwaters of the Tannanah and the Yukon, and other mountainous rivers; the natives being paid by the traders, according to the quality of the skins, \$1.50 up to \$4.

The next skin in value is that of the land-otter, which enjoys an extended range, and nearly everywhere on the mainland south of the immediate influence of the Arctic. This skin is now largely used by the fur-dealers, who pluck it and dress it as they do the fur-seal, and when thus treated and dyed resembles that production, only thicker and heavier. These skins are worth—the best of them—from \$2 to \$3 among the natives, and bring in the market \$3 or \$4.

In sequence, we notice the black bear now, the value of which has enhanced lately. They are not very plenty, however, the common bear being the brown, with patched and harsh fur.

The beaver, which used to be the great staple fur of the interior, especially in those regions drained by the Nushegak, Kuskokvim, and Yukon Rivers, have latterly so diminished in number as to form a minor feature in the trade.

The first year that the writer passed at the head of Cook's Inlet (the winter of 1865-'66), the Indians of that locality reported a catch of over 11,000 beavers. To-day they consider themselves fortunate if they can

secure 200 or 300 skins of the same animal. The reason for this extraordinary diminution is ascribed to the occurrence of two bitterly cold winters in succession, whereby the beavers were frozen to death in their houses; or rather their places of egress and ingress were stopped by ice until they fasted and starved.

A considerable trade is done in reindeer skins, large herds of these animals ranging all over the tundra and the mountains of the coast and the interior, but this trade is confined to the country, manufactured and consumed therein, a very few being shipped out of it.

The trade in smaller peltries, scattered here and there in the several localities, as indicated in our description of the settlements and their position, is incidental to and of minor importance, the whole aggregate of which is of small proportion. The trade itself in Alaska is of course directed and stimulated by the mind, energy, and competition of our own people, the agents and representatives of three large trading companies, together with a smaller, but still an active exertion, made by individual traders. The Russians and creoles, who at the time of the transfer of the Territory were able to sustain any commercial enterprise on the score of their own individual activity and merit, have either drifted back to Russia or have entered into partnership with or the employ of the existing organizations to which we have referred.

The fur trade of this country, with the exception of that confined to the Seal Islands, and set apart by law, is free to any and all legitimate enterprise, but it is an industry the successful prosecution of which requires a considerable capital and much more brains; tact, energy, and persistence. An ordinary man cannot sustain himself among Indians. He who manages them must embody many attributes which are the exception rather than the rule in our people; indeed, a man who hopes to have any influence over the savage race must have, without doubt, more regard and more self-respect for his conduct and method of life than he would be constrained to employ were he to direct bodies of laboring men in our own country. The Indian is an exceedingly shrewd and close observer of the white man—nothing escapes him—and the trader who has no self-respect will never have that of the natives. The white man who, by stooping to the level of the Indians, hopes to ingratiate himself in their good favor makes a fatal error.

Trade as it is conducted in Alaska is principally over the counters of the traders' stores throughout the Christian settlements which we have specified in the Aleutian and Kadiak districts. These store-dealers to a great extent characterize the trade of Cook's Inlet, Kadiak, Kuskokvim, and Nushegak districts. There is, however, much individual trading done on the decks of the little vessels which are fitted up either at San Francisco or the Sandwich Islands for the purpose of hovering about where the sea-otter hunters and others in the Territory are known to live, and are supposed to have peltries. Those traders who are settled in the villages with their stores filled with goods, and other articles of savage barter, are, in self-defense as it were, rendered useful auxiliaries and promoters of the government purpose to prevent the introduction of spirits to the debauchery of the people, though it is very evident that whenever these traders enter into spirited and determined competition the party which furnishes the natives with the greatest amount of material for the manufacture of "kvass" is sure to get most of the trade. There is no legal punishment for this, and hence they cannot destroy one another by laying information before the government.

These Christian natives keep store accounts, and have pass-books in which they are regularly debited and credited by the trader. The In-

dians, of course, and Eskimos also, are usually settled with on the spot. The love of shopping, so pleasantly manifested among our ladies here at home, is equally a prominent characteristic of the Aleutian women, and some of the men, who delight in thronging the trader's store for hours and hours and days at a time, feasting their eyes upon the pinch-beck jewelry, causing the fatigued but patient clerk to spread the goods, handkerchiefs, &c. The Indians themselves in trading also exhibit the same love of prolonging the agony, so to speak, being themselves addicted to haggling and protracting bargains beyond all adequate description. A party of savages with their skins would pry about a trader's store or tent, and in disposing of their scanty stock will go in one by one at a time, look over and handle, if they can, the entire stock, lay down one skin and take its equivalent, then go out with the rest of their skins, repeating this operation until they dispose of their individual fur supplies. The time occupied in purchasing the furs offered by these Indians is protracted for days, frequently to weeks; or the Indian lays down all his skins at once, the aggregate value of which is thoroughly understood between him and the trader. Then the delay comes in for settlement by the difficulty with which the Indian satisfies his mind as to the quantity and quality of the articles to which he is entitled, protracting the consummation of his bargain into weeks.

A refreshing contrast, however, of this method of procrastination is exhibited by the sea-otter hunters. The writer recalls an incident happening under his observation in Oonalashka, where a party of 22 sea-otter hunters returned from Sannakh Island, where they had been hunting sea-otters during the preceding five months. The agent of one of the companies received them and went with them to his warehouse, where in one hour and a half he had appraised their skins, settling the different values upon them, according to their grade and quality, informing each hunter what he was to have and how much he still owed him; the whole purchase and settlement covering a sum of \$5,200. In this short span of time each native was aware exactly of what was due him, and went away entirely satisfied. This is a business transaction as brisk and emphatic as can well be imagined.

The principal depots of the fur trade we have indicated on the map, and it will be observed that most of the stations indicating the paying sources of revenue from this industry are located near the sea-otter hunting grounds, while the great expanse and area of Alaska to the northward contains but a small aggregate, save on the immediate course of the Yukon, where there are fifteen or twenty posts.

The volume and value of the sea-otter trade we know definitely. That which belongs to the Yukon, Kuskokvim, and Nushegak districts we are also well informed of, but of that which extends from Norton Bay around to Point Barrow, derived from the Arctic Eskimos, we have no reliable data, though judging from the quantity of whisky that is shipped into those regions there must be some considerable industry. We append figures which will express themselves on this point:

*Shipment of land furs from Alaska for the season 1879-'80.*

	Marten.	Fox.	Bear.	Beaver.	Mink.
Kadiak region.....	2,900	1,800	220	1,500	1,200
Yukon region.....	4,000	5,000	450	2,100	16,000
Oonalashka region and Bristol Bay.....	2,400	1,200	120	200	1,400
Total.....	9,300	8,000	790	3,800	18,600

The furs obtained by whalers are not included in the above. The total value of those recorded is between \$75,000 and \$100,000.

It will be observed from the exhibit made by these figures that the land fur trade of Alaska is really insignificant in pecuniary value to that of the marine fur-bearing fauna. What this trade is capable of in the way of development on the main land is entirely a matter between the traders and the natives. The natural want or desire of the Indian from the stores of the trader at first is very little, consisting principally of ammunition and strips of cotton goods, but the shrewdness and address of the trader in stimulating the appetite of the Indian for tea, sugar, flour, tobacco, &c., causes the savage to eat up, as it were, more rapidly his skins, and makes him more active and energetic in the prosecution of the chase, which he will only do just as his physical appetites prompt him.

Broadly stated, and entirely within the lines of truth, it may be said that there is no danger of the extinction of the fur-bearing animals of Alaska as the trade is conducted to-day, and so long as it shall be principally in the hands of the natives. The country itself on the mainland protects the animals, while the good sense and superior intelligence of the sea-otter hunters will protect their interests as long as they themselves have its direction and control. We have alluded in this connection, while treating of the people of Ounga, to the peculiar processes by which white men are bringing themselves within the category of natives, who are alone by direction of the Secretary of the Treasury and by law permitted to hunt the sea-otter and other fur-bearing animals.

It must be a source of much satisfaction to the Government of the United States to know that in the acquisition of this extended land and these islands the native population, Indians and Christians, is not at all likely in the future, as it has not been in the past, to appeal for food and raiment at the cost of the public Treasury; that it is not at all necessary to send a retinue of Indian agents, with their costly supplies and dubious machinery, into this country; that the protection of the traders and the conservation of law and order in that region will not require the presence of an extravagant civilized government, nor the movement and disposition of soldiery and sloops of war. The simple needs of the people there to-day are embraced substantially in the establishment of courts of justice and record, with their inexpensive accessories.

The next interest of importance in order are those covered by the consideration of the fishing grounds. With reference to this topic we broach a very fruitful theme of speculation and prediction for the waters of Alaska. There is undoubtedly found at certain seasons of the year an enormous supply of salmon, and on the extensive shoals of Bering Sea and the North Pacific Ocean an indefinite and extensive distribution of cod. The fishermen themselves, after the fashion of their craft, have their own theories and methods, in a great many instances so widely divergent that it is difficult to reconcile them a correct mean. There is no argument, we believe, in regard to the extraordinary abundance and the superfine quality of the salmon indigenous to Alaskan rivers and streams. All authorities unite on this point, and agree in stating that the value of the natural resources of Alaska in this respect are simply regulated by the demand; that the supply is practically inexhaustible in abundance.

With regard to the codfish the opinions of authorities differ in many respects; we will not attempt to settle them. In the first place, a preponderance of testimony goes to show that the Alaskan codfish is ex-

actly the same species as is that found on the great banks of Newfoundland and the shores of Cape Cod. It also agrees with that in all essential points, as to size and weight, the cod of course being small, as is the eastern, while those fish caught out at sea on the banks in 40 to 60 fathoms are large, weighing from 20 to 30 pounds, the great object of controversy in regard to the Pacific as compared with the Atlantic cod embraced in the discussion arising over the relative quality of the fish taken from the two great oceans. The market of San Francisco exhibits both for sale—the Pacific and the Atlantic cod—cured of course either as boneless or soft fish. Here we find the Pacific cod quoted lower in the market than the Atlantic, differing as much as  $1\frac{1}{2}$  to 3 cents per pound, the eastern cod standing invariably at the highest quotations. This shows beyond all controversy that there must either be some difference in the quality of the fish itself, or else some radical defect in its curing on the Pacific. This the fishermen alone can settle; they do not agree at all as to the insinuation that they are not just as capable of curing codfish in Alaska as they are at Gloucester, Mass.; at least old Cape Cod fishermen are to-day engaged in this business of catching and curing Pacific cod, who say so.

The fact itself, however, that the cod-banks of Alaska, in their length, breadth, and superficial area, are the most extensive known to the fishermen of the world cannot be gainsaid, though it is probably true that the fishermen who repair to these shores or the most favored sections of that district do not find the cod bunched as it is on the more restricted fishing-grounds of the North Atlantic. Hence, in Alaska to-day they pay more attention to the shore or coast cod where the fish are, as we have stated, much smaller than they are at the deep-sea banks. It is a difficult thing for a judge, having eaten fresh cod in Massachusetts, to repair to Alaska and correctly estimate the quality of the fish which he will find there, for the simple reason that any man after making a long sea voyage from San Francisco up to the fishing-grounds will feel when he gets into port and tastes the fresh fish there that he never before ate anything so nice in that line. Certain it is, however, that the fresh cod of Alaska seemed to the traveler just as palatable, as firm and sweet, as they did to his palate in the East.

Another important point in connection with the prosecution of these fisheries may turn upon the quality of the salt which they employ up here. We leave that, however, for future investigation and discussion in connection with this subject.

Much stress is laid upon the fact of the non-development of the fishing interests of Alaska by the reiteration of the statement that the market is confined to the small local demand of California and the Pacific coast, where the population is a little over a million and a half. There is, however, a very large and important traffic with the South American states and provinces, and the reason why Alaskan fish does not reach these marts is not entirely clear to us; though we do know why there is a diminution of the demand for Alaskan salmon in Australia—because the exceeding benevolence and philanthropy of our government fish commissioners has stocked the waters of that southern island-continent with the California salmon.

In addition to the trade of San Francisco, some of the Alaskan fish, or a good deal of it, is diverted to the Sandwich Islands, but the fact remains, as exhibited by the trade statistics of San Francisco during the last six or seven years, that the volume of the codfish industry has steadily remained at an annual mean average of half a million fish. A little more activity and consequent increase in the capture will per

haps result from the fact that in addition to the regularly established fishing posts up there a number of small schooners have entered the list. It may result, as it has resulted heretofore, in over-stocking the market again and prostrating the lesser companies and individuals.

The cod-fishing fleet of Alaska to-day consists of a dozen or fifteen fishing-schooners, some of which are also engaged in the salmon business.

Before passing from the subject we may incidentally allude to the fact that much of the Pacific cod, or nearly half of it, brought into San Francisco comes from the Okhotsk Sea, captured, cured, and brought thence by our own people.

Latterly another fish has aroused the interest and cupidity of the Alaskan fishermen; we refer to the so-called mackerel (*Labrax monoprygis*), which has been offered in the San Francisco market, and finds an eager and ready sale. It has only been presented there during the last two years, and up to date the fishermen have not fully satisfied themselves as to its range and distribution with reference to the best grounds for capture. So far as known, it has only been found about the Aleutian and Shumagin Islands, and is only captured in bays and straits. It is a trifle larger than our veritable mackerel of the eastern coast, and it is said to be of a similar fine flavor and excellence. Possibly a thriving trade will yet be driven in preparing kits of this fish for exportation, full barrels of it having commanded the unwonted price of \$24 each in San Francisco.

The salmon trade, to which we first made reference, has, for reasons which do not seem entirely satisfactory to us, been quiescent or stagnant, confined to the salting and exportation of a few thousand barrels annually, principally for the Sandwich Island trade. Why canneries should not be established and maintained at many of the favored rivers, especially in Western and Northern Alaska, is not clearly explained. Here salmon could be secured to any size and number at a cost not exceeding half a cent, or a mill, apiece, while on the Columbia River for the same fish they pay as high as 75 cents each. The fishermen say that they dread the experiment of establishing a cannery in these isolated regions, which they can operate only during the short, comparatively speaking, season of the salmon run. Surely they might put up their works in these places, repair thither at the right season of the year with their workmen, pound their fish, and can them to any amount, and come down on the same vessel that they went up in, leaving the rude sheds and boilers in the care of a watchman or two.

The halibut of Alaska is also very wide in its range, and is, as in the case of the cod, closely related to and essentially the same as that of the North Atlantic, equaling its eastern congener in size and quality. Instances are on record, and we ourselves caught with our own hands one of these fish that weighed 312 pounds, rendering it the largest food fish known to Alaskan waters; while the silver salmon of the Yukon is next in order, with a weight of from 75 to 90 or 100 pounds; probably examples are frequently caught which will tip the scales much beyond these figures. As yet the halibut has not been utilized in the direction of trade, except a small beginning made at Sitka; but the fish itself is there in Alaskan waters, to all respects and purposes, points of quality and abundance, equal to its kind known elsewhere.

Large schools of herring frequent during certain seasons of the year the waters of the Aleutian Islands, being especially abundant at Oonashka, and more so at Sitka, much fatter and finer, perhaps, at Oonashka than any portion of the Territory, but in greater numbers at Sitka.



The natives make no special use of them beyond their immediate consumption as they capture them, not drying or preserving them at all, save the spawn; but they do press the oil from them.

There are, of course, many other varieties of fish in these waters of Alaska, which are, however, of minor importance to the foregoing list, and of only small local value, so far as is known. The natives themselves in their rude methods of preservation are exceedingly wasteful and extravagant. For instance, a 50-pound salmon, after it has passed through aboriginal curing, will present to the observer's eye a shriveled object, scarce distinguishable in shape and outline, which will not weigh more than 5 to 10 pounds; 5 pounds is a very high average for the best samples of such preservation.

The annual shipments of perhaps 2,500 barrels of salted salmon and 500,000 codfish to the San Francisco market, make but an insignificant showing of the development of Alaskan fisheries.

We now turn to the consideration of what we shall find embraced in the timber and mines of Alaska.

With reference to the timber, first, the analysis and fair presentation of the claims of Alaska to the possession of vast tracts of valuable timber are now in order. At the outset of this report we sketched the distribution of forests throughout the whole country, or, in other words, we gave a free-hand drawing of its limits. In descending now to details we find that the timber of Alaska consists of evergreen trees, principally, the spruce family preponderating to an overwhelming extent. These trees grow, as might naturally be inferred, to their greatest size in the Sitka or Alexander Archipelago. An interregnum occurs from Cross Sound until we pass over the fair-weather ground at the foot of Mount Saint Elias, upon the region of Prince Williams Sound and Cook's Inlet. Here this timber again springs up with a new lease of life, as it were, and attains very respectable proportions in many sections of this district, notably at Wood Island and portions of Afognak, and at the head of the Kenai Peninsula and the two gulfs that environ it. The abundance of this timber and the extensive area clothed by it is readily appreciated by looking at the map, and rendered still more impressive when we call attention to the fact that the timber extends as far north, in good size, as the Yukon Valley. It clothes all the hills within that extensive region, and to the north of Cook's Inlet and Kenai Peninsula; so that the amount of timber found herein is, in the aggregate, certainly great. The size of this spruce timber at its base will be typified in trees on Prince of Wales Island 50 feet and over in height, with a diameter of at least 3 feet. They have not grown in proportion to their age as fast as they would have done were they growing in a more congenial latitude to the south, such as Puget Sound or Oregon; hence, when they are run through the saw-mill the frequent and close proximity of knots mar the quality and depress the sale of the lumber. Spruce boards also are ineligible for nice finishing work in building or cabinet ware, or, indeed, anything that requires a finish, and upon which paint and varnish may be permanently applied, for under the influence of slight degrees of heat it sweats, exuding minute globules of gum or rosin, which are sticky and difficult to remove.

As we have stated just above, the spruce constitutes a vast majority of the forest; the other timber trees in Southeastern Alaska, Kodiak, and Cook's Inlet may be called the exceptions to the rule. But one very valuable species of yellow cedar, *Taxus canadensis*, is found scattered here and there within the Alexander Archipelago, and on the 30-mile strip. Here this really valuable tree is found at wide intervals in small

clumps, principally along shoal-water courses and flords. It attains in itself a much greater size than the spruce; frequently trees will be found 100 feet high, with a diameter of 5 and 6 feet. The lumber made from it is exceedingly valuable, of the very finest texture, odor, and endurance, highly prized by the cabinet-maker and the shipbuilder.

If these Alaskan spruce forests, to which we have just made reference, could only have been by some happy transposition of nature resolved into the cedar, and its place taken by the spruce, the value and importance of the Alexander Archipelago could hardly be overestimated. It would be the ship-yard and lumber depot of the whole Pacific. The scattered thickets of maples, poplars, birch, and willows have little or no economic value, and they are hardly worthy of the least consideration as such: There are to-day in this Territory three active saw-mills, one located at the northern extremity of Prince of Wales Island, one at Sitka, and one on Wood Island, off Kadiak. They are not sawing lumber for exportation; the first-named two mills are engaged, when they are running, in satisfying the demand for lumber coming from Fort Wrangell and a small local building in Sitka, while the one on Wood Island seems to be principally engaged in making sawdust with which to pack ice, which latter commodity is, by the way, never shipped out of the Territory, but regularly put up in obedience to the instructions of a certain contract, as to the conditions of which we have no definite knowledge. The lumber which the traders use in the Aleutian Islands, and which they employ in limited quantities of course to the northward, comes directly from San Francisco or Puget Sound. Ship-loads go up every year from Californian ports.

In regard to the use of this lumber from California, the Aleutian Islanders are employing it now, to the exclusion of their original resources in the shape of drift-wood and such, for the frames of their bidarkas. These in turn, strange to say, are lashed with bamboo cane or strips instead of the primitive whalebone and sinews. It is possible a mere matter of time ere they import canvas and India-rubber cloth with which to supplant their sea-lion skins.

While, therefore, we find a very large supply of timber in Alaska, such as we have described, yet it is instantly apparent that as long as the immense forests of Oregon, Washington Territory, and Southern British Columbia stand as they stand to-day, as long as this shall be so, the market for Alaskan lumber will be practically null and void.

From the consideration of the timber we pass to the reputed and well-known coal mines. Coal is found chiefly and wholly of a lignite composition at a great many points throughout the southern and western coast of Alaska and the islands thereof; and during the past season a vein was opened in the Arctic, above Cape Lisburn, by Captain Hooper, of the Revenue Marine, who says that he mined it easily, and used it with great satisfaction in making steam for his vessel. If this be true, and we have no reason to doubt it, then there is at least one good coal mine in Alaska. The oldest coal mine in the country is that so long and patiently labored with on Cook's Inlet, near its mouth, at a place still called on the map Coal Harbor. The Russians also took notice of coal on the Shumagin Islands, at Oouga, and several openings were made by them of veins here and there in the Alexander Archipelago. Following the Russians, our people discovered and attempted to work one or two in the Sitkan Archipelago and several to the westward. The quality of all this coal located and worked for a brief experimental period was of so poor a grade that in no case has it been pronounced fit for use on steam-going vessels. It is so highly charged with sulphur and other deleterious combinations that during combustion, which is

very rapid, it seems to eat out, as it were, the heart of the iron and ruin the boilers. The value, however, of Captain Hooper's vein in the Arctic to the opening enterprise of steam-whaling, and for the use of the Revenue Marine itself, must be of very striking moment. These examinations of and experiments with Alaskan coal have been exceedingly thorough and patiently wrought out at Oonga, where the most laudable, persistent, even desperate determination has been manifested by the owners of certain ledges thereon to develop their unprofitable holdings into mines of wealth. The steamers in the Territory to-day bring their own coal with them, or have it sent up by tender from British Columbia Sound or California. The traders at the different posts where timber is scarce, or entirely wanting, use it now as their principal fuel, and it is the sole fuel on the Seal Islands.

In regard to the reputed findings of large paying gold mines and other precious minerals, we can only say that as far as is known to-day there is nothing of the kind in Western Alaska; at least, there is nothing located and worked as such, though the prospecting or searching is as active as it has been since the transfer, and is likely to continue. The surface of the country in Southern Alaska being so mountainous and concealed by the timber cloak everywhere covering it, is, of course, a slow and exceedingly difficult undertaking to penetrate any distance back, up, and among the mountain valleys in search of mineral. The color of gold can be washed out of the sands of every little stream emptying into the ocean on the northwest coast, and in many places it can be found by searching in the surf-beaten beaches of the sea-coast itself. But the question immediately arises with the miner, "Will it pay?" and by that he means "Will it yield me \$4 to \$10 a day if I work it?" Less return for his labor does not satisfy him, nor will it bring others to the places.

The gold-bearing belt of the Rocky Mountain divide, so familiar to us as it crops out all through our States and Territories, and which we leave at Boise City, in Idaho, for instance, or Salmon Diggings above, reaches undoubtedly up and on, as rich at that point in the far north and trending to the Arctic Sea itself as it is where we now note it and work it with so much success. But it must be borne in mind that with every degree of northern latitude as we ascend we cut off working-days, as the icy grasp of frost checks the flow of water and shuts down the mills, so that when this gold-bearing belt crosses into our Alaskan boundary away back, and concealed from the sea by the towering summits of the Coast Range, we find it so far north as to be practically barred out from our miners unless they shall find the free gold and a rich quartz in unwonted abundance.

The Cassiar diggings, which have, during the last five or six years, given quite an impetus to Alaskan travel by Fort Wrangell and Sitka, are situated in the territory or dominion of British Columbia far up the Stakhine River, and away from our limits. They have been failing lately and the last season's work has been one of sore disappointment and discouragement to the few miners who still hold on.

In Norton Sound, within the deep land-locked shoals of Golovin Bay, there are reputed to be leads of silver ore and graphite. Cinnabar has also been discovered on the Kuskokvim; assays made of the ore in San Francisco indicate a very valuable discovery there. Other than these minute circumstances, we have no better evidence to offer at this writing of the mineral wealth of Alaska unless we refer to the old legend and partial corroboration of it in regard to the presence of an extensive deposit of copper *in situ* on the banks of the Atna or Copper River. There is also a mine opened, but just at present not being

worked, on Prince of Wales Island. This little mine, however, we might say is owned by British Columbians, who say that they are barred out from their legitimate home market on account of the Dominion tariff; hence they are idle.

We now pass to an interesting and fruitful bone of contention, that is the agricultural and pastoral resources of Alaska. So much has been said upon this topic, of frantic declamation on one hand, and indignant remonstrances on the other, that we shall be very cautious in our presentation of what we believe and know to be the fact.

In the first place, let us preface our remarks with this statement: That the cereal crops cannot be grown in Alaska. It has been settled by numberless patient and repeated tests in the most favored localities. Also, that the fruit trees, and the small fruits of our gardens here as we grow them and recognize them (unless it be the strawberry and the cranberry), cannot be cultivated successfully up there. But these people do have in Alaska quite an abundance of indigenous hardy shrub fruits, such as we have specified in our chapter upon the settlements. The statement made by certain high authority that wild apples are indigenous and perfect their fruit at Sitka, is a mere figure of speech; but the other half of the assertion that wild roses grow there is true; for that matter the wild rose blossoms with a rosy flush and the suggestion of perennial flowering up the Yukon, while the flowers, the violets, the gaily colored pea, and indeed the whole long list covering nearly 200 species of lovely blossoming annuals and perennials are found everywhere on the little prairie-like forest, on the bare hills of the Aleutian Islands sweeping on and over the great moor and tundra of Alaska.

But when we take up the subject of the vegetable garden, we find that there are localities in Alaska where for the last eighty years, or even more than that, up to the present date they have and they do plant and raise good potatoes, though we should say perhaps that this raising of these tubers is not a certain success year after year except at one or two points where it has been satisfactorily demonstrated within the Alexander Archipelago, namely at the mouth of the Stakhine River, at Fort Wrangell, and at Prince of Wales Island. The potato grounds of Alaska, however, can with care and due diligence and common-sense combined be made to furnish in the Alexander Archipelago, in Cook's Inlet, at Kadiak Island, and islets contiguous, and at Bristol Bay, a positive source of food supply to the inhabitants. It is not generally known that on Afognak Island, according to the best of our personal knowledge, there are nearly 100 acres of land dug up in patches here and there which are planted by the inhabitants, and from which they gather an annual harvest of potatoes and turnips. They have no fields spread out, squared up, and plowed anywhere in Alaska. The cultivation as it is conducted to-day, is directed in this manner: The little openings in the forest or the cleared sides of a gently sloping declivity in sheltered situations are taken up by the people who turn out with rude spades of their own manufacture, principally, for the purpose of subjugating and overturning the sod. Many of the gardens, noticeably those at the Kadiak village itself, are close by the settlement, while others are at some distance.

The potato crop at Kadiak this year was a total failure; it will happen so at intervals of from four to six years when it occurs in this way: The winter preceding the planting has been an unusually cold and protracted one, and the short season, at the best, of summer is cut off by unwonted early frosts during September and the latter part of August. The usual growing season, however, opens early in June—

from the 1st to the 10th; the potatoes are planted in May, coming up and growing freely until October, when they are harvested. This growth of potatoes, fairly established and well defined, presents the only firm and tangible evidence that we have of agricultural capacity within the limits of Alaska. The turnip grows and flourishes wherever the potato succeeds.

On Wood Island, during a number of years past, horses have been kept there to perform certain labor in connection with that mysterious Ice Company contract, and for the use of these horses a field of 12 acres of oats is regularly sown; they grow up, frequently head out, but never ripen. This, however, is a secondary object with the planters who cut the green crop for haying purposes.

We are called upon also to record briefly the repeated attempts made to raise stock cattle, sheep, and hogs in large herds within the borders of Alaska. The subject is one in which the Russians first naturally took a deep interest, for they were fond of good living, and were as desirous as any people could be to have the best of beef, or nice mutton, and the sweetest pork on their tables. They brought over hardy selections from the Siberian stock, placing the cattle at almost every point of importance for trial. The result after years of patient and persistent attention was that the herds on Kadiak Island throve the best and became of real service in assisting to maintain the settlement. Here there was, as there is, a very fine ranging ground for pasture; in the summer there is the greatest abundance of nutritious grasses, but when the storms of October freighted with snow, accompanied by cold and piercing gales arrive and hold their own until the following May and June the sleek fat herd of September becomes very much worn and emaciated in June. It has given its owner an undue amount of trouble to shelter and feed; hay, however, here suitable for cattle, or at least to keep cattle alive, can be cut in almost any quantities desired for that purpose, but the stress of weather alone even with abundance of this feed depresses as it were and enfeebles the vitality of the stock so that the herds on Kadiak Island have never increased to anything approximating a stock grower's drove as we understand it. They seem to rarely exceed 15 or 20 head at the most. Notable examples of small flocks of sheep which our people have brought up since the transfer and turned out at Oonalashka, Oonga, and elsewhere, have done well, but winter comes around again and the trouble begins. The mutton of the Alaskan sheep when it is rolling in its own fat, as it were, derived from the native pastures, is pronounced by epicures to be very fine. But the severe winters, not so cold but protracted, and the weather so violent that they have to huddle for weeks and weeks in some dark low shelter causes a sweating or heating of their wool which is detached and falls off, greatly enfeebling and emaciating the animal by spring. The practice of the traders now at some places is to bring beef cattle up in the spring from San Francisco, turn them out into the grazing grounds on the Aleutian Islands, Kadiak, and even to the north, where they speedily round out and flesh up into the very finest beeves by the middle or end of October, when they are slaughtered. Some ludicrous instances occur in this connection when Texas cattle are disembarked in these unwonted nooks where they charge from the gangway of the vessel up through the native settlements as though possessed of the evil spirit. They of course at once repair to the solitudes of the mountain recesses of the interior away from the settlements, where they remain undisturbed until they are hunted and shot by the traders. The natives of the settlements into which these strange horned bovines

charged dived into their barrabaras with remarkable celerity and activity, peeping from thence at intervals in fright, under anticipation of some fearful crisis.

The Russians familiarized some of these natives with horses as well as cattle; but a great sensation remained in store for these people after the transfer of the Territory, when mules were taken up there by the soldiers under the mistaken notion that they were going to be used in going about and over the country; these animals to the Indians were a source of profound astonishment, and the mules manifested towards them an exceedingly vindictive and aggressive disposition, always charging, ears laid back, and with threatened uprising of the heels, upon the luckless savage should he chance to cross their feeding-grounds, the Indians turning in swift, tumultuous flight from the advance of the unknown quadrupeds when they would have faced any number of bears without moving a muscle in their countenances.

Mules and horses, however, have no economic value here; there is no service for them on land. A little work is done with profit on the Seal Islands by mule teams, and these, perhaps, are the only draught animals or saddle animals that have any useful purpose to serve in the Territory to-day, with the exception of those we have cited at Wood Island.

With regard to the raising of hogs, the propensity of these creatures to devour carrion on the sea-beach bars them of much interest, and they are not encouraged anywhere. The same difficulties, however, occur of feeding and caring for them during the winter, were they regarded as a valuable accession to the trader's store.

In the light of the above concise and explicit recital, we feel fully warranted in saying that the extended coast islands and mainland of Alaska would not support and will not invite any considerable or noteworthy number of our people as agriculturists, but it is also equally apparent that the existence of those who are living in the Territory and who will always live in the Territory can be softened in many of its asperities by better attention to the development of the resources which are latent in the soil at many favored localities, notably at Bristol Bay, Kadiak, Cook's Inlet, and the Sitkan Archipelago. What strikes us most to-day with regard to this topic in this relation is the singular indifference of and growing disinclination of the people themselves to labor in this direction. In the times of the old Russian rule there were regular orders and regular squads of soldiery assigned to this purpose every year, and the old retired and patient colonial citizens were obliged by the terms of their indenture with the company to devote themselves wholly to agriculture. Now, of course, they are free to choose between the profits of hunting and the smaller gains of farming, and they naturally drop the latter and rally to the former. It will thus be noticed that the subject of agricultural resources in Alaska has not been a new agitation, and the result of American thought and industry; and it will be found in the future, as it has been in the past and is to-day that those points located by the Russians eighty years ago as the best for their potatoes and other garden relishes, such as radishes and turnips, are the ones which we find so to-day.

## CHAPTER IX.

## EDUCATION IN ALASKA.

In the discussion of this subject, embodying as it does a vital interest to the people of Alaska, we are brought face to face with many natural and some artificial difficulties. In the first place, the limit to which a savage people will progress, forced by all the pressure of a higher civilization, has been repeatedly marked in the examples recorded of the educational disappointments and successes which have attended the efforts of our government and our clergy to elevate the minds and advance the comfortable living of our own immediate aborigines. We cannot overlook their plain teaching, and we shall not, but there are some points which strike us as we regard the field of Alaskan labor, which we deem right and expedient on the part of the government to undertake and carry out, for if the youth of Alaska are to be lifted above their existing low medium level, in our opinion the Government of the United States alone can do it; or at least it is the best able from its position of strict neutrality among religious creeds to promote the progress of simple elementary education among those people.

In the first place, it will naturally be asked why is it that where so many churches and chapels stand there should be any need of governmental care or attention to school-houses; what are the people there themselves doing? If they have interest enough to support, sustain, and conform to the Christian religion, how is it that they do not become impressed by the equally valuable suggestion of the necessity of teaching their children the rudimentary elements, at least to read and write? These are pertinent questions, and they are not easy to answer. They require the following presentation of a peculiar situation: The Russian Church, which is the dominant ecclesiastical power in Alaska, is of course poor, comparatively speaking, necessarily so, and the great majority of these chapels are in the hands of natives and creoles, who are not members of the clergy. A somnolent organization is their chief constitution. They drone through the exercises of the church as appointed, and preside at its calendar days of festivity, after which they retire seemingly exhausted and desirous of repose. If anything can be done to reach these men, to invigorate and stir them up, it must come from the individual supervision and orders of some active, zealous head of the church. The present bishop, Nestor, who has recently assumed the spiritual direction of affairs in his diocese of all Alaska, promises to be such a man; his predecessor certainly was not.

Among the 7,000 or 8,000 members of the Russian Church we have found less than 400 able to read and write in either the Russian, the Aleutian, or Kadiak Innuvit vernacular, though in the villages where parish churches are located quite 30 per cent. of the people possess these rudiments of education. The average attendance at two schools, those of Oonalashka and Belkovsky, is ridiculously small—less than ten of both sexes. At the Pribylov Islands, where the special agents of the government watch over the schools, the attendance is 22, and the children are instructed in the English language.

Not one of the three missions of the Yukon, Nushegak, and Kenai, possesses a school, and in the village immediately surrounding the former (which now has a native missionary) the writer found but one man who could speak even the Russian language, outside of the attachés of the church. The bishop above referred to has planned the establishment of a training-school for native boys from all parts of the Territory at Oonalashka, but, of course, the English language will be ignored there.

We find, among the Innuits in especial, a quickness of apprehension and a lurking spirit of inquiry, which, to our mind, points them out as capable of being very much benefited by an intelligent system of educational labor, provided it can be established in their country. They are, if anything, brighter and more desirous of learning than the Aleutians themselves, who appear, as a people, to be degenerating, owing to the hybridization constantly going on in their country.

The natives themselves are quickened into the appreciation of the benefits of an education as they observe the advantages which those among their number have over the rest, being conversant in the method and manner of conducting trade, keeping accounts, and the advancement of these educated examples among them by the traders to positions of trust and confidence. This practical application reaches them fairly and fully, where the most eloquent and cogent advocate of the abstract advantages of education would fail to make the slightest impression or arouse a passing interest in their minds.

All those who read and write to-day, principally their own language, among the Aleutians as a class and the Kadiakers, have derived these elementary rudiments of instruction from the Greek Catholic Church. The father who can read and write, as a rule, teaches his son, while the exercises of the church keep the lesson somewhat fixed in the juvenile mind.

At the location of all parish churches it is supposed or expected that schools will be maintained by the church authorities, but they are, as already mentioned, very lax in this respect. The Presbyterian Board of Missions has established quite an extensive and successful school and house of refuge at Wrangel; at Sitka a school is supported by the joint co-operation of the people there and the naval authorities, but at least 20,000 natives are to-day entirely without the remotest influence of church or school—a fact our boards of foreign missions might take into consideration.

Under existing circumstances the general government could extend educational facilities only through the medium of the Indian Bureau, a branch of administration having as yet no foothold in Alaska. The extension of all the complicated and expensive machinery of the bureau would be unwise, indeed, among tribes now entirely self-supporting and occupying no lands attractive to white men; but as an entering wedge and earnest of future civilization, 15 or 20 youths might be chosen from various regions, instructed in some of the Indian schools (such as at Carlisle, Pa., for instance), and if found to be capable, trained as teachers in some normal school. Care should be taken in the selection of the boys, who should be pure natives and not the offspring of traders and native women, in order to insure the desired future benefit.

It will be said that the process of educating these young men in our own country will so unfit them for future residence in their own that as soon as they return they will hasten to get back. This insinuation is not borne out by the records made of quite a large number of Aleutian youth who have, since the transfer, been from one cause or another taken down to San Francisco and the States east of the Rocky Mountains where they were educated, and where, in all instances that we have knowledge, they have invariably returned, if alive, to the country of their birth. This is simply natural, and it needs no extended explanation.

Where there are white people in the Territory to the number of a few families and upwards, they themselves can solve the school question or not as they please, but with the natives we can readily understand the wide difference wherein they are helpless and the former self-reliant.



## CHAPTER X.

## POLITICAL STATUS.

Alaska is to-day, and has been for thirteen years, "a thing which it is not," a Territory in name only, without its organization. It is a customs district, for the collection of customs only, with a collector and three deputies separated by hundreds and even thousands of miles. It has no laws but a few Treasury regulations. It has no county or subdivisions, and, of course, no capital. The collector of customs and the only representative of police restrictions—a man-of-war—are located at Sitka, cut off from all communication with the bulk of the Territory except by way of San Francisco.

In the strip of country between Cape Fox and Mount Saint Elias, 300 miles long by from 30 to 60 miles wide, including islands, or about 18,000 square miles, there are about 500 whites and creoles, able to perform the functions of citizenship, and 5,000 wild Indians; about enough for a small county organization.

In all the western region, the special subject of this report, there are 139 white males and 5 females, including 3 boys and 1 female child, and leaving 136 white men and 4 women. Among the Creoles between 400 and 500 might be found sufficiently intelligent to understand what constitutional government means, though not speaking English, making an average of less than one possible citizen for every 1,000 square miles of superficial area, without regard to the fact that many of the men are foreigners.

The main difficulty of organizing or legislating for Alaska lies in the utter impossibility of reconciling the widely diverging interests and wants of two sections, entirely separate geographically and having no one feature alike, besides being ridiculously unequal in size. The sketch-map accompanying this report will illustrate this at a glance. The only practical and economical solution of the question would be to treat each section separately.

A reference to the map would also impress the observer with the vast distance in many cases from one settlement to its neighbor, rendering as a rule communication between the small villages and settlements of the Territory infrequent and rare, San Francisco being the central point of information received annually from the whole Territory; for instance, the people of Kadiak or Oonalashka hear from and learn of any one in Sitka by the "Golden Gate," and *vice versa*.

The only official knowledge which the government can have or will have of the condition of affairs in Alaska has been and will be derived from the cruising of the revenue marine steamers. The mail line established between Sitka, Wrangel, and Port Townsend, Puget Sound, is a branch of the postal service extended but to a faint degree over Alaska.

## CHAPTER XI.

## DISEASES.

The subject of the health of the natives is one that may be treated bodily; or, in other words, those diseases which are most fatal to life in one section of the country seem to be as applicable to all the others.

In the first place, the natives, as they grow up, are light-headed, have little or no parental supervision or care in regard to attention, clothing, &c., from a purely sanitary point of view; for the little fellows, male and female, for the first few years of their lives, are more often naked at all seasons of the year than they are clothed, though the little girls, as a rule, receive the earliest garments. Exposed as they are, in their manner of living, to draughts, to insufficient covering, and cold nooks for slumber, they naturally lay the foundation, at the outset of their rude lives, for pulmonic troubles in all their varied degrees. Consumption is, therefore, the simple and comprehensive title for that disease which alone destroys the greatest number throughout Alaska. The Aleut, the Indian, and the Eskimo suffer from it alike; and they all exhibit the same stolid indifference to its stealthy but fatal advancement—no extra care, no attempt to ward off, protect, or shelter, not even until the supreme moment of dissolution comes.

After consumption, perhaps the largest list of death causes will be laid at the door of scrofulous diseases, taking the form of malignant ulcers, which eat into the vitals and destroy them. It renders whole settlements sometimes lepers, in the eyes of the civilized visitor; and it is hard to find a settlement in the whole country where at least one or more of the families therein has not got the singularly prominent scars peculiar to the disease. Most of this scrofulous complaint being on the surface, as it were, of the patient's body, we naturally would look for some care and attention from the hands of the sufferer towards the alleviation of his own misery; while, with regard to consumption, that being more concealed and less disagreeable both to the native and his associates, it is not quite so natural for them to notice it in the way of a remedial appliance; but, so far as we know, the same apathy exists among the natives with regard to the treatment of scrofulous trouble. It is, of course, by their neglect and filthy habits, immensely aggravated and made more violent.

Following these two great sources of disease and death, we have to enumerate quite a list of other ills, such as paralysis, inflammation of the bowels, a few cases of fits, and a rather abrupt ending of advanced middle-aged life called "general debility"; or, in other words, these people, as a rule, live to no great age, as might be inferred from the method and exigencies of their life. When a man or woman rounds his or her fifty years, he or she is a rare example of the tribe; yet, if he or she is free from rheumatic troubles, or the death-grasp of disease, it is never without injured vision, for it is a noteworthy fact that eye diseases necessarily arise from the smoky interiors of their barrabaras (and the snow), and other places of residence principally so affect the eyes that the middle-aged are rarely without signs of decay, the various stages of granular ophthalmia being most marked.

The Eskimo people suffer from snow-blindness, and for its prevention use their peculiar goggles, but the greater evil of smoke poison to the ophthalmic nerve is not removed by any of them, or overcome; they seemingly live on, to live as wretched in the future as they have in the past. Of course all the traders have their medicine chests, or nearly all of them, and much relief and real kindness is extended by them to the suffering natives immediately about them wherever they are; but what they do, or can do, is, of course, a mere drop in the bucket. Hence it will be observed that the natives of Alaska are not a long-lived people as a rule, and when an old man or an old woman—very old—is found among them, she gives evidence of what must have been in her youth a magnificent constitution—iron-clad, in fact.

The Indian, Eskimo or Aleut, has not, however, an exalted idea of our pharmacy; in other words, they appreciate only forcible treatment; nothing else will satisfy them. As an example, of Epsom salts used by the traders who are obliged to give, if they give any at all, to a suffering native, the vilest dose must be administered, or there is no effect in the operation whatever. Naturally the traders use only the very simplest remedial agent known to the apothecary.

The natives themselves have no medicine whatever, nor any knowledge, as far as we can find out—and this is a very singular fact—of any medicinal herb whatever; all their lesser and slighter indisposition, arising from any natural cause, they treat by the universal and everlasting sweat-bath. This is their panacea, and this is all, except when they call in the “shaman” to either worry the last hour of the unhappy patient even to death, or to prolong his wretched existence for a longer period by stimulating perhaps an undue nervous tension, which causes the usually languid and resigned sufferer to rally, as it were, before the flame flickers out.

These people are certainly fatalists. They are wonderful in their patience when suffering all the ills that flesh is heir to in their lonely, desolate homes.

We have to speak of the dreadful consequences, in addition to the troubles which the natives themselves are responsible for, arising from the introduction of small-pox through Russian intercourse, first in 1838 and 1839, which swept like wild-fire up from its initial point at the confines of the southern limits of the Alexander Archipelago over the whole length of the Aleutian Chain, Cook's Inlet, Bristol Bay, Kuskokvim, fading out within the north, until entirely checked by the Arctic cold. It actually carried in its grim grasp one-half of the whole population of Alaska to an abrupt and violent death. In certain places it swept out the entire population, being exceedingly virulent among the Kaloshians of the Alexander Archipelago. The physician who knows this, however, will readily understand how a people living as they lived and live to day, with their strange apathy and sanitary regulations, as we understand it, will fall down and be crushed before and under the march of this disease. It is said that when La Pérouse touched in this country, at Lituia Bay, he found natives then, in 1786, to his great astonishment, marked by small pox, which it seems the savages had contracted from a visit made to the coast by the Spaniards nine or ten years earlier; yet there is no definite knowledge that this epidemic in prehistoric times even approximated the extent and decimation of that which we have just cited. In 1843 and 1844 another outbreak of small-pox took place on the Aleutian Islands, but the people did not suffer as they had previously, great numbers of them having been vaccinated by the Russians in the mean time.

Upon this point, the only interest or attention which these people have already given to our medical practice is manifested; they do occasionally ask why the American Government does not send out its agents for the purpose of vaccinating their people, as the Russians did. This is a suggestion which, though late, may be timely.

Another imported plague among these people was, as is, due to the introduction of the measles, a simple trouble with us, but of fatal power among them, assuming, doubtless on account of the exigencies of the climate and methods of life, the black form. It first ravaged Kadiak Island and the mainland contiguous, on one or two occasions, and produced a panic also at Sitka. The climate of Alaska renders its treatment very difficult, and it is an exceedingly dangerous complaint

up there for those even who have the best of care and medical attention. The last extended occurrence of this took place during the winter of 1874-'75, principally confined to the Kadiak Island.

The question naturally arises now, are these people of Alaska increasing annually in the aggregate of their numbers; and, if so, to what proportion may we reasonably look for their maximum limit? To this we make answer that, in our opinion, the inhabitants of the Aleutian Archipelago, the Peninsula, and Cook's Inlet are to-day nearly as numerous as they have been at any time since the decimation in 1838 and 1839, caused by the small-pox plague of that season. All authorities agree in saying that these people had never regained their former strength in point of numbers.

With reference to those Innuits to the northward and the Indians of the great interior, we are strongly inclined to say that they certainly number to-day as great a population as in years gone by, and as many as the country will support, always bearing in mind their extraordinary wastefulness in seasons of plenty. Were they provident they might live by tens where a single one lives now. The same remarks are applicable to the Kaloshians of Sitka and that country.

They are indifferent when living, and they are as apathetic when they face death. Their methods of burial are defined quite sharply—the Aleutians burying their dead with all the Christian ceremonies, as also do the other semi-civilized natives. The Indians place the forms of their departed in boxes upon rude scaffoldings above the reach of animals, or enveloped in skins merely; while the Innuits bury their dead wherever they live, without the pale of perpetual frost, in boxes or without, making a shallow excavation, into which they lay the body, usually crouched up, and supinely marking it with a simple stake, surmounted occasionally by rude images of fish, beaver, or something of the kind, suggested, perhaps, by some direct characteristic of the deceased in hunting these animals.

## CONCLUSION.

As a summary of the statistics scattered through preceding chapters, we present the following brief tables, reserving for the final report all detailed comparisons and deductions:

## 1—POPULATION.

Divisions.	Whites.	Creoles.	Aleuts.	Innuits.							Indians.	Total.
				Kodiak.	Togiak.	Bristol Bay.	Kyakovim.	Yukon.	Bering Sea.	Arctic.		
Yukon division .....	28	10	.....	.....	.....	.....	.....	3,339	633	2,990	.....	7,000
Interior division .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,226	2,226
Kuskokvim division .....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	147	3,654
Bristol Bay division .....	1	90	324	.....	1,826	2,099	3,505	.....	.....	.....	.....	4,340
Kodiak parish .....	23	770	.....	1,798	.....	.....	.....	.....	.....	.....	15	2,606
Kenai mission .....	9	64	.....	98	.....	.....	.....	.....	.....	.....	813	984
Belkovsky parish .....	36	223	410	.....	.....	.....	.....	.....	.....	.....	.....	669
Onalashka parish .....	28	256	1,108	.....	.....	.....	.....	.....	.....	.....	.....	1,392
Pribylov Islands .....	18	.....	372	.....	.....	.....	.....	.....	.....	.....	.....	390
Saint Lawrence Island (estimated) .....	.....	.....	.....	.....	.....	.....	.....	.....	400	.....	.....	400
Nunivak Island (esti- mated) .....	.....	.....	.....	.....	.....	.....	.....	.....	500	.....	.....	500
Total west of Prince Will- iam Sound .....	145	1,413	2,214	1,896	1,826	2,099	3,505	3,339	1,533	2,990	3,201	24,161
Estimate of Prince Will- iam Sound .....	.....	.....	.....	300	.....	.....	.....	.....	.....	.....	.....	500
Southeastern Alaska .....	247	270	.....	.....	.....	.....	.....	.....	.....	.....	5,000	5,517
Grand total .....	392	1,683	2,214	2,196	1,826	2,099	3,505	3,339	1,533	2,990	8,401	30,178

The Russian Church claims on its registers 10,950 members, distributed as follows:

Sitka parish .....	275
Onalashka parish .....	1,364
Belkovsky parish .....	633
Kodiak parish .....	2,606
Pribylov parish .....	372
Nushegak mission .....	2,848
Yukon mission .....	2,252
Kenai mission .....	600

Of these numbers, at least half of those counted with the northern missions, or 2,500, may be safely stricken off as fictitious; 1,013, the creoles, are semi-civilized, a small percentage being able to read and write, while the remainder are savages to all intents and purposes.

## 2.—TRADE AND RESOURCES.

The business interests of Western Alaska may be divided into the fur trade and fisheries, the former being, of course, the most important. The skins of marine animals especially are exceedingly valuable. The 5,700 sea otters shipped during the past season represent a value of \$600,000 in the London market, and the 100,000 fur seals considerably over \$1,000,000. The principal land furs are annually secured in the following average quantities: Marten, 10,000; foxes, 8,000; bear, 1,000; beaver, 4,000; mink, 20,000; representing a value of \$80,000.

The fisheries send to the San Francisco market 600,000 codfish from the Shumagin Islands, worth, perhaps, \$70,000; and 2,000 barrels of salmon, worth from \$12,000 to \$15,000.

In the line of provisions, Western Alaska is a good customer for San Francisco, having received during the past season, through the established firms alone, 18,200 barrels of flour, 3,452 cases of hard bread, 753 chests of tea, and 2,948 half barrels of sugar. Of leaf tobacco, at least 50,000 pounds are consumed.

In conclusion, we must refer briefly to the manner in which the foregoing information, and much that is still reserved for future elaboration, was collected. An exploration of the country was made as follows: From San Francisco to Oonalashka by steamer; thence eastward to Belkovsky and the Shumagin Islands, and westward to Atkha, also by steamer; then northward to the Pribylov Islands and Saint Michael, Norton Sound, again by steamer; from the latter point the journey was made entirely in a "bidarka" or skin canoe, 18 feet long by 30 inches wide, up the Yukon River about 800 miles; back again to a portage connecting with the Kuskokvim River; up that stream to Kolmakov Redoute and down to the seaboard; thence coasting along to Bristol Bay, making a portage across Aliaska Peninsula to Katmai, and thence again across Shelikhov Straits to Kadiak Island, Saint Paul Harbor; from here by small schooner to the southern end of the island, and thence to San Francisco, making a round journey of 4,500 miles by steamer, 2,500 miles by canoe, 1,700 miles by sailing vessel; a total of 8,700 miles on sea and rivers.

Thanks are due to the Alaska Commercial Company and the Western Fur and Trading Company for free passage of the special agent to and from the Territory, and other courtesies extended, and also to Capt. C. L. Hooper, United States Revenue Marine, for assistance in fitting out for the overland journey.

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