THESIS

THE INDIGENOUS TRIBES OF BRITISH COLUMBIA

AND

EUROPEAN INFLUENCE UPON THEM.

by

EFFIE LOVICA GILLIES, B.A., LL.B.
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THE TRIBES OF BRITISH COLUMBIA.

The Indian Department at Ottawa estimates the Indian population at about 25,000. That number is we believe, rather above than below normal count.

In eighteen hundred and seventy one, though no accurate enumeration was made, it was estimated that the Indian population, represented by existing tribes and a few that are partially extinct, was in round numbers about 35,000. In the interval, therefore, there has been a loss of ten thousand. Even in 50 years that is a large decrease and from the fact that the Indian population for twenty years has been, so far as the Departmental returns show, about stationary would seem to indicate that the original estimate was too high. It is our opinion, and the opinion also of those who have made a special study of the Indians and in particular of the Coast tribes, that there is a sensible decrease, and our conclusions are the result of personal observation. Consumption is making considerable inroads all the time. The Influenza Epidemic claimed a terrible death roll. The birth rate is/
is very low, a fact to be accounted for, to some extent by the former prevalence of sexual diseases which are productive of sterility in an unusual degree.

The Haida for instance, once a powerful and numerous nation, have in British Columbia dwindled down to three small communities and their home in Queen Charlotte Island contains many deserted villages which have been long the prey of curio hunters and collectors. They still continued to decrease up to five years ago as do also the others of the Coast tribes but on the whole, the influences of civilization within the past twenty-five or thirty years, although not wholly without evil results, have tended to arrest decay and some tribes have even been on the increase. It is perhaps inevitable that the red man should gradually retire before the white race; but the abundance and accessibility of food, the mildness of the Coast Climate, and the protection accorded under a very beneficent form of government, have given them an advantage as to permanency over all other native races.

One thing which has tended largely to their benefit
Tsimshian Family at Metlakatla.
is their position of independence. With the exception of their being in a general way under the aegis of the Indian Department, they receive no special favours such as are accorded to the Treaty Indians, no annuities or financial assistance. They are obliged to maintain themselves by hunting, fishing, trade and labour, the opportunities for which are always at hand. Game is abundant, the seas and rivers teem with fish; during the canning season they are largely employed at good wages and earn money. Lumbering, picking hops and in various ways. They are, as compared with their Eastern brethren, industrious and are usually well supplied with the ready cash for all their necessities. Famine or starvation among our Indians is extremely rare, if indeed it ever occurs. Their trade is highly thought of by the traders and is as a rule a fairly lucrative one. In many places they have comfortable homes and though not remarkable for their cleanliness or intelligence, they possess to some degree the refinements of civilization. Gardens often adorn the homes, flowers are cultivated and/
and vines are used to cover objectionable sights. Pictures of friends hang upon the wall with bought frames or such as they might make themselves. Though not so picturesque as the Plains Indians they are, sociologically speaking, on a higher plane. Naturally more docile and less nomadic, it was fortunate that owing to the wise policy of the Hudson's Bay Company in dealing with them, when the country came under the organized government, they were prepared to accept the sovereignty of the white man with good grace. If we except some trouble in the early days with the miners on the Fraser River, several murders by the Prince Rupert and the Cowichan Indians, and the Chilcotin massacre, which latter was not without provocation, there have been no atrocities like those which occurred in the United States or on a smaller scale east of the Rocky Mountains in Canada. In fact British Columbia has been remarkably free from disorder of any kind. When trouble did occur or threatened to occur it was repressed in its incipiency with a firm but not a cruel hand. Respect for the law, early instilled in a judicious way/
way, was rather by demonstration than by the exercise of force. The worst Indians inhabited the Coast of Vancouver Island and adjacent islands and these had ever in their hearts, the wholesome dread of the Hudson Bay Company gunboat or a man-of-war. It was rarely necessary to call either into requisition. In the early part of last century there were several serious disasters with loss of life to traders on the Coast, but it was before the advent of the Hudson Bay Company or rule of any kind. The tragedies in which the Indians were concerned, which are still related most graphically by themselves and of which accounts are found in every school history of British Columbia, are recorded to have taken place on this Coast when fur trade was at the height of its prosperity. One was the destruction in 1803 of the American ship "Boston", by the natives of Nootka Sound, when almost all the crew were murdered except Jewett the armourer and a sailor called Thompson. They were kept in slavery four years by the Chief Maquenna of Vancouver Island and Quadra Bay.
In 1805 the American Ship Atahualpa of Rhode Island was attacked by the savages of Millbank Sound and her Captain, mate and six seamen were killed after which the other seamen succeeded in repelling the assailants and saving the vessel.

In the same manner the Tonquin of Boston, six years later in the month of June was attacked by the Natives whilst it anchored in Clayoquot Sound and all except one of the crew murdered.

Probably one reason to account for the Indians of the Coast being more warlike than the interior tribes was that for a century they had been brought into contact with traders of foreign countries who, in their ships, carried on a system of barter in which rum was more or less a factor and honesty or scrupulous methods formed no part of the consideration. These tribes who traded exclusively with the Hudson Bay Company learned to trust white men and respect a covenant.

Of their Eastern brethren with whom readers outside the Province are more familiar, it may be said that in most/
A Family Group of Coast Salish.

Haida Mother with her four daughters. The two on the left are Japanese in appearance.

A Group of Indians at Windermere (Dene). The old man with braids and the one behind him to the right have typical Sarcee features.
most respects they are very different. The "Plain Indian" is tall, lithe and sinewy; has elongated face, aquiline nose and black piercing eyes. He is built to run, see, and smell at a long distance. He is quick, agile, and restless. The "Siwash", which is the common way to designate our Indian, is short, thick-set, and heavy in the body and small in the legs, with a long square flat face or a head that sits close to a pair of heavy shoulders. There is usually large chest and arm development. Nature has built him to suit his occupation - namely - to sit in a canoe and fish. Or it may be perhaps more accurate to say that his occupation has made him what he is. This description applies more particularly to the Coast tribes but as you go further inland the types more clearly approach that of the Plain Indian. The resemblance of the Siwash to the Japanese is striking and dressed alike it is sometimes difficult to distinguish the nationality. The Indians however are heavier in build and coarser in feature than the Japanese who posses a tightly knit frame and rounded smooth features.

It must be understood however that different nations differ in appearance and minor characteristics.
A great deal has been written concerning the Origin of the American Indian, by writers both past and present, yet according to Wissler, one of the latest American authorities, the question is not yet satisfactorily settled. "We have seen what a great array of facts must be considered and how one must draw upon the resources of Zoology, Geography and Geology before the various parts of the problem (namely New World Origins) can be formulated for critical consideration. As to the origin of the New New World man himself we have achieved one point, namely, that he migrated hither from Asia where his nearest relatives still reside". (1)

Nevertheless modern inquiry has resulted in showing us that whatever may have been the origin of the Native Races of the New World, they have been dwellers there for a very long period of time, compared with which the siege of Troy was a matter of the day before yesterday.

The remains of primitive instruments and implements of rude form in strata which are clearly of ancient formation and of remains of extinct species of the horse and other/
other animals now unknown, make this certain.

The distinguished American Dr. Brinton held the opinion that the American man was present and active and using tools and fire during the interglacial period and that he spread over the continent and lived in both North and South America at the close of the Glacial Age, he regarded as beyond any doubt.

Physical characteristics certainly suggest a racial relationship between the peoples on the opposite shores of the Pacific, and this conclusion seems to be supported by the similarity in the Art of the Coast Indians to that of the Chinese and Japanese but similar conditions might have developed resemblances in races autochthonous and distinct.

Language affinities, but more particularly folk-lore are now and have for some time been the subject of careful study and comparative philology and traditional stories, may yet reveal the basis of determination.
The Haida in British Columbia are confined to the Queen Charlotte Archipelago and are peculiarly an island people. Surrounded by waters in which fish and sea animals are most prolific, they had plenty of sustenance. They were daring and warlike and expert in the use of their primitive tools. They were daring sailors in their immense cedar canoes. They were artistic in their tendencies. In the Alaskan Territory they are classified as Haida Tlingit whose general characteristics are similar. Formerly they were quite numerous and powerful but have been greatly reduced. Of the Coast Indians they are decidedly the finest in appearance and many of their young women are handsome judged by the white standard of beauty.

The great rivals of the Haida in most respects, numbers, physical prowess, and artistic skill were the Tsimshians, inhabiting, generally speaking the country on the opposite coast of the mainland of which the Tsimshian peninsula may be said to have been their chief seat.
The Haida and the Tsimshian in the earliest times dominated the Coast as far south almost as the Columbian River and drew hostages in slaves from many tribes, being exceedingly cruel and remorseless in their methods.

The Tsimshian people had reached as high a point of development in every way as any of the other tribes of British Columbia when first discovered. Their artistic work in wood, horn, ivory, and stone is not surpassed even by their neighbours and rivals - the Haida.

The Nass River bands too of this people are credited with having been the original makers of the elaborate ceremonial coat now known as the Chilcot blanket.

The Wakashan stock of which there are two divisions - the Kwakiutl and Nootka, therefore often called the Kwakiutl-Nootka Nation, inhabit the east and west coast of the Island of Vancouver, adjacent islands and to some extent the adjacent mainland although in the latter territory the stocks are somewhat mixed.

The Kwakiutl and Nootka were, and still are, a numerous people and as experience has shown, have been least/
least amenable to civilization and missionary influence.

Many of them are still pagan and some of the tribes were cannibalistic a very few years ago . . . In fact it is said that they were the most dangerous, warlike and independent and adventurous of all the coast Indians.

It is claimed that the Wakashan, particularly the Kwakiutl are of Polynesian ancestry. Here one finds the broad nose formation and in some cases the hair is not absolutely straight. Hale in "Was America peopled from Polynesia?" which is a study of comparative philology has tabulated the pronouns - "I" "THOU" "WE" "YE" "THEY", in the languages of Polynesia and of Western America, and these are the pronouns as used by the Kwakiutl.

The tribes of the West Coast - the Nootkan Division - belong to Sproats well known classification of the "AHT" nation from the uniform termination "IT" "AT" "ET" and "AHT" having the same significance "the people of", and properly should all be spelled in the same way.

The Dene are very widely distributed, occupying the entire/
entire interior throughout British Columbia and extending through the present area of United States as far as and including New Mexico. There are two branches - the Northern and the Southern. The Northern group outside of British Columbia cover the region at present known as the North West Territory of Canada - that is to say the unorganized territory - and within British Columbia include the Beavers, Nah'anes, Carriers and Chilcotins in the Cassiar, Omineca and Cariboo districts. The Dene (or Tinneh) stock is also designated Athapaskan but according to Reverend Father Morice very inappropriately. They present many local characteristics which might vary their classification at points of contact with other nations or stocks. Father Morice describes the northern Dene as generally pusillanimous, timid and cowardly but a noteworthy quality, especially in those who have remained untouched by modern civilization, is their great honesty. They are gentle in disposition, he says, and have usually shown a remarkable receptiveness.

The Kootenaians who inhabit principally East Kootenay
are physically congeners of the Plain Indian whom in features and build they closely resemble. As Kootenay, or "Cootenai", as it was first spelled, is said to have been derived from "Cootinneh", or "people of the Lakes", it has been suggested that they belong to the Dene stock, a derivation not sustained by their physical traits, which as has been stated, are distinctly those of their neighbours of the prairies from whom they are undoubtedly off-shoots and sometime or other in the remote past took refuge west of the Rockies, from their more powerful enemies.

The Salishan are more widely distributed and have a number of sub-divisions. Numerically they are the strongest of all the Stocks, constituting about fifty per cent of the entire population. Their representatives belong to Bella Coola on the Coast, to the southern and Eastern parts of Vancouver Island and adjacent islands and extend throughout the Lower Mainland, to the Lillooet and Yale and southern part of Cariboo Districts including the Bella Coolas, to the Cowichans, the Fraser River and Thompson River Indians, Lillooets, Shuswaps, Nicolas, Similkameens and/
and so on as variously designated.

The famous Chinook Indians are part of the Salish Nation. They compose three different tribes each speaking a different language which are:

1. **SHUSWAP** comprising
   - Adams Lake
   - Niskainlíth
   - Kamloops
   - Little Shuswap Lake
   - North Thompson
   - Deadman Creek
   - Bonaparte Bands

2. **THOMPSON**
   - Ashcroft
   - Oregon Jack
   - Cooks Ferry
   - Nicomes
   - Lower Nicola
   - Goldwater

3. **UPPER NICOLA**
   - Okanagan Tribe.
Thus the Indians of British Columbia may be divided as follows:

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<tr>
<th>Stock</th>
<th>Division</th>
<th>Numbers (approximately)</th>
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<td>372</td>
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<td>Skidegate</td>
<td>239</td>
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<td></td>
<td>4068</td>
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<tr>
<td>Dene or</td>
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<tr>
<td>Athapascan</td>
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<tr>
<td>Kootenaian</td>
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<tr>
<td>Salishan</td>
<td>Bella Bella</td>
<td>281</td>
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<tr>
<td></td>
<td>Interior</td>
<td></td>
</tr>
<tr>
<td></td>
<td>including Chinook</td>
<td>5413</td>
</tr>
<tr>
<td></td>
<td>Coast</td>
<td>4598</td>
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**Total**

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**Note:**

In addition to the above number of Indians there are/
are the Nomads whose numbers are thought to range from 5000, to 4000. This number includes the Nomadic in tendency and the Semi-nomadic.

Of the pure Nomads there is thought to be about 5000.

The Fort Graham Indians are said to be Nomadic in tendency. They number 88 and practically the whole tribe has embraced the Roman Catholic Religion. The Nanees (two bands north of Connolly Lake) are Semi-nomadic and are also claimed as converts by the Roman Catholic Church.
Skeena River Indian Chief.

Shewing Chinese caste of features.
The following are the agencies referred to in this Thesis and the Tribes of which each is comprised.

1. BABINE AND UPPER SKEENA AGENCY comprises

Andimalu, Fort Babine, Getannax, Glen Vowell, Kisgeges, Kispiox, Kitselas, Kitsegukla, Kitwanga, — of the TSIMSHIAN NATION.

Kitwankool, Kuldoe, Moricetown, Old Fort Babine, Rocher Deboule, — of the DENÉ.

2. BELLA COOLA AGENCY.

The Bella Coola Agency extends from the River's Inlet on the South, to the Nass and Babine Agencies on the North where it is bounded by the 54th. Degree of Latitude. It includes about 200 miles of Coast line and islands adjacent thereto, running inland and including the sources of the Bella Coola and Salmon Rivers.

It comprises the Bella Bella, China Hat, Kimsquit, Kitlope tribes of THE WAKASHAN NATION and the Hartley Bay Kitkatla, Kitimat and Ulkatcho tribes of the Tsimshian Nation and The Bella Coola tribe of the Salish.
3 COWICHAN AGENCY comprises
Beecher Bay, Comox, Cowichan District, Cowichan Lake, Esquimalt, Hellelt, Kulleets, Siccomeen, Lyackson, Nanaimo, Qualicum, Nanoose, Penelakut, Saanich District, Songhees and Sooke OF THE SALISH NATION.

4 KAMLOOPS AGENCY
THE CHINOOK TRIBES comprise this agency -- that is all the Chinook tribes not in the Okanagan Agency.

5 KOOTENAY AGENCY
The following tribes comprise this agency:
Arrow Lake, Lower Columbia Lake, Lower Kootenay Shuswap or Kinbaskets, St. Mary's and Tobacco Plains.

6 KWAKIUTL AGENCY
The Indians of this agency belong to the KWAKIUTL NATION and they live in the 15 Principal villages of the Nation.

7. LYTTON AGENCY.
The following Salish Tribes comprise this agency
Cheam, Squawtits, Ohamil, Popcum, Union Bar, Skawahlook, Hope, Yale, Seabird, Maria Island, Spuzzum, Boston bar, Boothroyds, Kanaka Bar, Siska, Skuppah, Lytton, Anderson Lake, Seton Lake, Cayoose Creeks No. 1 and 2, Lillooet and Shuswap tribes.
8. **NASS RIVER AGENCY**

This agency comprises the following groups of bands:

(a) The Nishga Group which comprehends the Gitladamiks, Aiyansh and the Kitwilluchselt or (Gwinoha), Lakkalzap and Kincolith. (b) Port Simpson, Metlakatla, Port Essington and Kitsumkalum. All are lands of the **Tsimshian Nation** of the Nass and Skeena Rivers.

9. **NEW WESTMINSTER AGENCY IS COMPRISED OF:**

The bands in the Chilliwack district, on Howe Sound, Burrard Inlet and Squamish River; Chehalis and Scowlitz, Coquitlam, Douglas and Skookumchuck, Samahquam and Pemberton Meadows, Homalco and Klahoose Katzie, Langley, and Whonnock, Musquam, Matsqui, New Westminster, Nicomen and Skwawham, Sechelt, Sumas Shnman, Tsawwassen, all bands of THE SALISH NATION SLIAMMON.

10. **OKANAGAN AGENCY** is comprised of the Okanagan bands of the Chinook Indians in which are included the Spallumcheen, Okanagan, Penticton, Osoyoos, Skemeequankin, Ashnola and Chu Chu Wayha.
STIKINE AGENCY comprises the following bands:
Tahltans of Telegraph Creek and vicinity, Casca bands and Grahaem Nomads of McDames Creek; Laird band and Nelson Nomads of Laird Post; Atlin and Teslin Lake Band.

STUART LAKE AGENCY
The following bands are under the jurisdiction of this agency — Blackwater, Burns Lake, Cheslatta, Decker Lake, Euchinico, Francois Lake, Fraser Lake, Fort George, Grand Rapids, Kluskus, Maxim Lake, Nazco, North Talca Lake, Stoney Creek, Stella, Stuart Lake, Tatcie, Pintcee, Tsislainli, Yacutsee, Fort Connelly, Fort Graham, McLeod Lake and Naanee.

Queen Charlotte Island agency is comprised of the two large tribes of the HAIDA NATION—Massets and Skidegates.
Bibliography.

(2) Horatio Hale  Ethnography and Philology.
    Philadelphia (1846).
(3) A.G. Morice  The Western Denes, their Manners and Customs - Proceedings of Canadian Institute.  Volume 7, Toronto.  1889.
Homes of the British Columbia Indians.

A. Early Homes.

Much may be inferred in the study of an Indigenous tribe from the geographical distribution of Cultures and Culture Elements. Generally the geographical distribution of a culture element is continuous. It may stop abruptly at a prominent geographical barrier such as a mountain range or a desert tract, or send out spurs along favourable lines of communication such as navigable streams or easily traversed Coast lines, but on the whole the area of distribution, tends to be a compact land mass with more or less clearly defined centres in which the cultural element, under consideration is most elaborately, or better most typically developed. The Quadrangular wooded houses built upon a framework of corner posts and cross beams, with the level of the floor generally lower than the surface of the ground with inclined roof, often with circular entrance, is a feature reaching from the Tlingit of Southern Alaska south to the tribes of North western California. The centre of distribution may most probably be fixed in the Coast region of Southern British Columbia.
Due allowance being made for such corrections as various cautions make necessary, the tribe at the Cultural centre must be inferred to have first developed the culture element or complex studied, while those geographically removed from the centre were later affected by it, those at the periphery receiving the new type of thought or action last of all. So the quadrangular House of the north-western California undoubtedly represents a later period of diffusion, though not necessarily a later type of house than the more elaborate structures of the Kwakiutl of British Columbia.
THE HOME OF THE INDIGENOUS TRIBES.

HAIDA.

The Haidas used as temporary dwellings in their frequent summer excursions for war and hunt, simple lodges of poles, covered, among the poorer classes, with mats of cedar and among the rich, by skins. The Cedar is the American white cedar, the THUYA GIGANTEA of botanists. Some of these along the coast reach gigantic proportions having not uncommonly a diameter of from 15 to 20 feet near the base. This cedar tree has had a unique and far-reaching influence on the lives of the littoral tribes, and has been more potent in shaping the lines of their culture than any other single factor of their environment. It was to them much what the cocoa-nut palm was to the South Sea Islanders. From its outer bark the men constructed their ropes and lines, coverings for their dwellings, their slow matches or travelling fire and many other things. From its inner bark their wives wove garments for themselves and their children, made their beds and pillows, padded their babies' cradles; fashioned the/
the compressing bands and pads for deforming their heads besides applying it in a multitude of other ways. From its wood the men built the family and communal dwellings, made such furniture as they used - tubs, pots, kettles, bowls, dishes and platters; fashioned their graceful and buoyant fishing and war canoes, their coffins, their treasure chests, their ceremonial masks, their heraldic elements, their commemorative columns, their totem poles and a host of other objects. From the branches of the younger trees they made their most enduring withes and ties and from its split roots their wives and daughters constructed the beautiful water-tight basketry of this region. There was practically no part of this wonderful tree which they did not apply to some useful purpose or other. They even resorted to it for food in times of scarcity and famine - the women and children robbing the chipmunks of their stores of its cones for the nourishment which they contained. Indeed, one can hardly imagine what the condition of the natives of this region would have/
have been without this tree, no other in the country lending itself to such a variety of useful purposes.

Their permanent villages were usually built in strong natural positions, guarded by precipices, sometimes on rocks detached from the mainland but connected with it by a narrow platform.

Their town houses were built of light logs or thick split planks, usually of sufficient size to accommodate a large number of families.

Poole speaks of a house on Queen Charlotte Islands which formed a cube of 50 feet, ten feet of its height being built in the ground and which accommodated 700 Indians.

The buildings were often however, raised above the ground on a platform, supported by posts, sometimes carved into human and other figures. Some of these raised buildings seen by earlier visitors were 25 to 30 feet from the ground, solidly and neatly constructed, an inclined log with notches serving as a ladder. These houses were found only in the southern part of the Haida territory.
The fronts were generally painted with figures of men and animals. There no windows or chimney; the floors were spread with cedar mats on which the occupants slept in a circle round a central fire whose smoke in its exit took its choice between the hole which served as a door and the wall cracks.

On the South eastern boundary of this territory, Mackenzie found in the village, large buildings of a similar but more careful construction and with more elaborately carved posts but they were not dwellings, being used probably for religious purposes.

Various writers, especially the early explorers, have described points of interest about these dwellings of the Haidas.

Vancouver describes, "A house erected on a platform raised and supported nearly 30 feet from the ground by perpendicular spars of a very large size; the whole occupying a space of about 35 by 15 yards, was covered in by a roof of boards lying nearly horizontal and parallel to the platform; it seemed to be divided into three different/
different houses, or rather apartments, each having a separate access formed by a long tree in an inclined position from the platform to the ground, with notches cut in it by way of steps, about a foot and a half asunder. This we know was a house used for religious purposes.

Later Vancouver continues, "Their summer and winter residences are built of split plank like those of the Chinooks. Near the house of the chief, I observed several oblong squares of about 20 feet by 12 feet. They were made of thick cedar boards, which were joined with so much neatness, that I at first thought they were one piece. They were painted with hieroglyphics and figures of different animals, probably for the purposes of devotion as was a large building in the middle of the village. The ground plot was 50 feet by 45. Each end was formed by four stout posts fixed perpendicularly in the ground. The corner ones are plain and supported a beam of the whole length, having three intermediate props on each side but of a larger size and 8 or 9 feet in height. The two centre posts at each end are 2\(\frac{1}{2}\) feet in diameter and carved into/
These two large Figures are carved pillars supporting the beams of a Haida Indian House.
into human figures, supporting two ridge poles on their heads 12 feet from the ground. The figures at the upper part of this square represent two persons with their hands upon their knees, as if they supported the weight with pain and difficulty; the others opposite to them stand at their ease with their hands resting on their hips. Posts, poles and figures were painted red and black, but the sculpture of these people is superior to their painting."

In picturing an early Haida village, one sees the houses neatly constructed, standing in a row, having large images cut out of wood, resembling idols. The dwellings would all have painted fronts showing imitations of men and animals. Clark Wissler, speaking of the Architecture of the American Indian quotes as follows, "The most distinctive structures here (in the North) are the wooden totem pole houses of the North Pacific Coast reaching their highest development among the Haida and Tlingit. The structural plan consists of four massive upright timbers supporting two long equally heavy beams. These are placed parallel/
parallel about four feet apart and are essentially ridge poles. Around these a rectangular enclosure is made by setting split planks upon end. The ends are gabled and the roof of planks. The only framework is the massive central support in contrast to which the remainder of the building appears flimsy in the extreme. But we find one feature not, so far observed north of the Nahua area, namely, architectural embellishment. The four interior posts are carved in high relief and outside is the famous totem pole. Paint is used to reinforce the carving and, in addition, the front of the house is decorated with one of those curious spread out animal forms. Had these people carved in stone instead of wood, we should now find their country one of our richest archaeological fields but the perishable nature of their building material left no records of their past history."

None of the early historians, except perhaps "Poole" (3), have made it clear that although the usual dwelling houses of the Haida, especially of the Massets were raised twenty or thirty feet above the ground there was always an additional/
Early Haida House.
Shewing the small oval opening.

Summer lodges of Interior Salish
additional ten or fifteen feet excavated in the ground.

The entrance was usually a small oval doorway, cut through the base of a large totem pole, which impelled those entering to bend in order to pass through it. On entering we find ourselves on a tier or gallery of some five or six feet in width which formed the uppermost of several similar platforms rising one above the other from the ground floor below and running all round the house. A stairway led down from this upper platform to the basement or floor. This was the plan on which all the Haida houses were built, the object being defence in case of attack. The small oval doorway, cut through the base of the totem, prevented a surprise or rush of an enemy, whilst when bullets were flying and crashing through the walls from without, those within remained in safety in the excavated space on the ground floor, in the centre of which was the fireplace.

The description by Captain Meares(4) who visited the Western Coast in 1788, of a chief's house at Nootka, exactly describes the dwellings of the Haida chiefs a century later.
Interior of Haida Chief's House.
The house is 40 feet square forming one large room. The upper cubicles are on a level with the ground which in front of them is excavated, so that the fireplace in the centre is 12 feet below the surface.
Nootkas.

The Nootkas chose strong positions for their towns and encampments. At Desolation Island, Vancouver found a village built on a detached rock with perpendicular sides only accessible by planks resting on the branches of a tree and protected on the sea side by a projecting platform resting on timbers fixed in the crevices of the precipice.

The Nimkish tribe, according to Lord, built their homes on a table-land overhanging the sea and reached by ascending a vertical cliff on a bark rope ladder.

Each tribe had several villages in favourable locations for fishing at different seasons. The houses, when more than one was needed for a tribe, were placed with regularity along streets. They varied in size according to the need or wealth of the occupants and were held in common under the direction of the chief. They were constructed in the following manner.

A large row of posts from 10 to 15 feet high, often grotesquely carved, supported an immense ridge pole sometimes/
sometimes 2\(\frac{1}{2}\) feet thick and 100 feet long. Similar, but smaller beams, on shorter posts, were placed on either side of the central row, distant to it 15, 20, or 25 feet according to the dimension required. According to Mayne (7q some houses were 80 by 200 feet long.

The frame was then covered with split cedar planks about 2\(\frac{1}{2}\) inches thick and from 3 to 8 feet wide. The wide planks were tied together with bark and supported by slender posts in couples just far enough apart to receive the thickness of the plank. A house like this, 40 feet by 100 feet accommodated many families, each of which had its allotted space sometimes partitioned off like a double row of stalls with a wide passage in the middle. In the centre of each stall was a circle of stones for a fire-place and round the walls were raised couches covered with mats. No smoke or window holes were left but when the smoke became troublesome a roof plank was removed. The entrance was at one end.

"On entering the house we were absolutely astonished at the vast area it embraced. It contained a large square/
square boarded up close on all sides to the height of 20 feet, with planks of an uncommon breadth and length. Three enormous trees, rudely carved and painted formed the rafters, which were supported at the ends and in the middle by gigantic images carved out of huge blocks of timber. The trees which supported the roof were of a size which would render the mast of a first-rate man-of-war diminutive on a comparison with them. Indeed our curiosity as well as our astonishment were on its utmost stretch when we considered the struggle which must be necessary to raise these enormous beams to their present elevation; and how such strength could be found by a people wholly unacquainted with mechanic powers.

The door by which we entered this extraordinary fabric was the mouth of one of these huge images, which, large as it may be supposed, was not disproportioned to the other features of this monstrous visage. We ascended a few steps on the outside, and after passing this extraordinary kind of portal, descended down the chasm into the house, where we found new matter for astonishment in the number of men, women/
women and children who composed the family of the chief which consisted of at least 800 persons." (8)

These houses furnished according to Nootka ideas, a comfortable shelter except when a high wind threatened to unroof them and then the occupants went out and sat on the roof to keep it in place.

Frequently the outside was painted in grotesque figures of various colours. The carved pillars were not regarded by the natives as idols in any sense. Only the frame was permanent.

Matting planks and all utensils, were several times each year packed up and conveyed in canoes to another locality where a frame belonging to a tribe awaited covering.

The odour arising from fish entrails and other filth which they took no pains to remove, appears to have been inoffensive but the Nootkas were often driven by mosquitoes to sleep on a stage over the water.

"On the East side of Vancouver was a village of 34 houses arranged in regular streets. The house of the leader/
leader was distinguished by three rafters of stout timber raised above the roof according to the architecture of Nootka though much inferior to those I had seen in point of size. Bedrooms were separated and more decently observed than at Nootka Sound." (5)

Sproat considers the inside building a sort of a duplicate with shorter posts, the roof of which furnishes a stage where all kinds of property and supplies are stored and Jewitt remarks, "The planks or boards which they make use of for building their houses and other uses, they procure of different lengths, as occasion requires, by splitting them out with hard wooden wedges from pine logs and afterwards dubbing them down with their chizzels." (10)

The chief resides at the upper end, the proximity of his relatives to him being according to their degree of Kindred." (11).

SALISH.

The characteristic dwelling of the Salish of the Coast was the communal long house, always erected close to the river or the sea. It was constructed of broad thick slabs or planks of cedar, split from the trunk by means of elk-horn/
Long House of the Coast Salish.
Blankets and various parcels stowed on the roof.

Old time Salish dwelling.
elf-horn and maple wood wedges and these comprised both the walls and the roof.

These houses were usually 48 feet wide, but Fraser reports seeing one 60 feet wide. They were usually two and three hundred feet long but the length varied with the nature of the ground and the number to inhabit them, some buildings extending in an unbroken line for upwards of 600 feet or more. The great width of the buildings caused the roof to be exceedingly low, so low in fact that they served as platforms upon occasions of public festivity.

These buildings were divided into sections or compartments shut off from one another by temporary hangings or mats made of reeds or swamp grasses which were removed when occasion required and thus one large room or hall created.

These compartments were occupied by the various related family groups forming the local community, each of which was commonly split up into four or five fire-circles.

It was customary to cover the whole of the inside walls during the winter months with reed mats. Along the walls/
walls was built a kind of low platform which the inmates used as beds, and beneath was stored the winter supplies of roots or firewood.

From the rafters, hanging shelves were suspended upon which were packed dried meats, fruit and fish.

The Chinooks, a branch of the Salish, moved about less for the purpose of obtaining a supply of food than many others, even of the Coast Families, yet the accumulation of filth and vermin generally forced them to take down their winter dwellings each spring, preserving the materials for re-erection on the same or another spot.

The best houses were built of cedar plank attached by bark fibre to a frame which consisted of four corners and two central posts and a ridge pole. The planks of the sides and ends were sometimes perpendicular but oftener laid horizontally, overlapping here in clapboard fashion as on the roof. In some localities the roof and even the whole structure was of cedar bark.

These dwellings closely resembled those further north but were somewhat inferior in size, 25 to 75 feet long and
15 to 25 feet wide being the usual dimensions. On the Columbia they were only four or five feet high at the eves but an equal depth was excavated in the ground while on the Willamette the structure was built on the surface. The door was only just large enough to admit the body and it was a favourite fancy of the Nations to make it represent the mouth of an immense head painted around it. It was often made of a piece of board which hung loose by a string like a sort of pendulum and was selfclosing.

There was no window or chimney. One or more fireplaces were sunk in the floor and the smoke escaped by the cracks, a plank in the roof being lifted sometimes for the purpose. Mats were spread on the floor and raised berths were placed on the sides, sometimes in several tiers.

Partitions of plank or matting separated the apartments of the several families.

Smaller temporary huts and the permanent homes of the poorer Indians were built in various forms of sticks, covered with bark, rushes or skins. The interior and exterior of all dwellings were in a state of chronic filth.

Vancouver/
Vancouver considers their homes to have been more comfortable than those at Nootka, the roof having a greater inclination and the planking being thatched over with barks of trees.

Another writer states the coverings were sometimes skins and rags.

It is hard to estimate the number of people living in such a house. Ross states that he never saw more than four fires or above 80 persons, including slaves in the largest house and the opinion is considered to be fairly accurate.

"When we turn to the Inland Salish tribes of British Columbia we meet a distinctly underground house entered through the snake-hole at the centre by a step ladder. The distribution of this form centres very closely among the Salish who may be considered its originators." (13).

To accommodate large numbers such as gather at potlatches, fishing places etc., these Indians made use of large lodges closed or covered at the back but open to the front. Besides these, the Upper and Lower Thompson used the
hunting-lodge. Its shape is that of the square lodge but larger with heavier poles.

The interior Salish, as a whole, had two distinct classes of dwelling, one for summer and one for winter occupation. The former, which was the general dwelling for the greater part of the year, was the light and easily constructed frame lodge formed by a gable-roof resting on the ground. The floor was covered with small fir-branches which were spread more thickly near the wall where the people slept. The fire was in the middle of the lodge; the doorway was a space 3 feet by 5 feet or less, left in the lower row of mats over which was hung a piece of mat skin or blanket a little larger than the hole and stiffened at the lower end by a stiff thin piece of stick.

They had the large lodges for festive occasions and another lodge generally used but once was the "brushhouse" thrown up temporarily by hunting parties in the winter or early spring and consisting of a square or conical framework of light poles covered with fir or spruce branches.

The second class of dwellings, the winter lodges, were
of a more massive and permanent kind than those just described.

They were the circular, subterranean huts which, like the long houses of the Coast tribes varied in dimensions according to the nature of the village side, and the number of the families to inhabit them. The diameter of some structures was as small as 15 feet, but in general they had a diameter of from 25 to 30 feet. A hut of this size commonly accommodated from 20 to 30 persons.

Several related families usually occupied the same dwelling in common, each family having its own section and in the larger structures its own fireplace.

The entrance to these winter houses was in the apex of the roof as described, through the smoke hole by means of a notched pole. The floor of these dwellings except around the hearth site, was kept covered with fir and spruce branches, renewed from time to time and always when some guest of honour was expected. Layers of the same material, covered with skins or grass mats, formed the couches of the inmates. In some tribes, hammock beds were/
were used. These were made of buckskin stretched on thongs which were fastened to the beams of the house. These underground dwellings were among the Salish, usually occupied from December to March, the "cold Season" of the southern interior of the Province.

All the tribes of this region constructed temporary shelters for the use of girls arriving at womanhood and for during their periods. They were generally roughly made of cedar bark or brushwood, conical and just big enough for a single person to sit inside them without discomfort. The occupants of these structures generally spent their time in making yarn.

KOOTENAÏANS.

The dwelling of the Kootenaïans in particular and also of the Inland Salish, was a frame of poles covered with rush matting or with skins. The form of the lodge was that of a tent, conical or oblong and usually sharp at the top where an open space was left for light and air to enter and smoke to escape.

Their internal condition presented a marked contrast with that of the Chinook and Nootka habitations since they were generally kept clear of vermin.

Their light material and the frequency with which their/
their location was changed, contributed to this result.

The lodges were pitched by the women who acquired
great skill and celerity in the work. Holes were left
along the sides for entrance and within a floor of sticks
was laid or more frequently the ground was spread with
mats and skins which served for beds.

Dwellings were often built sufficiently large to ac-
commodate many families, each of which in such case had
its own fire-place on a central longitudinal line, a
definite space being allotted for its goods, but no divid-
ing partitions were ever used.

The dwellings were arranged in small villages,
generally located in winter on the banks of small streams,
a little away from the main rivers.

Although a simple slant roof of mats or bark would
often suffice for shade and shelter in summer, some tribes
constructed for winter, a subterranean abode about 12 feet
deep, roofing it with poles or split cedar covered with
grass and mud, having a small opening at the top for exit
and entrance by means of a notched log ladder.

The Okanagan constructed their lodges over an excava-
tion in the ground, several feet deep and like many other
nations covered their matting in winter with grass and
earth.
The Carrier Tribes has as many as five different kind of dwellings - the ceremonial lodge, the summer lodge, the fishing lodge, the winter lodge, and, in the southern portions of the tribe, the semisubteranean hut of the interior Salish but they inhabited their permanent villages not in winter but in summer. This was because of the necessity of obtaining firewood to protect themselves from the rigor of the winter. The ordinary winter lodges were entirely above ground and needed more to make them comfortable than did the Salish underground dwellings. But these huge fires meant the consumption of considerable quantities of firewood and as the Carriers possessed but few facilities for felling and cutting up trees, and no ready means for its transportation when cut up save the backs of their women, and as the amount of suitable fire-wood available in any one centre was soon exhausted, one winter at most was as long as they could stay in any one place. Consequently they were compelled to look for fresh camping quarters every winter and thus could not establish permanent villages for winter residence.

The other four kinds of dwellings in use among these tribes seem to be native and peculiar to themselves.

"The most important and most elaborate of these was the/
the ceremonial lodge, so called because of its being the seat of all their native gatherings, such as feasts, dances, and other public festivities.

But it was not reserved exclusively for these purposes. It was also used as the residence of the head men or noble of the tribe and their families.

The erection of these buildings was always made the occasion of much feasting and merry-making. Large quantities of dressed skin and blankets were also distributed by the owner of the lodge among those who assisted in the building of it.

These lodges were rectangular in form with gable roofs, having customarily a length of from 40 to 50 feet and a width of about half that distance.

The entrance to these lodges was always in the end. If the structure was a large one, a door would be made in each end. There were no windows, light coming in through the smoke holes and doors. The fire-place was in the centre of the building. The place of honour in these lodges was at the four main uprights, upon the upper part of which the totem animal of the owner of the lodge was customarily carved, as was also usually done on the main posts of the long houses of the Salish.

The inmates of these lodges slept upon beds of undressed/
undressed skins, laid upon spruce boughs placed directly upon the floor, each person lying with his feet toward the fire. There were no partitions of any kind between the different groups, who were all related to each other in these dwellings." (14).

The ordinary summer lodge varies in several important features from that just described. It was built only with one pair of uprights instead of two as in the larger structures. This was placed in the centre and the supporting beams formed the ridge pole of the roof. The walls were also differently constructed. Instead of slabs of spruce which required much labour and time to prepare, poles were placed horizontally, one over the other, between sets of double stakes.

The fishing lodge, inhabited only during the salmon or fishing season, was built upon the lines of the ordinary summer house lodge, with this main difference, that the gable ends of the roof were left open to the air and wind to accelerate the drying of the fish, which were suspended on cross poles. Some of the fishing lodges, have the apex of the front adorned with the carved totem crest of their owners.

The winter lodges of the Carriers were always carefully built, the greatest attention being paid to the comfort/
comforts of those about to winter in them. Inside the ground was strewn with small branches of fir or spruce, which were renewed from time to time. Besides the lodge proper, there was a kind of semi-circular ante room attached to one end of it made by leaning a number of poles placed close together against the wall of the building. This enclosure served to render the lodge itself warmer and more comfortable, besides being useful in many ways. Here it was that the old men took their baths, and here also the dogs of the house had their kennels or sleeping places. Within the structure proper each corner was customarily partitioned off into four little cupboards or store-rooms. These answered to the hanging shelves of the Coast Salish. Herein were stored the personal belongings and general impedimenta of the different families who shared the house in common, one cupboard going customarily to each family.

Among the Chilcotin and southern Carriers, the winter dwelling was a semi-subterranean hut similar to that of the interior Salish.

The characteristic dwellings of all the other nomadic Dene were, to a large extent they still are, the conical skin tepees, the framework of which is simply a number of light poles set in a circle on the ground and made to converge/
converge at their upper ends. It is covered together with moose or other skins generally sewn together into one piece. The smoke from the fire, which is always placed in the centre of these dwellings, escapes through the interstices of the poles, at their converging points.

To guard against the entrance of rain or snow here, an additional piece of skin is sewn about the upper part of the general covering. This can be manipulated at will by means of a long pole which is attached to one end of it, and made to act as a shutter to cover, in whole or part, the smoke hole, as the condition of the weather or the direction of the wind makes necessary.

The men customarily set the lodges up after long journeys but if the move has been a short one, the women are expected to do this. They are set together without any particular arrangements among these tribes except that the doors all turn one way, to leeward.

In speaking of the habitations of the Salish, it was pointed out that the Coast Tribes customarily stored their stock of winter provisions in their dwellings - the roots under the sleeping platforms, the fish, meat and fruit on hanging shelves.

This mode of storing was possible only to those tribes having suitable permanent houses. The interior Salish and/
and the more nomadic Dene, whose habitations offered scant accommodation of this kind, had to provide other means of storing the winter or surplus supplies more suitable to their condition of life. This they did in two ways. Among the Lower Thompsons and the Lower Lillooets, whose climate is much damper than that of the upper bands of these divisions, and among the more sedentary of the Western Dene, detached sheds or cupboards, elevated on posts several feet from the ground, were built and used as storehouses. They were thus elevated to protect their contents from prowling animals and the camp dogs. Each household or family group had its own storehouse.

Among the Upper Thompsons, Lillooets and other interior Salish, where the soil is usually dry and frequently of a sandy nature, particularly on the old upper branches of the rivers, the "teepen" or cellar takes the place of the elevated cupboard. Well-like holes five or six feet deep and about three or four in diameter, are dug some little way from the dwelling in the sandy soil. These are either lined with bark, or the articles placed in them are wrapped about with bark. The mouth is closed by laying poles across it and heaping on these pine branches or other brushwood. Sometimes the whole is covered with pine needles and earth. Scores of these old excavations,
or rather the sites of them may be seen near the sites of the old native villages. The permanent teepons or cellars were different from the more temporary "caches" of the hunter and the Nomadic tribes, which are made wherever it is most convenient to place them without regard to camp or settlement, and are rarely used for the same purpose twice.
At William's Lake Reserve. Old Style.
At Williams Lake Reserve. New Style.
B. THE HOMES OF THE INDIAN TO-DAY.

The great majority of British Columbia Indians, except in the more outlying districts now, have modern well built comfortable homes either of log or frame construction. This is evidence of rapid progress as a few years ago nearly all of them lived together in wretched little shacks or herded together in the structures which are still in use in some of the more unsettled parts of the Coast. The Haida Indian of the Queen Charlotte islands who are remarkably progressive, build up to date frame houses that will compare favourably with those found in the average white community.

The same may be said about the buildings of the Bella Coola, only one might more suitably compare their homes with those of the white labourers and small farmers but the furniture is generally scant and not orderly judged by our standards.

In the Babine and Upper Skeena agency the old type of dwelling of split cedar is fast disappearing. The houses with outhouses and barns are of good construction and well placed.

A large portion of the dwelling houses of the Indians of the Shuswap tribe are of log but in a few of the villages log houses are neatly put up and tidily kept, while/
b Barns of Chief John Chilliheetz'a
Douglas Lake. (Salish)

(a) Port Babine. (Tsimshian)
while others are not only unsightly on the outside, but decidedly insanitary inside. There are no floors in the houses, rubbish is allowed to collect and general filth is everywhere in evidence.

The dwelling houses of the Thompson and Okanagan tribes are mostly of logs, some of which present a neat appearance on the outside. There is also a fair proportion of frame buildings, notable the Cook's Ferry Village which is composed altogether of frame buildings. Also on the Nichola Marmeeet No 1 or Shulus as well as on the Douglas Lake and Nichola Lake reserves, there is a superior class of both log and frame dwellings, a number of which are neatly painted on the outside and some are neat and tidily kept inside.

The Indians of the Kootenay agency live in much the same way as their Chinook neighbours. Frame structures, fairly well ventilated and lighted, are taking the place of the old log buildings and every precaution has been taken to keep these dwellings in a sanitary condition and the Indians are beginning to realize that this is important in order to keep away disease.

In the Lytton the old type of Indian dwelling has become practically extinct. The majority of the buildings are of frame consisting of several rooms and when this is so/
so, the Indians take an interest in keeping them painted and clean.

This was one of the first divisions of the Country to accept Christianity and ever since the Indian has felt the influence of European civilization. Industrial schools were first established in this region and it is no doubt due to the influence of the ex-pupils and pupils of those schools, that the Indians are so far removed from their old type of living.

In the Stikine Agency no farming is done. Most of the buildings on the Tahltan Reserve are old but of late years a number of the band have purchased lots in the village of Telegraph Creek and have erected good dwelling houses, mainly of logs well furnished inside with lumber and most of them are equipped with modern cook stoves, sewing machines, washing machines and imported furniture.

The buildings of the Nass River Agency continue to improve from year to year. Here there is great competition in home building. Many new buildings have been erected, old ones repaired and repainted. The new houses are of modern design but there is usually a lack of completeness about them which suggests a promise of a comfortable home when circumstances will admit. The nomadic pursuits of these Indians forbid the home touches of lawns and flower-beds/
Home of Chief Michael Cooper
on Songhees Reserve.
flower-beds such as grace the homes of white people under favourable circumstances. For this reason it is common to find a modernly built house surrounded with weeds and growths of many kinds.

At Kincolith a new saw-mill was built by the Indians themselves, in 1915, and this gives employment to three hundred.

In the Okanagan Agency a chief has just completed his new home of cement.

In the Stuart's Lake agency, dwellings are mostly of the one or two room log cabin type of house. At Fort George however the houses are all story and a half frame buildings of from three to five rooms. (See illustration p.78). At Stoney Creek, an entirely new village in 1916 and 1917 was erected, the old houses being removed as the new ones were ready for occupation. The out-buildings, cattle and horse stables are wanting in ventilation facilities.

The Skidgate erected a number of new residences in the past five years and all of them are substantial buildings.

They take a pride in erecting good cottages and are learning to furnish them with modern furniture. In fact the Skidgate Indians have homes that are models of cleanliness/
cleanliness with many improvements that are seldom noticeable in towns inhabited by Indians. Many of them have musical instruments, carpeted floors, kitchen ranges and all the conveniences of modern dwellings.

The Massets did not construct many new homes but since 1916 they have made many improvements as good in tearing down old shacks along the water front, formerly occupied as dwellings and in removing the signs of former times, viz., the "Totem poles". It was customary for the chiefs to have large cedar poles in front of their houses on which were carved the figures of animals and birds. Since the introduction of the Councils, the Indians are doing away with old ideas and customs. The former chiefs are no longer the official heads of the bands. In the place of the "totem pole" they have erected flagstaffs from which they float the British Flag.

If all the Indians disposed of the "Totem poles" and the hereditary chiefs were eliminated, it would go a great way towards suppressing the potlach and the "feast".

Usually the chief assumed the position of the head man of the village which position he retained whether he was the best or the most non-progressive of the Indians. The annual election gives the Indians the opportunity to select their own chief councillors and Council and the greatest/
greatest step among progressive Indians, has been the entire disposal of customs that never would be beneficial.
BIBLIOGRAPHY.

(3) Francis Poole. Queen Charlotte Islands. pp.111, 113-4
(4) Captain John Meares. Voyage made in the Year 1788 -9
(7) R.C.Mayne. Four Years in British Columbia and Vancouver Island. p. 296.
(8) W.H.Collison. In the Wake of the War Canoe. p.102
Bella Coola. (Salish.)
Fish Trap.

Fish drying in the Sun.
FOOD OF THE INDIANS.

There are five distinct species of Salmon in British Columbia all of which make excellent and highly nutritious food, but one species in the estimation of both Indians and Whites excels all the rest in the fineness of its flesh and the delicacy of its flavor. This is known locally as the "Sock-eye", a corruption of the Native term, "sukai" meaning, "the fish of fishes". These, like most salmon, are not, strictly speaking, river fish; they enter the rivers and streams only for breeding purposes at certain seasons of the year, no two of them having quite the same spawning time. There is scarcely any month in the year when salmon may not be caught in the rivers and lakes which have a sea connection.

But it is during the run of the 'sock-eye' that the salmon are taken in the greatest numbers and upon this fish the natives mainly depend for their food for the greater portion of the year.

The 'run' lasts about seven or eight weeks and during that time the Indians formerly aimed at catching and curing as many as would last them till the next 'run' came around; especially those tribes who had no fishing station/
Indian fishing with drift net on Fraser River.
Behind is salmon drying in the sun.
Salmon fishing at the mouth of the Fraser.
station actually on the Coast itself.

The salmon is taken in a variety of ways. On the islands, fishing with "reef nets" is the commonest method employed. Many of the island tribes have fishing grounds off the mouth of the Fraser. Here miles of tribal flats stretch out into the deeper waters of the gulf and as the salmon pass over these on their way up the rivers, they are easily taken in large numbers in long 'seine' nets.

In the off season when the salmon are not running, single salmon may be caught at any time in the tidal waters, the Indians being expert trollers and deep-line fishers.

The tribes living on the rivers and streams inland, secure their salmon in other ways and the 'weir' is most commonly used. This is a wattled obstruction placed across the rivers in one or more of its shallow spots.

In the higher parts of the Fraser, and on its tributary rivers and streams, the trap or basket, shaped like a box or wicker-work basket of cylindrical form, is the chief method of capture.

In districts where the river rushes through the canons with great force and swiftness, the dip or bag net is the characteristic means of capture.

In clear water streams and rivers such as the Thompson,
Thompson, for example, the salmon are mostly taken by spearing, generally done in canoes by torch light.

The Dene employ a number of original methods adapted to the nature of the fishing grounds but as they are not commonly used by all the nations, they will be discussed later.

The fishing spears or harpoons were made in different styles among the different tribes. Some were made with fixed and some with detachable heads, the points being held to the shafts of the harpoons by long plaited lines. The heads or points were generally made of horn or bone and were heavily barbed.

Hooks, spears and nets are sometimes rubbed with the juice of certain plants supposed to be attractive to fish.

The method of treating salmon when caught is much the same in all the tribes. For the most part they are dried in the sun and air. The heads are first wrenched off by thrusting a stick through one of the gills and out through the mouth. One turn of a woman's dexterous wrist and the head is off. The cleaning and preparing the salmon is the woman's work. When the head is off a knife is run along the belly of the fish and it is laid open in a moment. The knife used for this purpose is crescentic in shape or rather has a crescentic or curved edge. They are now always made of steel, quite commonly/
commonly from a piece of saw which has been ground to the proper form, but in earlier days the material was either shell or slate.

The backbone is next taken out and is set aside, usually for dog food, the inner flesh is then scored to facilitate the drying and the fish is kept open by two skewers or rods which stretch from side to side. After this treatment they are hung in rows beneath rough sheds, and dried by the action of the sun and air, the process being sometimes hastened by fire and smoke. Salmon taken in the autumn months are frequently wholly dried and cured by smoking, which is done in closed sheds or huts.

Among the upper tribes, particularly among the Dene, where the salmon are not taken in such quantities as nearer the mouth of the Fraser, the heads are always carefully preserved for making oil. They are strung on willow rods and deposited in the water on some sandy shore of the lake or stream and left to float there until they have reached an advanced stage of decay. When 'ripe' they are gathered and placed in large trough-like receptacles, and boiled by means of the usual heating stones. During the boiling the oil rises from them to the surface and is skimmed off into birch-bark buckets, and afterwards stored away in bottles made from the whole/
whole skins of the salmon. This oil is eaten with preserved berries.

Among the Thompsons and the tribes near the sea, the oil is extracted from the salmon in much the same way. The fish are allowed to ripen and then some forty or fifty of them are placed together in 'the large wooden skuma' or cooking tubs of these tribes. Water is now poured on the putrid mass, and the whole is well stirred and boiled for several hours. When ready the cooking stones are taken out and a pail of cold water is poured into the tub which causes the oil to rise to the surface. At this stage it is of a reddish tinge and has to the Indian no offensive smell. When the oil has all risen, it is skimmed off into birch bark buckets with spoons. It is allowed to stand thus over night and the next day it is boiled afresh by itself and skimmed from time to time till all the skum has been taken off. It is now ready to store away.

Some tribes treated the oil in another way. A kind of butter was made from it by mixing it with the best kind of kidney suet taken from the deer or preferably from the mountain goat. The oil and suet were boiled together, thoroughly mixed and then set aside to cool. When cool the compound had the consistency of butter and/
and was esteemed a great delicacy among the natives. It was eaten, among other things, with the compressed cakes which they make from certain of their wild berries. This was a costly kind of food and only the wealthier class could afford it.

The flesh of the salmon, after the oil is extracted from it, is never thrown away or wasted. The water is all strained off and the residue is then worked up and kneaded into balls and put in the sun to dry. While drying, the women occasionally smell it to see that it is sweet and devoid of flavor. If there is the least taint noticed they break it up and wash and knead it afresh. When quite dry and devoid of all smell, it is again broken up and rubbed fine between the hands till it takes the appearance of flour. This substance is spread over the bottom of a birch bark basket, upon this a row of the bottles of oil is laid, this is again covered with more flour, and the second layer of bottles put in which are treated in the same way, and so on until the basket is full. It is then stored away for future use.

The fresh salmon was cooked in a variety of ways - by roasting whole before a fire with a stick run through its mouth, planted in the ground and made to slant towards the fire, or slit open and placed in the cleft of a stick,
stick; or laid in hot ashes, or by boiling. When treated in the last way, it was usually tied up in bark to keep it from going to pieces.

On occasions of public feasting when it was required to cook large quantities of salmon at once, the common method was to roast the salmon over a fire on a kind of gridiron made of wood and constructed in the following manner: - a long trench about a foot deep and two feet wide was first dug, a fire of dried wood which made little smoke was then kindled along the bottom of this. Short stakes were then driven into the ground at intervals of eight or ten feet apart on either side of the fire, and crossbars were laid about a foot apart. Upon these scores of salmon were placed at a time, either whole or split open, and roasted together.

**OTHER FOODS.** Besides the salmon, the inland tribes caught large numbers of brook and river trout. Some of these latter are very large, weighing from twenty to forty pounds each. The tribes of the Fraser also catch and eat sturgeon. These fish, when mature, attain enormous proportions and are generally caught by means of large bone hooks fastened to thick bark lines from 75 to 100 yards long. Sometimes they are taken from the shore but/
but the ordinary way is to capture them in a canoe. They are clubbed to death when once secured.

The tribes living on the Coastal waters supplemented their salmon meat with other marine products, such as the seal, porpoise, sea-lion, whale, halibut, cod, flounder, sea-trout, whiting, herring, candle-fish, smelts, - the last three of which run in large numbers at certain times of the year - crabs, clams, sea-cucumbers, sea-urchins, and a host of other smaller things. Nor did they neglect the land animals of their region.

The interior tribes had to depend more largely upon animal and vegetable food and with them venison took the place of the salmon. The meat of the larger game animals is preserved and stored away for winter use among all the interior tribes but particularly among those whose staple food is venison. The fat is first cut off and put away in deer skin sacks, or melted down and tied up in a deer's paunch. The marrow from the larger bones is also melted down and stored away for future use in elk or deer bladder. When the fat has been removed and the flesh taken from the bones, it is then cut into thin slices, each of which is repeatedly scarred or pierced with holes or slits to accelerate the drying which is generally accomplished by means of the sun and air.

Should/
Should this however not be practicable, artificial heat and smoking are resorted to. It was also common to hang meat inside the dwellings, close the roof and thus gradually dry it. Some of the Thompson tribes made use of the sweat house to dry their meat supplies, others effected it by partially roasting it before a fierce fire.

Besides flesh and fish, the Indians everywhere gather and eat considerable quantities of roots, berries and nuts. The bulbs of several kinds of lilies are requisitioned. There is the bulb of the Lilium Columbianum, which is very large, a single specimen often weighing a pound; and the Camass whose bulbs are about an inch in diameter. The root of the sunflower, wild onions and carrots, the roots of the white clover and of the bracken fern are also popular. The Wapato, a bulbous root, compared by some to the potato and turnip, was the aboriginal staple of the Coast Chinook and was gathered by women wading in shallow ponds and separating the roots with the toes. The Wapato is the Sagittaria variabilis and the word has passed into the Chinook jargon and means "potato". The origin of the word is very uncertain.

The principal method of cooking these roots and bulbs is by baking and steaming them in a kind of oven made/
made in the ground. This is done in several ways. The following is a common way over a large area. A hole is first dug, the bottom of which is covered with heated stones. Over this a layer of grass or aromatic leaves is spread upon which the roots are laid or covered over with more grass or leaves. The whole is then covered up with earth, a small orifice being left in the centre for pouring in water which is converted by the heated stones into vapor. This thoroughly and speedily cooks the roots. When the oven is cold it is opened and the contents taken out and eaten. Both fish and game are sometimes treated in this way.

In addition to the various roots, the natives of the Interior are fond of eating the cambium layer of the Black or Bull pine* and other trees in the spring when it is soft and gelatinous. The thin outer bark of the tree is first peeled off and then the inner or cambium layer is scraped from the trunks. It is sometimes dried and put away for winter use. Another favorite dish is that composed of the tender succulent roots of the flowering raspberry. These are picked and eaten when they are about six inches high. They are tied in bundles, boiled just as we do asparagus, and then served with salmon butter or oil.

The/

* Pinus austriaca.
The berries gathered or eaten by the Indians are of various kinds, almost every variety found in the habitats being pressed into service. In the Southern Interior, the berry most in favor is one which closely resembles the Black Currant; it is about the same size but much sweeter in flavor and called by the whites the Service Berry. It is the Annelanchier Anifolia of the botanist.

Salal berries are to the Lower Fraser and Coastal tribes what the Service berries are to the Interior tribes. It is a black soft berry about the size of a small currant and grows on its stem very much like the flowers of the lily of the valley. It is the fruit of a low evergreen plant which spreads all over the ground and is known to science under the name of Gaultheria Shallon.

Large quantities of these berries are preserved for winter use. Some are compressed into cakes. But the commonest way of treating the Salal berry is to make a kind of dry jam of it, which, when ready for storing away, has much the appearance of dark coarse felt. To preserve them in this way they are first boiled for some hours after which they are poured into a bowl and carefully mashed into a uniform jelly with a wooden pestle. A layer of large leaves is now spread over a kind of lattice work tray, and upon the leaves is spread out a thin continuous layer/
layer of the jelly. The tray is then placed in the sun for the layer to dry and when the upper side of the jelly is hardened into a cake, the whole is turned over upon another tray and the other side exposed to the sun's rays. When both sides are properly dried it has the appearance of a sheet of felt and can be rolled up like a mat and thus stored away for use. Now sugar is used in the boiling but formerly this had to be dispensed with. When they wish to make use of this preserved fruit, they break off a piece of it and steep it in water for a little while and then reboil it just as we do the dried fruits of commerce. Cured and preserved in this way, the natives say fruit will keep in good condition from one season to another or even longer if kept dry and free from mildew and moths.

The nuts and nutlets in common use were the hazel nuts and the kernels of the cones of the white and yellow pines, the former found in the habitat of the Delta tribes, and the latter in that of the Interior tribes. The hazel nuts were eaten both in their natural state and roasted. The nutlets of the pine were usually first roasted before eating. The roasting was done either in small ovens or in hot ashes. The kernels were often crushed or mixed with dried service berries and put away for winter use.
According to Teit the Upper Thompsons cooked the greater quantities of their roots in the following manner:

"A circular hole is dug in the ground to the depth of $2\frac{1}{2}$ feet and large enough in diameter to contain the quantity of roots to be cooked. Into this hole are put four or five flat stones, one in the centre and the others round the sides. Above these is piled a large heap of large fir wood on which is placed a quantity of small stones. The wood is then kindled and allowed to burn till nothing but the embers remain, when the small stones drop down to the bottom of the hole. The unburnt wood is then taken out leaving nothing but the ashes and the stones, and this is overspread to the depth of half a foot or so with branches of bushes, such as the service berry, maple, alder etc. Next follows a layer of broken fir branches over which is spread a layer of dry yellow pine needles, and still another layer of branches. By this time the hole is nearly filled up. The roots are then laid on the top and carefully covered with a thick layer of broken fir branches. The whole is now covered with earth and a large fire of firewood is kindled on top. In this way immense quantities of roots are cooked at one time. They remain in the oven according to kind, from twelve to twenty-four hours."
The roots of the wild sun-flower are the most difficult to cook, and it is therefore allowed to be in the oven for two days.

The Salish had many curious customs and ceremonies in connection with their food. Among the Thompsons it was believed that if a deer was killed the other animals would be pleased if the animal were butchered nicely and cleanly. Bear hunters addressed their prey and begged it to come and be shot at. Hunters never talked lightly or made fun of any animal they hoped to kill or trap, but always spoke of it in respectful tones.

The young shoots or suckers of the wild raspberry were so highly esteemed among some of the Delta tribes that they held a First Fruits feast each spring when they were ready to be picked, and until this ceremony, no one would think of picking or eating any. Similar First Fruit ceremonies were held in some tribes before each root picking or berry picking season, and also in all the Salish tribes when the 'prince of fish' or 'sock-eye' run was commenced. In the latter ceremonies, the elders of the tribes are introduced by name to the first salmon caught, saying, "This is So-and-So who desires to welcome you and shake your hand". The ceremony finished, from that time onwards throughout the season, anyone is free to catch as many/
many salmon as he likes. Formerly the meat of the salmon had to be cut with the grain and the hearts of all must be burnt or eaten and on no account be thrown into the water or be devoured by a dog.

The Dene tribes which live on streams or lakes that form spawning grounds for the salmon, differ generally from those of the other Indians in their methods of fishing. They capture their fish mostly by means of traps. A common way of doing this is to erect a weir across the stream, behind which they set bottle-shaped baskets which the fish enter by narrow openings in the weir and are thus caught. Sometimes these baskets lead into a rectangular box-like receptacle where the fish crowd in such numbers as to squeeze themselves to death, becoming packed in the struggles almost as closely as sardines in a tin. Where it is not practicable to weir the whole stream or body of water, they make pens or corrals into which they drive the salmon by beating and splashing the water all around them. In their effort to escape from the corral, the fish are prompted to enter the gaping mouths of large cylindrical baskets which are placed on one side of the corral. As soon as they have done this the mouths of the baskets are lifted up so that the fish cannot retreat, and they are thus taken.

Still/
Still another way is to erect a kind of pothanger basket. Such baskets are always placed upon the edge or brink of some fall in the river which is not too deep to prevent the ascent of the fish, but sufficiently deep to temporarily impede their passage. A simple bridging is first built across the stream immediately above and over the fall and to this are then suspended by bark ropes, numbers of lattice work screens, the lower end of which are turned up so as to form a kind of trough or pocket. These rest upon the edge of the fall and when the salmon attempt to jump to the higher reach of the river, they stick against and screen and fall back into the pockets and are thus secured.

The Carrier tribes have a special method of preserving service berries which is described by Father Morice. When the first fruit has been gathered in sufficient quantities, a large spruce bark vessel or boiler is built and laid on small posts driven in the ground. This is filled with berries. Heated stones are now thrown on the mass and these have the double effect of cooking and pressing down the berries, the juice from which is permitted to escape through a narrow conduit at the bottom of the boiler and falls into another receptacle. When the liquid has all been drained off, what is left in the boiler is kneaded.
kneaded and squeezed with the hands, after which it is spread out in thinnish layers on willow bundles which have been previously covered with leaves and then exposed to the action of the sun and air. By frequently sprinkling the layers with the exuded juice, they coagulate into large cakes of almost uniform thickness. These when properly prepared and dried will keep for years and when sprinkled with a little sugar are of tempting succulency even to other than Indians."

Although game is plentiful, the Haidas are not a race of hunters but derived their food chiefly from the innumerable multitude of fish and sea animals which, every variety in its season, fill the Coast waters. Most of the Coast tribes and all who live inland, kill the deer and other animals, particularly since the introduction of fire-arms, but it was the skins and not the flesh that was sought. Some tribes would not taste flesh except from the sea, from superstitious motives. Birds that burrowed in the sand banks were enticed out by the glare of torches and knocked down in large numbers and clubbed. They were roasted without plucking or cleaning, the entrails being left to improve the flavor. Potatoes and carrots were unknown but wild parsnips are abundant on the lakes and streams, and their tender shoots roasted furnished a palatable food. Berries and bulbs are found in abundance, and the inner tegument of some varieties of the pine and hemlock was dried in cakes and eaten with salmon oil.
The varieties of fish sent by nature to the deep inlets and streams for the Haida's food are very numerous, their standard reliance for regular supplies being the salmon, herring, oolachan or candle fish, round fish and halibut. The candle fish, so fat that in frying they melt almost completely into oil, and need only the insertion of a pith or bark wick to furnish an excellent lamp, are impaled on the sharp teeth of a rake or comb. The handle of the rake is from six to eight feet long and it is swept through the water by the Haidas in their canoes by moonlight. Clams and shell fish are captured by the women, such an employment being considered formerly, beneath manly dignity. Fish when caught were for the same reason delivered to the women.

The spawn of salmon and herring is greatly esteemed by the Haidas and besides that obtained from the fish caught, much is collected on pine boughs, which are stuck in the mud until loaded with eggs. This native caviare is dried for preservation and is eaten prepared in various ways:—pounded between two stones and beaten with water into a frothy consistency, or boiled with sorrel and different berries and moulded into cakes about twelve inches square and one inch thick by means of wooden frames.

After a sufficient supply of solid food for the winter/
winter was secured, oil, the great heat producing element of all northern tribes, was extracted from the additional catch, by boiling the fish in wooden vessels and skimming the grease from the water or squeezing it from the refuse. The arms and breasts of the women were the natural press, in which the mass wrapped in rugs was hugged, the hollow stalks of the abundant sea-weed furnished natural bottles in which the oil was preserved for use as a sauce, and into which nearly everything was dipped before eating.

When the stock of food was secured, it was rarely infringed on until the winter set in, but then, such was the Indian appetite - ten pounds of flour in the pancake form at a meal being nothing for the stomach of a Haida according to Poole 5 - that whole tribes frequently suffered from hunger before the spring.

Bear meat is supplemented in season and also water fowl. There are no deer on the Islands, although they abound on the mainland and on the islands of the Coast both of Alaska and British Columbia - neither are there wolves, lynx or wolverine.

It was not an uncommon custom amongst the Haidas to place a small canoe filled with berries, preserved in grease and mixed in snow, before a number of their guests. The chief dishes were served up in wooden bowls and trenchers, skilfully carved and inlaid with mother of/
of pearl. Dried salmon and oolachan grease followed, with boiled seaweed (dulse) also mixed with fish and grease, and lastly as desert, a bitter tasting berry (hugutlite), beaten up with water until it became a mass of froth. This was eaten in a peculiar manner with long narrow wooden spoons shaped like miniature oars or paddles. The fruit was pressed out of the mouth and quickly drawn in again to expel part of the air with which it is mixed. This was attended with an unusual sound, and in endeavoring to imitate this native custom, the white man if a guest was seldom successful, and had to be prepared to be greeted with shouts of laughter at his failure.

"The Nootka mode of living was very simple", says Jewitt, "their food consisting almost wholly of fish, or fish spawn fresh or dried, muscles, clams and berries of various kinds, all of which are eaten with a profusion of train oil". In his time three peculiarities were observable in the Nootka use of animal food, particularly bear meat. The Nootkas were but indifferent hunters, but when a bear was killed, it was dressed in a bonnet, decked with fine down and solemnly invited to eat in the chief's presence, before being eaten; after partaking of Bruin's flesh, which was appreciated as a rarity, the Nootka could not taste fresh fish for two months and while fish to be palatable must be putrid, meat when tainted was no/
no longer fit for food.

In eating they sit in groups of five or six, with their legs doubled under them, round a large wooden tray and dip out the food, nearly always boiled to a frothy consistency, with their fingers or clam shells, paying little or no attention to cleanliness. Chiefs and slaves had trays apart and the principal meal, according to Cook was about noon. He adds further - "Their heads and their garments swarm with vermin, which we used to see them pick off with great composure and eat."

Feasting was the favorite way of entertaining friends so long as food was plentiful and by a curious custom, of the portion allotted them, guests had to carry away what they could not eat.

Water was the only Nootka drink.

The common business of fishing for ordinary sustenance was carried on by slaves or the lower people, while the more noble occupation of killing the whale and hunting the sea-otter was followed by none but the chiefs and warriors.

These tribes or clans of the TSIMSHIAN had each a winter encampment on the salt water on the Metlakatla Channel, to which they moved for the winter. Here they were never frozen in as they would have been had they remained on the river. In addition they had an abundance of fresh fish with which the Metlakatla waters abounded, besides deer and water fowl.

At/
At the encampments when fresh fish were not procurable, the Indians opened a pit of salmon roe which had been covered up for a period of time – usually from three to eight months. This is the strongest dish the Indians indulged in and the odor could be detected afar off but they relished it greatly – because no doubt the pits were only opened when there was a scarcity of other food and they were suffering the pangs of hunger.

The term Nass signifies "Food Depot". For centuries the oolachan fishing on the tidal waters of the river has attracted the Indians from all quarters. From the interior, hundreds of miles distant by the trail, the Indians thronged hither carrying their effects on sleighs drawn by their dogs or by themselves as they generally started early in the year while the snow was deep to reach the river in time for the fish which usually arrive about the middle of the month of March. They brought with them also furs, the proceeds of their hunting expeditions, with which to pay the tribes resident on the river for the right to fish and also for the use of their nets and for shelter in their fishing lodges during the season. Before the coming of the white man if a delay occurred in the arrival of the fish in the river, many of the older and weaker died from scarcity of food. The Coast Indians also from far up in Alaska and from the/
On the Nass River

The river is frozen over with ice several feet thick. The Indians are engaged in setting nets beneath the ice to catch the Oolachan.

A sleigh stands ready to convey the fish away.

Stringing Oolachan Fish

on sticks for drying in the sun. The women are protected from the wind by a rough awning. The background shows the Nass River—the headquarters of the Oolachan Fishing.
the South, came in large fleets to catch the oolachan or
to barter for oil which is extracted from it, and upon
which its chief value to the Indian belongs. For just
as the Eskimo must have their whale blubber and seal oil,
so these Indians find a suitable substitute in the
oolachan grease.

Prior to the arrival of the fish, the river is a
scene of desolation, especially if still frozen over.
Not a sign of life can be seen from the river to the
mountain tops, but a continuous covering of snow.

But with the arrival of the fish, the scene changes.
First there are the Indians in their boats or canoes,
or with their dogs hauling their sleighs along the ice
to the various camps. Then the seagulls begin to arrive,
first in flights of hundreds or more, but soon to increase
to thousands and myriads, until they appear as snow flakes
filling the air. They are usually accompanied by numbers
of the white-headed eagle which wings a higher flight
and circles round and round while the sea gull fish and
feast.

The Indians prefer to fish on the ice as it is so
much easier and they can use their dogs and sleighs to
advantage. Each party or household proceeds to saw
openings in the ice which is usually from two to four
feet/
feet in thickness. Sometimes the fishermen are much troubled with drift ice, which comes down the river in great sheets. Much of the fishing is done at night, as they must put down their nets with every falling tide. Then hundreds of lanterns are seen flitting and flashing to and fro, which with the shouting and hammering produces quite a busy scene. During the day, men and women and even the children are engaged with dogs and sleighs carrying the fish to the shores where they are heaped up in oblong or square bins three or four feet in depth. Each household will thus have from five to ten tons of fish and more, from which to extract the oil or grease after they have salted sufficient for future use, and also kept apart a quantity to be sun dried or smoked.

When fish become scarce, the Indian feast on both seals and seagulls which are then in good condition, though savouring a little of their fish dietary. It is estimated that a seagull consumes a pound of fish a day. But this is not the only benefit derived by the Indians from the seagulls. The Indians have always possessed comfortable feather beds and pillows made from the feathers of the seagulls which they have killed for food. The seagulls move down to the ocean every evening, returning in the early morning to their feasting grounds. The/
The Indians have a tradition that the birds move away to a distant mountain to boil the fish which they have caught during the day and to extract the grease.

The Tsimshian Indians had individual bowls and large horn spoons for eating, but they most commonly sat around a common pot into which each in turn dipped his large horn spoon. The following is an account of a meal of a Metlakatla chief, in 1874. "His wives roasted some dried salmon before the large fire which burned on the hearth in the centre of the great lodge. Having seated themselves, one on either side of the chief, they proceeded to provide and masticate the salmon for him. Then withdrawing it from their mouths, they placed it in his mouth, each acting in turn, the one using the right hand, the other the left. He held a horn spoon himself from which he occasionally took a sip of oolachan grease, renewing his supply from a dish placed before him. At length he intimated that he was satisfied, when they supplied him with a draught of water, after which they proceeded to partake of the dried salmon and grease themselves".6
Cleaning Salmon.

Oolachan Curing.
Those in the tanks are waiting to have their oil extracted. Those on racks are drying in the sun.
UTENSILS. When the oolachan oil is ready to be stored away, it is preserved in bottles made from various materials, the nature of which varies to some extent with the locality. Among the Thomsons and the neighbouring tribes, the salmon skin bottle is most in vogue.

These are prepared in the following manner. The skin is first drawn whole from the salmon just as one draws off a closely fitting glove inside out. This is then carefully cleaned by rubbing it with dry wood dust, after which it is greased with deer or preferably with mountain sheep fat. It is then turned right side out, the oil poured in and the mouth securely sewn up and sealed with salmon spawn jelly.

In other localities, oil bottles were made from the larger gut of bear, from the sounds or air bladders of the larger fish, or on some parts of the Coast from a species of seaweed peculiar to the Northern Pacific waters; this has a large hollow bulbous root, which when dried is almost as good and serviceable for holding and preserving liquids as a glass bottle itself.

The kettles and troughs in pre-trading days were either/
either trough-like tubs hollowed from a block of wood or trunk of tree, or baskets. These latter were so skilfully made from the split rootlets of the cedar or spruce, that they would hold liquids. They were never placed over the fire. The heating or boiling was effected by means of 'cooking stones'. These are small water worn boulders of basalt, or some other close grained stone that will stand the heat without cracking or breaking.

They are first heated in the fire and when hot enough are taken up by a pair of wooden tongs, quickly dipped in and out of a pail of water to cleanse them, and then put into the pot or kettle. It does not require many such stones to make a kettle boil or to cook a salmon.

The food of the Indians was usually served in wooden dishes, and even where basketry and bark were common, wooden vessels were made.

The majority of existing wooden vessels were fashioned with iron tools but before metal was introduced they were excavated by means of stone tools and fire. They were often carved to represent animal forms in great variety and small bowls of horn occur.

Food was also, served on plaques made of basketry, or on reed or grass mats. Soups, stews and such were served always/
always on the wooden dishes, but fish and meat and other more solid portions of their food were served on the grass or reed mats.

In eating, whether in the formal feast or at the ordinary meals, the men were always served first, by themselves, the women never eating until they had finished, and then partaking only of what they had left.

All solid foods were eaten directly with the fingers, but spoons were generally employed for liquid messes such as soups or stews. Their spoons were ordinarily carved out of maple or from the horns of the mountain sheep. Those who could not afford or did not possess either of these, used any hollowed thing that came to hand. Among the Coastal tribes, shells were often employed both as spoons and cups.

The Salish possessed a great variety of stone bowls. These were used for different purposes, some for holding and mixing paints, some for medicine and some for ceremonial purposes in connection with the hunting or the gathering of their food. They were invariably carved or fashioned after the semblance of some animal, generally the totem of the owner and occasionally a human figure is represented.

The Salish excel in coiled basketry, but north and east/
east of the coiled basketry area, bark receptacles may be said to be the vessels most commonly used for cooking and liquid holding purposes. Two different kinds of bark are in use in the manufacture of these vessels - birch bark and spruce bark. The latter is only used in the larger coarser receptacles, the former is the material most commonly employed.

The birch bark vessels of the Carrier tribes are of various kinds and sizes. Father Morice has figured the most characteristic of these. Each vessel is made from one piece of bark, and this was the invariable method employed in the manufacture of these receptacles, whatever the size and whatever the use it was intended to put them. To finish off and give the necessary strength and stability to the rims of the vessels, they are encircled on the inner or the outer side, according to their use, with a small rod generally fastened to the bark by overcasting, the threads for which are made from spruce root.

The larger of these receptacles have a capacity from four to ten gallons and the use to which they are put are manifold. They often serve to 'cache' up close to the house, any household chattels which it is thought expedient to protect from mice. 'When thus employed, they/
they are suspended carefully covered with birch bark from the lower limbs of a branchy evergreen'.

None of the Dene vessels have lids to them.

The oblong shallow vessels, called in the Carrier tongue 'thel', which means receptacle, have a capacity varying from a pint to two gallons.

They are put to many uses like the larger vessels but they are primarily berry baskets and several of them will ordinarily be found in every household. The smaller ones are not uncommonly used as drinking vessels.

Sometimes dried horsehair, arranged so as to produce a geometrical figure, is employed in the decoration.

The 'fish-tray' among the Dene, takes the place of the wooden dishes and coiled and woven plaques. They are as a rule seamless and thus different from the berry baskets. To effect this, the corners are merely folded up and tucked under the encircling rim rod, which in this case is placed in the outside of the vessel, a double lining of bark, one on the inside, the other on the outside, being added to the edge, to make it stronger and more durable. In length these fish trays are from twelve to eighteen inches, the width being commonly about half the length.

There is also the Carrier water-basket and kettle.

The/
The interesting feature about the former is the narrowing of its upper part for the purpose of more conveniently carrying its liquid contents. It is made water tight by the addition of spruce gums to the seams and stitching. The kettle is seamless, or to be quite accurate its corners are turned up and folded over, and held in place by the edge rod. By means of these bark boilers, the natives formerly cooked their roots, fish and meat, and notwithstanding the fragility of the material used in their manufacture, they made excellent and serviceable vessels. Strange as it may seem, they were hung directly over the fire like our mettle pots and kettles, but of course care had to be taken that the flames did not come in contact with them. Nor did they wear out or burn out as quickly as might be supposed; the parts that wanted renewing oftenest were not the bodies of the receptacles but the rims which had to be replaced from time to time. They say they made most excellent and rapid boilers.

At potlatches, and other ceremonial gatherings of the Dene, when large quantities of food were required to be cooked, the cooking vessels were the large cedar boxes employed by the Coastal Salish as treasure chests. These were not of home manufacture but were obtained by barter from the Coast people. In these the provisions were boiled by means of the cooking stones.

The jam caldron of the Carrier is composed of two parts/
parts - the boiler proper and the juice receiver. It is constructed in the following manner. A shallow excavation is made in some sandy spot and in this is placed one end of the shallow, oblong, bark tray. This is the reservoir for collecting the juice, and by being thus placed at the slight inclination the juice or liquid part of the jam collects in the lower end where it may easily be dipped out as necessity demands. In the higher end of the tray, a sheet of spruce bark is drawn into a circle, the outer edges of which touch those of the upper or higher part of the tray. The circle of bark is held in place by sticks driven into the ground about it, which are secured to its upper edges. At the bottom of this a layer of twigs is spread which acts as a strainer. The fruit is boiled and the preserve made as described.

The Dene use also a kind of wallet, made amongst the Carriers from caribou hide and these are commonly employed as game bags.
BIBLIOGRAPHY.


7. A. Morice. Notes on Western Dene.
OLD MOSES
Kilsemaht

A Medicine Man of To-day.
MEDICAL IDEAS AND PRACTICES.

The Science of Medicine is unknown to the Indian. He has observed keenly but has not reached the stage of systematic critical study or investigation.

His knowledge consists of memories of experience and of traditional interpretations of experience. His mind being untutored, these memories are often imperfect and the interpretations biased and erroneous.

His reasoning is largely confined to simple and apparent analogies which are usually inadequate for correct determinations and is much influenced by traditional views, religion, and unbridled fantasy. One of the chief results of such reasoning with the Indians, as among others living in simple societies, is that every object, organic or inorganic, may exert it is believed, in a greater or less degree, mysterious power for good or evil on every other object and his conception of sickness is largely based on this notion.

Illness, to the Indian, is a deleterious spell which induces bodily suffering, is generally inimical to physical welfare and may even bring an untimely death.

These manifestations excite the closest attention to those affected and their friends and a strong desire to learn the causes.
The Indian who is not devoid of common sense, knows that certain natural conditions such as extremes of cold and heat are capable of affecting him adversely and that many animals, plants, and other objects may harm him.

Ailments thus caused are observed to be accompanied by various symptoms, as pain, debility, loss of appetite, fever etc. These occurrences, if no complications arise are viewed quite rationally, but similar symptoms arise at other times without their cause having been observed.

They may develop suddenly or during a night or they may approach gradually but their origin remains obscure.

Under such circumstances there is no rational explanation at hand and the inquisitive but uninstructed mind is readily led to suspect supernatural causes of the illness.

Thus in regard to etiology, pathology and necessarily also the treatment of the disease, the Indian reached the conclusion that there exist two chief classes of ailments, (1) Those of an ordinary character which have their origin in extreme old age, in accidents or in some other palpable manner and which can be interpreted and occasionally dealt with in a more or less simple way and (2) those of a mysterious nature incited by some adverse, natural or supernatural powers, sustained often by magic or particularly by some material agent introduced secretly into the body/
body and requiring special, largely supernatural treatment
And so the supernatural elements in the Indian Notions
of disease have lead him to offer invocations or prayers
and incantations, to make offerings and to establish and
practice an intricate system of tabus, regulations,
propitiatory rites, and fetishism and to employ such persons
as are capable through supernatural endowment of determin-
ing the proper safeguards and remedies or of controlling
or counteracting the powers that caused the disease.

Thus arose the class of individuals, mainly elders,
popularly called "Medicine-men" and "Medicine-women".
Mediators between the world of spirits and the world of
men, may be divided into two classes - the shamans where
authority was entirely dependent on individual ability
and the priests who acted in some measure for the tribes
or nation or at least for some society.

SHAMAN is explained variously as a Persian word mean-
ing Pagan, or with more likelihood as the "Tungus"
-equivalent for "Medicine-man" and was originally applied
to the Medicine-man or exorcists in Siberian tribes from
which it was extended by ethnologists (1) to similar
individuals among the Coast Indian tribes of America.
Among the Haida and Tlingit, shamans performed practically all religious functions including as usual, that of Physician and occasionally the shaman united the civil with a religious power by being a town or house chief also.

Generally he obtained his position from an uncle, inheriting his spiritual powers just as he might inherit his maternal wealth but there were also shamans who became such owing to natural fitness.

In either case the first intimation of his new powers was given by the man falling senseless and remaining in that condition for a certain period. Elsewhere, in North America, however, the sweat bath was an important factor in bringing about the proper physical state and certain individuals became shamans after escaping from a stroke of lightning or the jaws of a wild beast.

When treating a patient or otherwise performing, a North West Coast shaman was supposed to be possessed by a supernatural being whose name he bore and whose dress he imitated and among the Tlingit this spirit was often supported by several minor spirits, which were represented upon the Shaman's mask and strengthened his eyesight, keenness of smell etc. He let his hair grow long, never cutting or dressing it. When performing, he ran around a/
a fire very rapidly in the direction of the sun, while his assistant beat upon a wooden drum and his friends sang spirit songs and beat upon narrow pieces of board. Then the spirit showed him what he was wanting to discover, the location of a whale or other animal food, the approach of an enemy or the course of sickness of a patient. In the latter, he removed the object that was causing pain by blowing upon the affected part, sucking at it or rubbing a charm upon it. If the soul had wandered, he captured and restored it and in case the patient had been bewitched he revealed the name of the offender. Payment of his services always had to be made in advance but in the case of failure, it was usually returned, while in some tribes he was punished with death.

Shamans also performed sleight of hand tricks to show their power and two shamans among hostile people would fight each other through the air by means of their spirits.

Among the Nootka there were two classes of shamans, the UCTAK - U or "workers" who cured a person when sickness was thrown upon them by an enemy or when it entered in the shape of an insect, and the K-OK. OATSMAAH, or "soul-workers" especially employed to restore a wandering soul to its body.

The Songish of the Southern end of Vancouver Island also/
also had two sorts of shamans. Of these the higher called the "Squnaam" acquired his powers in the usual way by intercourse with the supernatural beings while the Si-owa who was usually a woman received her knowledge from another Si-owa. The former answered more nearly to the more common type of shaman, while the function of the latter was to appease hostile powers to whom she spoke a sacred language. She was also applied to by women who wished to bear children and for all kinds of charms.

Among the Interior Salish, the initiations of Shamans and warriors seem to have taken place in one and the same manner i.e. through animals which became the novice's guardian spirits. Kootenai shamans had special lodges in the camp, larger than the rest, in which they prayed and invoked the spirits.

Where shaminism flourished most there was a tendency for certain priestly functions to centre round the town or tribal chief. This appeared among the Haida, Tlingit Tsimshian and Kwakiutl in prominent parts, the chief played in secret society performances and a chief of the Fraser River Coast Salish was even more of a high priest than a civil chief, leading his people in all religious functions.

So these Medicine-men and Medicine-women were supposed to possess the extraordinary and mysterious powers described/
described as well as a special fitness for serving in other contingencies as priests or priestesses. They were believed to have come into possession of their sacred healing powers prenatally or to have received them in dreams or in connection with some notable event in their lives. By means of these special gifts and with the aid of "fetishes" or other expedients, they were supposed to recognise the mystic or volitional exciting cause, particularly the active or instrumental evil agent of the disease, to choose the most effectual invocations, incantations, "medicine" and physical means necessary to prevent further action of this cause and to remove and neutralize the effective agent to whose presence the suffering was due.

Generally the medicine-man was supposed to receive also from supernatural sources, a particular song or songs fetishes and other expedients or aids which constitute the essential means of his practice.

These resources varied in character among different practitioners though apparently not much in the same individual.

The priest healer may "be given" other songs or discover other fetishes in time or he may acquire them by purchase or gift from other medicine men.

Particular songs or other expedients were employed for/
MEDICINE WOMAN OF TO-DAY, KNOWN AS SIX MILE MARY.
for particular diseases or classes of disease, real or imaginary.

Many of the practitioners not having a large supply of songs, fetishes and other requisites, were specialists to cure a limited number of affections. In some tribes nearly all the medicine men were thus limited in their practice while others treated all classes of disorders.

Some of the Medicine-men had acquaintance with the use of the knife, splints, massage and other physical means as well as with medicinal remedies, but usually these were employed in association with songs, invocations passes with saliva and practices of more mystic nature. Their whole treatment especially when practiced with sincerity, must have exercised a deep influence on the mind of the patient.

The medicine-man was only called for the treatment of those who were seriously ill and often had one or more assistants. His first aim was to find a cause of the disease, his second to determine the particular objective agent employed thereby. The procedure with the patient varied much with the various practitioners. If the cause of the illness was not manifest, the medicine man inquired into the dreams, symptoms and transgressions of the patient and examined him visually and even by touch to/
to determine to what category of influences the ailment should be attributed.

Once decided, he was expected to make known the cause and symptoms and sometimes pointed out the sorcerer. Sometimes he would call in or refer the patient to other practitioners, specialists in the particular line of affections under treatment, this course being adopted probably as a means of avoiding the responsibility of a hopeless case.

The treatment varied according to the supposed necessities of the case, consisting of propitiation for broken tabus, repeated prayers to the elements or deities, the depositing of prayer-sticks or countercharms in shrines, appeal to the patient's personal protector or totem, the use of effectual songs, rubbing or kneading (sometimes quite violent though for supposed magic effects), rubbing liquid medicine into the skin, extraction of the objective cause of the disease, blowing air or tobacco smoke on the patient, passes with fingers moistened with saliva, ceremonial observations and rituals and rites including painting of the body of the patient as well as that of the medicine-men and making sand paintings, noises (made with voices, rattle or drum) commands and exhortations to drive away bad spirits, assurances given the patient, various/
various symbolic representations, purifications of the body by sweat baths, purging and emesis, strong sucking, cauterizing, scarifying, bleeding, external applications, the administration, externally or internally of secret magic or other medicine and various regulations of the behaviour of the patient.

The venerable W.H. Collison gives the following account bearing on this subject.(2)

"Shortly after my return to Massett, I was called to see a young man suffering from an attack of brain fever. It had been brought on by plunging into the cold waters of the sea when overheated, in order to cool himself. The Haidas believe that all such ailments are caused by the "Stlique" or land otter which all the Indians believe to be possessed of supernatural powers. I had his hair cut short and applied blisters freely and instructed them also to procure ice and apply it to his head. I then prescribed suitable medicine, and was gratified to find the patient improving under my treatment. Just when he was progressing toward recovery, the medicine-men returned to camp.

In the middle of the night, whilst engaged in treating a serious case of croup in my own family, I heard them in their wild orgies over my patient, whooping and rattling so/
so that they could be heard all over the camp. They continued at intervals throughout the night, and when I entered in the morning, the leading medicine-man had just sunk down exhausted by the side of the sick man, who was now in a raging delirium. And little wonder, when one medicine man after another had been performing over him through the night, now singly and then in chorus with their rattles to drive out the demon of disease. The house was filled with followers of the medicine men, who sometimes joined in the chorus with them. The sick man was being held down by two attendants, one on either side, and it was with difficulty they retained him on the floor. I stooped and felt his pulse, though I knew there could be no hope for him under such treatment. It was bounding and I shook my head to indicate my conclusion. Instantly the medicine men assumed a threatening attitude toward me as the leader exclaimed, "He will recover, we have expelled the evil spirit which your medicine could not do."

The sick man died the following morning and the account goes on to show that many conversions followed this episode.

In the larger curative ceremonies, several medicine men acted conjointly, or if but one was present, he may have had from one to several assistants.
The extraction of the material agent of the disease by means of the hand or by strong sucking with the mouth was sometimes performed symbolically but more frequently the object was assumed to be symbolically removed. It may have been a thorn, a piece of coal, a piece of hair, an insect, a worm or other substance suggesting by its appearance or nature the symptoms of the disease. It was usually exultingly shown and then destroyed.

Fifty years ago the Medicine-man was fully believed in and employed. Twenty-five years ago their practices were still prevalent and dominant although the work of the missionary had begun to bear fruit. Ten years ago the Medicine-man was not uncommon but now only a few of the older Indians retain the old beliefs.

The Indian medicine-men of to-day are chiefly men of advanced years, shrewd and knowing. Their dress and daily life are in no way distinctive. Many are undoubtedly sincere in all that they do and among them are the most impressive figures. They have some knowledge of herbs.

Of course the medicine-man did not always cure. Failures in the case of children were readily excused. Single failure with adults could be satisfactorily explained on the ground for example, that the bad heart of the patient was responsible for the trouble, but if a number of
of patients died successively the career of the medicine-man generally came to an end.

Distrust arising from similar failure sometimes hampered the progress of the medical missionary. Medicine women serve chiefly as midwives and herbalists. They have never been addicted to the trickery of the man but aid in confinements for a fee and give simple remedies mostly herbs. They are shrewd and experienced and their methods are quite rational and effectual.

Preventive means applied to disease were practically unknown. In delivery, illness or wounds there were no proper precautions. However in labour some of the steamings, lotions, powders or gums served more or less as cleansing agents or antiseptics. Absolute ignorance with all its sad results existed everywhere concerning the transmissibility and modes of aggravation of diseases like tuberculosis and other contagious diseases were hardly better understood. The Indians recognised the disease of Tuberculosis. The Salish treated consumptives with rattlesnake whose head and tail were cut off before the reptile was angered. The body of the snake would then be toasted and dried and a piece of this delicacy would be taken with each meal. It was also considered beneficial to Consumptives to sleep on Fir Boughs. They had, even in former times their specific remedies for certain symptoms, yet/
yet to-day when there is more general enlightenment in these matters, it is practically impossible to get the Indian to understand the significance of prevention.

However times have improved since the Indians, when an epidemic developed, attempted to find a sorcerer who caused it or to propitiate the angry dieties.

If the disease continued, general helplessness and demoralization set in. At last from sheer fright the people would flee from their houses abandoning everything even their dead and dying.

Some mothers will even yet expose their children to measles and other contagious diseases believing they must contract them sooner or later and that it is better for them to get through with the ordeal. This idea may have been introduced with civilization for it is interesting to note that in localities where this is practised the white mother often entertains the same belief. They know, though, it is impossible to say whether it is through their own deductions or through other channels, that one attack of such diseases gives immunity for the future.

A few hygienic observances that appear rational were generally observed - sex abstinence during menstruation, recognition of the transmissibility of venereal disease with consequent employment of practical safeguards against them/
them, the knowledge of numerous poisonous plants and animals with the employment of antidotes, and to a greater extent the use of the sweat bath and steaming.

There is also much simple general knowledge of actual remedies.

There are numerous plants and modes of treatment, the use and utility of which are known to all in a given locality even to the older children while others are known only by individuals, mostly by old men and women who keep the knowledge secret and make profit out of the drugs. The sums paid for the medicines are occasionally very high. The parts utilized are mostly roots, least often seeds and flowers.

Many of the older Indians, especially of the West Coast tribes, still bear traces of scarification which was performed for any sharp localized pain. A sharp instrument for the cutting was required but from the nature of the scars, this was not always used.

When a girl or woman has an attack of hysteria, the stomach of the victim is pressed very hard and her wrists and eyes are rubbed vigorously.

In nose-bleeding the nostril is stuffed with cotton or sphagnum moss or cold water is taken into the nose or it is applied with the hands to the forehead. Sphagnum is also used on open wounds when bleeding is profuse. It coagulates the blood and stops the bleeding.
There are many modes and means of treating a tooth. It may be jerked away or the point of a heated wire may be thrust into its cavity if there is tooth-ache.

For pain in the chest they will often draw a TIGHT BANDAGE around the chest and there are certain PINE DECOCTIONS given for a cough.

The sagebrush is often used in prolonged headache. The plant is gathered, rubbed in the hands and the smell inhaled. Or the temple may be plastered with a paste of flour and water and this is often soothing from its binding effect.

To stop bleeding a spider-web may be applied to the bleeding surface or the scrapings from the inside of a tanned buckskin.

Our Indians have long known skilful treatment of dislocations and of fractures. In the former, the bone is forced into place by a quick jerk and the patient then ordered to rest. In fractures rubbing and straightening are employed and roughly made splints.

Sprains and bruises are treated sometimes for hours with hot and cold water alternately, slowly poured upon the affected part and there have been wonderful results therefrom.

Open wounds are often treated with plasters of fat. If a cut is large they sew the skin with reeds and if it should/
should continue to suppurate they keep it open by continual probing with feathers or a sharp instrument or with sinew or string thrust into the cavity.

A common poultice applied to the seat of pain is made by putting hot ashes into a hot cloth.

The Salish have numerous remedies for snake-bite. The poisoning rattle-snake is found along the Thompson River and upper Fraser River as far as Yale. In some instances a pig is caught and its snout having been cut off the raw surface is applied to the wound. Some of the animal's blood diluted with warm water is drunk.

The wound may be sucked. Sometimes a hot or burning coal is applied to the wound and the patient is given to drink an infusion of the ash-tree. If the victim happens to be some distance from any-one and he desires to apply an immediate remedy, he kills the rattle-snake, tears it open and applies to the wound a certain fat which is found along the middle of the snake. At times also the blood is applied.

This application is repeated and is said to be a certain cure, and even to be efficacious when the limb has begun to swell.

The following are still further remedies in use amongst the Indians of British Columbia.

The/
The bone of fish is powdered, mixed with oil of fish or animal and is given to the Old to make the bone slip easily or it may be given to children to give them bone substance. Suckling mothers use it freely.

Sufferers from rheumatism often wear under-suits made from BIRCH. These are worn under the ordinary clothing. If the patient is required to lead an active life he will confine himself to birch leggings, birch knee pads or birch shoulder-pads.

The thin lining of BIRCH BARK is used to cover wounds before the outside dressing is applied. Some Indians have formed the habit of chewing birch bark incessantly and there is a general ill defined idea that such a habit produces blindness.

The bark of BUCKTHORN is steeped and used as a purgative. For BLOODPOISONING an incision is made and blood is drawn. Formerly the Medicine man sucked the blood away, thus proving his immunity to evil spirits.

A very bitter extract used to allay vomiting is BARBERRY ROOT. The root is grated and soaked in ordinary water or if alkaline water is procurable, it is much preferred. It is almost impossible for the Indians to obtained alcohol but the Indians realize its value in such preparations.

BILE
BILE is a favourite purgative and it is also administered externally in case of snake-bite. Practically every household has preserved a bottle of bile.

BLOOD-LETTING is used only as a final resort. Strange to say there have been remarkable cures through this treatment even though sterilizing arrangements are very crude. As stated the witch doctors would often suck or drink this blood to prove their supernatural resistance to the Evil one.

Various medicinal uses are made of BARLEY. It is fed to babies when the mother's milk is not sufficient. Barley water is given in typhoid when there is high fever. One old Medicine man, who was a witch Doctor and whose ability is held still in high esteem especially among the older members, prescribes barley water where the urine is thick with sediment but he almost confessed a Medical Missionary had imparted this secret to his father.

Some consider barley water a laxative and yet it is prescribed in summer diarrhoea.

BROOM grows in abundance throughout Vancouver Island. The tops are infused and are often given to mothers immediately after childbirth but the action is quite unknown.

The Indians have always had a form of "Sweet" which they/
they obtained by mixing oil with honey and allowing it to harden or dry. To this was added a powdered root of some species and a pill or lozenge was the result.

A beverage used in fevers is made from Couch Grass Root.

CALVES FEET are considered a great delicacy for the sick and are invariably used to jelly meat or soups.

CHARCOAL is powdered and taken internally with the general idea that it is good for the stomach. In olden times charcoal from the human body was preferred.

Small bags are filled with charcoal finely ground and mothers use it for dusting babies after wet napkins have been removed, to prevent sores and chapping.

It is used as poultices for boils and it deodorizes sores of animals.

COW- UDDER VACCINE - The serum is taken from the lining of the udder of the cow and the native Doctor vaccinates with a porcupine quill. The practice was introduced many years ago by the white man when small-pox was prevalent.

A spring tonic is obtained from the roots of DANDELIONS which are soaked in water and are left in the sun to ferment. The leaves and roots of young dandelions are used as an article of diet.

A/
A dogbite wound is sucked clean and TURPENTINE applied.

The Salish in particular are conversant with the curious properties of the Foxglove. The preparation is a speciality of David Maxime, a former medicine man of the Matsqui band of the Salish Nation. He makes the preparation from the leaves and seeds of the Foxglove - just how remains a secret. But it is known that he pays large sums for small quantities of alcohol and as he himself does not drink intoxicants, it is assumed he extracts his preparation from leaves and seeds by means of this alcohol.

He prescribes his medicine without discrimination but beneficial results in cases of dropsy certainly have been noted and sometimes fever was reduced. Good results have been attained in typhoid fever. Unfortunately it is put to other uses. Just before a war dance - now only indulged in on Potlach occasions, David Maxime dusts a small quantity of the powdered leaves or seeds into his eyes, thereby causing inflammation to the eye and by snuffing the powder can develop a hoarseness very effective in the war cries.

David Maxime formerly used this drug to punish the unruly and has been detected doing so quite recently. It causes/
causes vomiting and diarrhoea. Sometimes the Indians say convulsions develop and finally sleep. There is a tradition that one long fatal sleep resulted. Convulsions usually occur in animals subjected to prolonged treatment.

David Maxime is often called in cases of veterinary trouble and claims this medicine is beneficial where there is inability to pass urine.

There is the case and testimonial of one woman of the tribe who just after childbirth had difficulty of this kind and who was "made well" by the treatment of David.

He also has been successful in certain cases of Pneumonia and bronchitis which is very common in this district.

Wherever David Maxime is called he carries out the same methods of procedure. The Indians far and near generally prefer his treatment to that of the English Doctor of the community.

A decoction made from the bark or leaves or sap of the ELM is drunk as a cooling draught.

Epileptics were formerly thrown into the river or sea or tortured with hot irons to cast out the Devil.

The Indians have a great variety of FLAVOURINGS, and SEASONINGS. They use the leaves of roses and various sweet scented flowers, leaves of the sagebrush and thyme and/
and sweeten with honey.

The milk of the FIREWEED plant is eagerly sought for by lactating mothers who wish to increase their flow of Milk.

GALL from animals is taken internally but the Indians seem to have no idea of its specific action.

GUM is obtained from the various native trees. It is applied to cuts and sores to stop bleeding or is more often simply chewed like "chewing-gum".

HORSE-RADISH is given in strong doses to effect vomiting in case of poisoning. It is generally ground into powder.

HONEY is a favourite diet for tuberculous patients. It is compounded in many ways.

BITTERS made from herbs are valuable tonics.

HEMLOCK SPRUCE (Tsuga Canadensis) is a tree which was thought to belong to evil spirits. To drink its sap or to chew its bark or to drink an infusion of leaves was to invite death. Tradition says a man will stagger and fall if he has partaken and eventually comes languor and a sleep from which perhaps he may never waken. That it is not so deadly is proved by the fact that at feasts the witch Doctor would drink it before a huge audience to prove his supernatural resistance to poison and his right to practice witch-craft.
Indian Medicine Men.

In full dress prepared to begin their incantations. They belong to the Nass River Indians.

Indian Man's Rattle.

The face is a conventional representation of the Moon. The figure is hollow and contains small stones. The whole is carved in wood.
HEMP is difficult to obtain but eagerly searched for. It acts upon the brain like firewater. The victim becomes frenzied with intent to kill all before him.

JUNIPER BERRIES are crushed and taken internally in case of stomach pain. It produces a burning sensation which gives relief.

LAUREL LEAVES, dried and steeped in a cup of water are given for colic.

Wounds are washed with lime water. It is prescribed for children when bone trouble is suspected. Suckling mothers often drink it.

A former Witch Doctor of the Tsimshian Nation, known as Andrew and who still practices, prepares a curious concoction which has rather startling effects.

ALL KIDNEYS of animals killed on his reserve were brought to him. He boiled them to shreds allowing no steam to escape. In olden days, to show his magical power he would feed this result to a fourteen year old boy who had been previously starved. The gums of the mouth and the lips became lighter in colour, the pupil of the eye dilated, the eyelids wide apart and the eyeball later was distinctly/
distinctly protruded. The victim was then exultingly exhibited to the awe-stricken superstitious multitude. Urine after an hours time was passed in quantities. Therefore Andrew prescribes and administers this mixture where there is difficulty in micturating especially after childbirth. It also seems to be effective where there is breathing difficulty.

Residents of the village speak most highly of the medicine and of its results.

A paste of SAND or MUD and water is applied to bee-stings and snake-bites and it is considered beneficial for any disease of the skin. A victim of nettle-rash, poisoned ivy, prickly heat, sun rash etc., will bury himself day after day in mud which he allows the sun to cake upon his body.

BARLEY GRAIN is allowed to germinate and is then dried. It is a common article of diet for all, but especially for the sick.

Nicotine has been used by Witch Doctors to produce instant death in animals, especially dogs.

OIL OF FISH COD WHALE ETC., is easily obtained and is put to many uses. It is the usual lubricant for joints. It is taken internally by the old to make the bones "slippery" so that they might "Slip easily".

POWDERED/
POWDERED BONE OF FISH is often mixed with the oil in the belief that bone substance direct may be supplied. It is fed to children with this idea.

Old Moses of the Wakashan Tribe formerly a Witch Doctor, discovered that in the poppy was some drug which paralyzed small chickens or fowls if they ate to excess thereof. He therefore cultivated the wild poppy and gathered and crushed the seed. In his exhibitions and displays he often will scatter the seeds amongst the starved fowl, which will eat greedily, then become dizzy, to the great delight of the spectators and then exhausted they will finally sink to sleep.

A cat to which a dose has been administered will keep an assembly amused for hours. It becomes very excited rushing here and there and will take no notice of obstacles in its way. It is given judiciously by Moses to man especially when a sedative effect is required.

Porcupine quills are used in vaccination.

SAP from the POPLAR TREE is supposed to cure headache.

Pine bark is chewed to relieve cough.

A disease is usually contracted by those who have touched the poison Ivy plant but Indians believe that merely to approach the plant will give the same results. ALKALI mud rubbed over the body is the usual remedy.

POULTICES/
POULTICES are made of hot boiled bran, of bread and sugar, of hot ashes and of sand.

THE STOMACH OF THE HOG is boiled for many hours and is then taken for "HYAS TUMTUM" (inflation) and succeeds in raising great quantities of wind from the stomach. The origin of the custom was to make the stomach "As strong as the Hog".

The pancreas is treated in the same way and is given in vomiting fits.

A decoction made from QUINCE SEEDS is used as a cooling beverage.

STERILIZATION BY BOILING is practically unknown. Most of the Natives sterilize an object by burying it in the ground for a long period of time or by exposing the object to the sun.

SALVES are made from the pitch and gum of trees and the fat of fish and animals. Mutton tallow is the favourites fat. The Salves are perfumed with the extracts. Mutton Tallow is used as a lubricant for oiling machinery and greasing harness, saddles etc.,

SAP OF TREES is used to cure many ills, such as HEADACHES, COLDs etc.,

Bathing in BRINE is also prescribed in skin diseases. An Infusion of DRIED SAGE is drunk for tea.

Turpentine/
Turpentine was often used in extracting the desired properties from drugs. Turpentine itself is extracted from the Douglas Fir, sometimes by compression but more often the Indian tap for it and in this are wonderfully successful.

Turpentine extract is used for blisters, as a rheumatic lotion and is taken internally for colds and coughs.

THYME BERRIES are crushed and taken internally in case of stomach pain. Thyme is also used for seasoning.

Tar is found on some pine-trees in its crude form. One witch doctor claims he can obtain tar from pine wood by boiling the tree and then distilling the water. It is given for colds and coughs and sometimes if it is soft enough, is rubbed in open wounds.

Vinegar is made from fermented roots.

VACCINE SEE "C".

Wines are made from fermented fruits or dandelion roots and also from wild (choke) cherries.

RAW BEEF is applied to warts to remove them and is known to be very effective.

WILLOW SAP helps to ease headache.

Yeast is obtained from hops. Hop beverage is a favourite in hot weather and in some villages is sold at the/
the Indian Stores. It is considered a good tonic.

Pregnant women drink yeast in quantities "To make the Babies white".

It has long been forbidden by law for a Witch Doctor or a chief to administer drugs as punishment. Copper poisoning was formerly a favourite method of punishment.

The results were seldom fatal but great discomfort was caused through the vomiting and diarrhoea, the vomit often being a greenish blue.

As a milder punishment a victim was ordered to snuff strong brine or to bathe repeatedly in a barrel of the same.

All that has been said in this section affords merely a glance at the multiple conceptions and practices of the Indians. Of some of these much has been written but what is given here is the result of the writers own investigations and has not, as far as she can ascertain been hitherto noted in any of the accounts of the British Columbia Indians.

"A" thorough investigation of Indian notions concerning the various bodily ailments and the means employed for curing them, with the reasoning that leads to the selection and mode and use of such means, an investigation carried out to the remotest detail, would undoubtedly reveal/
reveal a wealth of additional data invaluable to the study of folklore and of the primitive mentality.(3)

The British Columbian Indian is in a transition stage. The white Doctor may be called if he is within calling distance, patent medicines, pills, and the drugs of white civilization are becoming more and more favoured, yet fifty hears ago the native Witch Doctor or medicine-man reigned supreme and the folk medicines were commonly known. To-day, they are not forgotten. The old Medicine-man who still remain practise in a different way for their practices have been curbed by legislation, but still with every faith in their decoctions and diffusions. There are still numbers on the Reserves who are acquainted with the art of Native Medicines and practise them. Perhaps knowledge gained from the white man in former years, has left its mark upon these medicines, but it is usually impossible to tell just how and when.

Usually the secrets of the preparations were known to a tribe or to a family or to an individual who guarded the secret faithfully and only passed it on to successors. There is much here that remains to be brought to light. And notwithstanding the ever increasing encroachments of the white man's influence, such investigation is still feasible with most of the Indian tribes.

Most/
Most of the early writers have made mention of the fact that abortion practices were not uncommon amongst the tribes of British Columbia, but with the advent of Christianity, it is difficult to get the Indian woman to discuss this question, and just to what extent this practice is followed now is difficult to know. Neither are the early writers very definite in their remarks.

"Abortion is not uncommon among the Haidas".

"The Nootka's frequently prevent the increase of their families by abortion." (4)

Lord said that the causing of abortion is not uncommon among the Natives of Puget sound while we find the practice common in Vancouver Island.

Teit mentions abortion as being rarely practised amongst the Thompson Indians and rare among the Shuswap, while Bancroft somewhat contradicts this statement by saying that abortion is of frequent occurrence among the Chinooks and not uncommon among the Inland Tribes.

What information the writer gained on this subject was given by the very old men and women of the tribes.

The Indian woman desires and loves her children.

The causes of the practice are shame and fear in the unmarried and among married women, inability through poverty to provide for the family, or a loss of many previous/
previous children or a desire to be rid of concomitant physical difficulties and necessary subsequent cares. The occurrence is more frequent in the unmarried notwithstanding the fact that among most of the tribes early sexual intercourse is not uncommon and the additional fact that the bearing of children by unmarried women, does not, despite the teaching of the Missionary, bring any particular discredit and is but a slight obstacle to future marriage.

The means employed is mainly some form of physical violence applied to the abdomen; occasionally one hears of some internal medicine but any of these recipes which the writer gave for analysis were declared to be harmless.

In most instances it appears that the prospective mother is aided in the execution of her designs by another woman, by a medicine man or by her husband.

Among the Haidas the means for induction of abortion are mainly mechanical and the attempt is always made in secrecy.

Among the Carriers the prospective mother leans on a stout stick or hangs over a precipice or the abdominal area is well kneaded by a second party. Decoctions (of no use) are drunk. Large doses of the fermented acid juice of the inner bark of pine was a favourite recipe.

Most/
Most tribes seemed to have the same methods. The Shuswap women applied a very tight bandage around the abdomen with the object of crushing or expelling the fetus. There was also the account of one case where abortion was induced by burying the woman to her waist in the earth. Some women fast with the idea of starving the child within.

There did not seem to be much fear of serious bodily consequences except in cases where a bent wire had on different occasions been introduced by another woman into the uterus - without exception with very serious results - so that this practice is disountenanced even by the boldest.

Stretching and climbing are favourite practices but in no case was it suggested that horse-back riding might have the same effect. The Indian women ride on all occasions, without thought, and it is the opinion of the writer and this opinion is upheld by at least one Kamloops Doctor, who has of late been studying the question, that it is this custom which accounts to a degree for the smallness of the Indian Family.

Doctor Irving of Kamloops, has studied the question of sterility amongst the Thompsons and has had eleven% of successes in his "Rest Treatment" in which he gives no drugs and performs no operations.
It is the writer's opinion that inherent sterility is supposed to be much more common than it really is. With care and proper advice much of it may be overcome.

The Indian woman even to-day nurses her child until it is at least three years of age and very commonly until it is five or six, and the mother's strength is thus sapped to its limit. It is a matter of expediency to nurse the child for one wonders what amongst the ill-cooked foods of the Indians, could possibly take the place of the Mother's milk. Certainly, the mortality amongst the children is high enough and it would increase if they were fed at an earlier age, on especially the summer diet of the Indians about which the flies swarm and which is generally left open to the air and dust. Thus one hesitates to advise the mothers to wean the child earlier - and the Mother's instinct tells them it is unwise.

The causes of death amongst the children are various. In the earlier days, death was most often due "to exposure as the result of improper treatment, or of certain customs or of want of food". "Throughout America", continues the writer, "it is a common custom to bathe even the new born children in cold water at all seasons of the year and to this Kraus attributes the high child mortality, that he records among the Tlingit. Many children of the eastern Tinneh/
Tinneh died at an early age according to Ross, whilst Bancroft says that the child is not allowed food till four days after birth, in order to accustom it to fasting in the next world. Nootka mothers, roll their babies in the snow to make them hardy, and Tiet says the Thompson Indians take small care of their children allowing them to run about without any protection." (5)

Now it is certainly true that the most harmful of these practices have long been abandoned but to teach the Indian mother to care for her children according to advanced European ideas is one of the difficulties of the missionaries and of the field matrons. The high mortality of the Indian child and of the slum child of the larger cities is due to the same causes. There is the food improperly cooked, very often contaminated, causing dysentery and other ills. The Indians do not yet realize the different food values. The child eats of the dried salmon and berries of the adult and there is no special provision made for it.

The trouble involved in securing cow's milk does not appeal to the Indian and perhaps this is just as well until they are further educated in methods of cleanliness. It is however remarkable how suddenly has come the appreciation of cow's milk in the southern part of the Stuart/
Stuart Lake agency. In some instances, butter is made for home use and these food products, coming into use, are having here a beneficial effect on the health of children among whom the mortality rate of the last three years has been low.

That there is much sickness caused through exposure of the child, is as true to-day as it was formerly although the mother does not deliberately expose the child to the cold. After the child has passed the cradle stage of its existence, its garments except in cold weather are of the scantiest description. He may be provided with shoes and stockings in winter, but he is not taught to avoid draughts or extremes of heat or cold. If he has become heated through work or play, he strips and plunges into icy water below his home. He will rush out barefooted without a moment's hesitation from the warm house into the snow, merely following the example set by his elders in this.

The old winter home of the Salish was subterranean, and was warm and cosy. To-day the Indians live in homes resembling those of the white man but he has not taken the precaution to exclude draughts, nor does he seem to mind very often if the rain and damp find entrance through the cracks and crevices.

The insanitary houses of the Indians have during the past/
past fifty years wrought great havoc, not only to the youngest but also to the middle aged and there are to-day not such a great number of old people on the reserves as there must have been formerly according to all accounts. One wonders sometimes if they would not have been better in this respect left in their native condition. Had they adopted the white civilization in toto — if this had been feasible or possible — there is no doubt of the beneficial results but they have half clung to the old in adopting the new and herein has lain the difficulties.

Krause quotes the opinion of a Doctor who lived among the Tlingits in the year 1836, to the effect that they were a strong healthy people. The Shuswaps, were a strong healthy people and lived to a great old age. Hillcott says, "The great age to which both men and women of the Salish, formerly lived, shows the vigor of the race and the general wholesomeness of their lives and conditions."

The Nootkas were generally a long lived race. Jewitt reports that during his captivity of 5 years at Nootka Sound, only 5 natural deaths occurred and the people suffered scarcely any disease, except colic.
The better educated and more intelligent of the Indians have certainly recognised the essentials of public health and safety but tuberculosis has meanwhile found a fertile field upon which to work and the health of many has been needlessly undermined.

It has been asserted by medical men that tuberculosis will carry off the Indians as such marked inroads have been made by this disease.

During the last twenty years the Indian population has remained almost stationary. The child mortality is not so high but between 1900 and 1916 there was a steady increase in the Indian deaths between the ages of 21 and 35 and the cause was tuberculosis. It seldom develops in the Indian before he becomes of age but it works rapidly so that in a few villages there are only the young and the old.

30% of all deaths in 1921 were due to tuberculosis.

Of course tuberculosis cannot be eradicated in a year but there is a way and when the Indian looks upon the disease as he does upon the small-pox and other dread diseases, there will be some hope of controlling it.

In the past years our Indians depended upon rain water from the tops of buildings for domestic use but now, in most of the larger Indian towns and villages they have water works from/
from which they obtain the very best water.

A great war is being waged against tuberculosis in the Nass River Agency where the death rate is high, the disease claiming 70% of the total. This is no doubt due to the nomadic pursuits of these Indians who up to 1910 exhibited an unfriendly attitude to the white settlers but now are becoming more reconciled and since this has become so, conditions are very encouraging. Since 1916 lecturers have been sent by the Anti-tuberculosis society, and the Department through the Women's Institutes, to lecture with the aid of a lantern and slides, on the subjects of Tuberculosis and Venereal Diseases, in all the villages of this agency. The medical officer of the Department has presided where possible at the lectures and good results have followed. Field Matrons have been placed in the district to minister to the Indians' needs.

Indian mothers here are taking better care of their children at birth and eye troubles have become less numerous. Rubbish that was six years ago the habitat of flies is now in most instances destroyed. Light and fresh air in the homes are more valued. Some shop keepers forbid spitting on their floors and many homes are kept beautifully clean.

The Department is fully satisfied with the experiment in/
in this agency for they have demonstrated the beneficial results of live propaganda.

It is difficult as yet to judge from statistics just what the effect of all these precautions will be upon the Indian Population as a whole.

The death rate of the Haidas in 1916 decreased by one half and has steadily continued to decrease ever since. Both the bands have an increasing birthrate. On the other hand, although there has been no epidemic among the Kwakiutl in the last ten years, the nation continues to lose ground numerically. In 1915 the deaths exceeded the births by 117.

Sanitary laws and practices among the Haida are very satisfactory. In 1920 chicken-pox was introduced through outside visitors but a strict quarantine was imposed immediately and the disease was stayed. This was remarkable for in these islands they have INDIAN town councils.

Fish offal is now buried or thrown below high water mark. The towns are cleaned up regularly by the council and a large number of shacks have been removed in the last three years, the whole of the inhabitants on one occasion turning out and making firewood, not only of the old buildings but also of the totem poles.

Yet it was only of 1865 that The Reverend W.H. Collison wrote/
wrote the following. (8) "But I could not sleep. Was it the exciting experiences of the day which prevented my sleeping, or was it the strange odours from the carved and painted boxes around? In these I knew were stored dried fish, dried herring, spawn, dried seaweed in cakes, and boiled crab-apples preserved in an oolachan grease. I concluded however that the offensive odour came from without through the numerous openings through the split planks with which the walls were constructed. I went out to reconnoitre and found to my astonishment a great pile of the remains of the dead, some in grease boxes tied round with bark ropes, some in cedar bark mats which had fallen to pieces revealing the contents whilst skulls and bones were scattered around. As I turned from the weird sight, a hungry wolfish looking dog challenged me. I had evidently disturbed him in his horrid feast. The Haida never interred their dead. They simply removed the body to the rear of their lodges or a few yards distant excepting the remains of those of rank which were generally encased, if a chief, in the base of a mortuary totem pole erected to his memory by his successor and elaborately carved with the crest of the clan; or if a person of lesser rank, the body was placed in a large box-like structure supported by two great posts from 10 to 15 feet above the ground. These/
These were erected throughout each camp and on the decay of the wood, the remains were scattered around."

"In the Wake of the War Canoe".

Sanitary laws among the Indians of the Babines and upper Skeena River Agency are very unsatisfactory but there seems to have been an improvement in the last few years in the condition of the streets. In the Cowichan Agency in 1915, the epidemic of influenza occurred during the winter and through the bad housing accommodation, several of the older people died. A very heavy snow fall during the months of January and February of that year wrecked a number of the old houses, and the Indians with the memory of the recent deaths so fresh in their minds were careful to replace these old houses with modern frame dwellings. They too have some regard for sanitary requirements believing that they may be able better to resist disease by having such and as the villages are nearly all situated beside salt water or on the bank of some river, they take advantage of the good drainage afforded. The present chief in 1916 introduced laws regarding this matter into his Council.

The Indians of the Kwakiutl Nation live in 15 principal villages. Only a small percentage of the buildings in this agency are modern and comfortable. Most of the houses are large barnlike shacks built of split cedar boards/
boards and heated and lighted by a large bonfire in the centre. These buildings have only earth for the floor. The smoke finds its way out partly through a hole left in the centre of the roof and partly through the crevices of the walls.

Fully 70% of these Indians after reaching middle age have eye troubles seriously affecting the sight and it is thought that the continued living in the smoke affects the eyes.

These Indians unlike the Salish are naturally clean in their own person.

Conditions at Stuart Lake are depressing. The dwellings are mostly the one or two roomed log cabin type of house and here the Indians are being persuaded to white-wash the insides of their dwellings at least once a year.

It is in the Northern and remote parts of the province where the Indian must still depend on hunting and trapping for his livelihood that there is still much regrettable evidence on the reserve of the crude civilization of former times. It is most difficult to make the Indian realize the necessity of continual cleanliness of the home or body. The government, the Missionary, and the Educationist are making every effort to educate the Indian in this respect. Quarantine for the more contagious diseases is strictly and
successfully enforced and where possible other sanitary precautions are being taken. The Indians have long acquiesced in the matter of systematic vaccination.

On the occasion of visits of any government official, the village is inspected and the Indians are advised to clean up their premises and to throw all offal into the sea and the government has seen that all the water supplies of the villages are pure and wholesome.

One great step forward has been made since practically all the Indians realize the close association of sanitation and health but further education is required in the matter.
Population of British Columbia.

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1900: Incr. 201 221 | 410 443 | 282 312 | 802 916
1921: Decr. 12 8

(2) W.H. Collison "In the Wake of the War Canoe." Page 181.


(5) " " " " " " 148.


(8) W.H. Collison. "In the Wake of the War Canoe". pp. 103-104.
Typical Coast Salish Canoes.

Dene Birch bark Canoes.
CANOES. Though the Haida have been chiefly noted because of their warlike nature, yet it must not be forgotten that they have even excelled as sea hunters. Whether for hunting or fighting they found they required the same outfit, viz.—a good canoe with bows and arrows, spears, clubs, harpoons and gaff-hooks, with which they could either attack an enemy or kill a whale.

It was their industry and ability in the construction and preparation of their powerful canoes, which enabled them to prosecute successfully both their fighting and hunting expeditions.

The Haida canoes are dug out of cedar logs and are sometimes 60 feet long, 6½ feet wide, and 4½ feet deep, accommodating a hundred men. The prow and stern are raised and often gracefully curved like a swan's neck, with a monster's head at the extremity. Boats of the better class, have their exteriors carved and painted with the gunwale inlaid in some cases with otter teeth. Each canoe is made of a single log except the raised extremities of the larger boats.

Some of the canoes are large, some are medium size and some small, ranging from 60 feet to 20. The largest are for ocean travelling and freight, and resemble the old/
old war canoes, whilst those of medium size are used for hunting.

The development of the canoe was gradual. At first it had a square bow, and as that part under the prow was only two or three inches in thickness and it was found that the wind and water held it so that it was difficult to steer, they cut a large oval segment out of the thin piece. Ultimately this part was given up altogether and the canoe assumed its present outline.

The Haidas were not the only canoe builders on the Coast as the BELLA BELLA Indians and also those on the West Coast of Vancouver Island turned out excellent canoes.

But those of the Bella Bella were wider in the beam and shallower, and in consequence were not such a good sea going craft, whereas the canoes of the West Coast Indians were much heavier in their build and lacked the graceful outlines of the Haida Canoe.

The canoes are impelled rapidly and safely over the often rough waters of the Coast inlets, by shovel-shaped paddles and when on shore are piled up and covered with mats for protection against the rays of the sun.

In hunting there are usually three Indians to each canoe, the steersman, the sailsman, and the marksman, which/
which last is seated towards the bough. For this post the best shot is often selected.

Every Indian is now armed with the modern repeating rifle and although it may be considered advantageous to be thus armed, the Indians assert they were far more successful in the past when armed with bow and spear. But then the channels and inlets abounded with the sea otter and the fur seal, whereas now they are only to be found far from the shores in the open ocean and in very limited numbers.

It is to be regretted that no provision has been made to preserve a sufficient supply of the best red cedar timber to enable the Haidas to continue their canoe building. In a few years this industry will have passed away and one of the most interesting features of Indian life will have been forgotten.

Not many years ago, a large war canoe was found in the forest of Graham Island (the North Island of the Queen Charlotte group) - almost complete, with stone adzes, hammers and chisels as left in it. It was concluded by the Haidas who found it that it was being constructed when the first great small-pox epidemic visited the Island and all the workmen had perished.

The stumps of some trees may still be pointed out which bear the unmistakable marks of having been cut down.
down with the stone axe of the past.

Nootka boats were dug out each from a single pine tree and were made of all sizes from ten to fifty feet long, the largest accommodating 40 or 50 men.

Selecting a proper tree in the forest, the aboriginal Nootka felled it with a sort of chisel of flint or elk horn, three by six inches, fastened in a wooden handle and struck by a smooth stone mallet. Then the log was split with wooden wedges and the better piece being selected, it was hollowed out with the aforesaid chisel, a mussel-shell adze and a bird's bone gimlet worked between the hands. Sometimes, but not always, fire was used as an assistant. The exterior was fashioned with the same tools.

The boat was widest in the middle, tapered towards each end and was strengthened by light cross pieces extending from side to side, which being inserted after the boat was soaked in hot water, modified and improved the original form.

The bow was long and pointed, the stern square cut or lightly rounded, both ends were raised higher than the middle by separate pieces of wood, painted with figures of birds or beasts, the head on the bow and the tail on the stern.

The inside was painted red, the outside slightly burned.
Haida Handiwork.
The upper horizontal club was carved by a Haida from a whale's jawbone.
That beneath was made by a Niska Indian from an elks horn.
Clubs and double headed daggers are on each side.

Old Style.  New Style.
Haida Canoes.

Haida Canoe in the making.
burned was rubbed smooth and black and for the whale fishery was ornamented along the gunwales with a row of small shells or seal teeth, but for purposes of war it was painted with figures in white.

Paddles were neatly made of hardwood about 5½ feet long with a leaf shape blade of two feet, sharp at the end and used as a weapon in canoe fighting. A cross piece was sometimes added to the handle like the top of a crutch. The boatmen kept time to the stroke of the paddle with their songs.

Exactly the same canoe is made to-day, only with improved implements. Since the coming of Europeans, sails have been added to the native boats and other foreign features imitated.

The canoes have no seats. "The rowers generally sit on their hams but sometimes they make use of a kind of small stool". (1).

"The largest canoes are used for sleeping and eating, being dry and more comfortable than the houses". (2)

"They make canoes for sale to other tribes. The baling dish of the canoe is always one shape - the shape of the gable roof of a cottage." (3).

The Haida not only turned out larger canoes than the Nootka but they were also much more ornamented.

The/
The Haida canoes were furnished with seats fastened to the sides of the canoes with thongs of cedar bark and supported by a piece of wood which was carried on either side from bow to stern and was polished and painted. On each of these, two rowers were seated, one at either end so that a canoe of six seats would accommodate twelve rowers, who with their paddles could propel their craft through the waters faster than a motor boat.

SALISH. The canoe of the Coast and Delta SALISH differed almost entirely in make, and absolutely so in material, from those in use in the Interior. There the canoe was a roughly made dug-out, fashioned from the trunk of the cotton wood tree or else one made of a single piece of bark stripped from the tree in lengths of about 15 feet and turned inside out to make the propulsion through the water easier. The bark commonly employed is a tough leathery pine bark. This is set about a frame work of cedar and sewn with strong wood fibres or with strips of cherry bark.

The most striking and characteristic feature of these canoes is their snouty ram-like extremities which run to a point under the water, like the 'ram' of a modern warship.

These/
These canoes are not strictly speaking Salish vessels. They have been borrowed from the neighboring tribes among whom they seem to have originated.

In addition to these bark canoes and dug-outs, the ordinary vessel of the Interior Tribes of British Columbia, a hastily made skin or hide canoe, was occasionally used by hunters for crossing rivers or narrow lakes. The skin or hide of some large animal was wrapped about a slight frame work of wood which was discarded as soon as the transit was effected.

The typical canoes of the Coastal and Delta Salish are technically speaking "dug-outs". Their buoyancy, their graceful outlines and finish, their oftentimes great dimensions and carrying capacity, place them in a class by themselves.

It may be of interest to give here an account of the method of manufacturing these canoes. The Salish are typical builders and what is said of them applies in the main to other nations as well.

A suitable cedar tree is felled and cut to the required length. In pretrading days this was effected by means of the chisel somewhat after the manner in which the beaver fells and cuts up trees, and it is quite likely that the natives received their first suggestion as to/
to the felling of trees from these animals.

By means of the chisel and their stone hammers, two circular and parallel incisions are made in the trunk about nine or ten inches apart and the wood between these is often prised or picked out piece by piece, the incisions being deepened as the work proceeds. This method of felling timber is necessarily slow and tedious but time is rarely of great moment to the Indian, and in due course they topple over the biggest trees in this way. When down, the piece for the canoe is cut from the trunk in the same manner or is burnt off.

The log is now barked and faced on one of its sides after which it is hollowed out by means of fires and adzes. The same agency is used to shape the ends of the log. However it may be shaped and hollowed, it is always finished off with the adze. This of course is now universally of steel, an old file being not uncommonly ground down for this purpose, but the shape of the old stone tool is everywhere retained. This, with the exception of the axe, is the only tool employed in the construction of the canoe.

The thickness of the shell varies with the size of the vessel, the smaller canoes being about an inch, the larger ones nearly two inches thick. The canoe maker judges/
judges the thickness by feeling alone. He places the tips of his fingers against the wood, one hand inside, the other out, and by this means he will regulate the thickness of the sides and bottoms with a nicety that approaches absolute uniformity.

In shaping the canoe in the rough the builder gives it a very different outline from what it will eventually have. A distinct longitudinal concavity is given to the bottom and a corresponding convexity to the top, in other words when the canoe is hollowed out the bottom will belly upwards at the centre and the gunwales will have the same upward sweep at this point. It is here that the skill and experience of the canoemaker comes in; this form is given to it to allow for the spreading - almost all their canoes being spread or broadened out after being hollowed.

It is not at all uncommon to give a spread of two feet to a canoe cut from a three foot log. That is to say that a canoe with a beam of five feet will be constructed from a log three feet in width. This spreading is effected by means of fire and hot water. When the shell is ready for the operation, fires of smokeless embers are kindled all around the outside of it at such a distance from the wood as will heat it without unduly scorching it. The inside is then filled with water which/
which is brought to the boil by heating stones. This "plims" and softens the fibre of the wood and allows of the expanding and stretching of the sides to the desired width. When this result is obtained, fixed narrow thwarts are fastened to the side by wooden pegs to keep them in proper condition. When the wood cools, the sides become rigid and maintain the shape given to them in spreading, without trouble. In the larger canoes, the bow and stern pieces rise some feet above the level of the gunwales and are added after the canoe is shaped and spread. They are skilfully morticed into the gunwales and secured with wooden pegs or else sewn on. Nowadays they are mostly nailed.

There are several styles and varieties of canoes amongst the Salish. Formerly each division had its own style of canoe. The Delta and Coastal tribes generally used the "Chinook" style, so called "Chinook" because it is said to have been borrowed from the Chinook Indians of the Columbia River.

It is characterised by its peculiar prow and invariably takes the form of the head and neck of some wolf-like animal. These canoes which are from 30 to 50 feet long, will carry from sixty to seventy people, some of the larger ones even a hundred, and an incredible quantity/
quantity of freight.

All the canoes of this region are propelled by means of paddles and sails, though it is doubtful if the latter were used in pre-trading times. In the earlier days, in the larger canoes, the paddlers used to stand to paddle but invariably knelt in the smaller ones. Now kneeling is the common attitude. The paddles are all single bladed and vary somewhat in form, make and material in the different tribes.

Most of the Western DENE now use the cottonwood dug-out but according to the traditions of the Carrier tribes, the birch bark canoe was formerly the commonest water conveyance employed by them. There is no material among the North American Indians which has been more widely employed for water service than the bark of the birch tree. It is easy to procure, handy and light, making a vessel which is readily and quickly transported from one body of water to another without waste of time or effort, thus rendering it possible to traverse with the same vessel vast stretches of the country wholly by means of its water ways.

The principal weapon in both war and chase, but particularly the chase, was the Bow AND ARROW. It was in use everywhere amongst these Indians, the material, style/
On the Nass River

Canoes, with gasoline engines installed, at anchor.
Returning Home from Northern Canneries.

Ashtovat.
style and dimensions varying with each. The bow was usually made of the wood of the yew but this did not grow in every district and other woods had to be substituted for it where it could not be procured. Among these were the hemlock, the dogwood, the willow, the mountain maple and the juniper. Among many of the Interior tribes, the last mentioned (juniper) was the chief material employed.

The length of the bows varied from two and a half feet to five and a half and even six feet. Those of the Coast Salish were the shortest, seldom exceeding three feet in length. The average length of those of the Interior hunting tribes was about four and a half or five feet. The longest bows were found among the Northern Dene, the regular size of whose hunting bows was about six feet.

In all the divisions of both stocks, the natural strength and elasticity of the length of the bow was augmented by the application of sinew or cherry bark or snake skins, mostly the first named.

These materials were glued to the wood.

The method of handling the bow differed from tribe to tribe, some tribes holding it perpendicularly and some horizontally. Among the regular hunting tribes, the bow was frequently highly ornamented. Great care was taken/
taken in the preparation of the bow string so that it would not be seriously affected by changes in the weather. Among the hunting tribes, delicate threads of sinew were twisted together and afterwards rubbed with glue obtained from the sound of the sturgeon. The gum of the black pine was also extensively used for this purpose where the sturgeon glue was not procurable.

Among some of the tribes, one end of the bow carried a stone point similar to those used on the spears. It could thus be utilized as a thrusting weapon if the hunter were hard pressed and had no spear at hand.

The arrows were customarily feathered, the feathering consisting of three split feathers applied spirally, or two whole feathers laid on flat. Sometimes one method, and sometimes the other, was employed in the same tribe.

The points of the arrows of the Interior Salish tribes were commonly of stone, but bone and steel points were not uncommon among the Coastal tribes. Iron and copper were also known and employed as arrow points before the time of Vancouver or MacKenzie. The earliest source of these materials was probably the Russian traders of North Eastern Asia and Alaska.

Both arrow and spear points were of many styles and varieties. Long shaped points were those commonly used for/
for hunting purposes, barbed points being preferred for warfare.

The commonest material employed over a very large area, in the manufacture of arrows and spear points, was a dark fine-grained stone known to geologists as "augite-porphyrite". In addition to this, arrow tips were also made from agite, rock crystal, quartz and many other crystalline rocks and also from slate.

The arrows were commonly carried in quivers of dressed hide which were often elaborately decorated. In some divisions, notably among the interior tribes, the arrow points were poisoned, various substances being used for this purpose, some vegetable and some animal. The commonest and most deadly was the poison taken from the fangs of the rattle-snake.

Besides the bow and arrow for offensive purposes, they had knives, daggers, spears, war clubs and tomahawks. For protective purposes in warfare they employed shields and coat armour.

The shields varied in form and material from tribe to tribe. Among the Interior Salish they were commonly made of wood which was afterwards covered with hide. Sometimes they consisted of several thicknesses of hide only. The hides most commonly used for this purpose were those of the elk, buffalo or bear. In some centres, long/
long rectangular shields, made from single or double sheets of stiff elk hide were employed. These were often from four to five feet in length and from three to four feet in width, large enough to cover nearly the whole body. They were fastened to the neck with a thong and thumb loops were attached to their sides by means of which the wearer could move them to cover any exposed part of the body.

Among the Dene tribes, the shield was commonly made of closely woven wicker work and was of an ovaloid form.

The coat armour was everywhere employed and varied in form and style in almost every centre.

There were two ways in which this was most commonly made. One of these was a slatted cuirass or corset which was formed of a series of narrow slats of wood set side by side vertically and fastened in place by interlacings of raw hide. It went all around the body like a shirt and reached from the chin to the hips, being hung from the shoulders with straps. The other was a kind of shirt of double or treble elk hide fastened at the side with thongs and having a heavy fringe at the bottom.

Another kind of armour, less common than that just described, was the long elk hide tunic which reached to, or even below, the knees, and was sleeved to the elbow.

The/
The Thompsons who sometimes used these commonly soaked them in water just before wearing them, the effect of which was to make them arrow-proof; but a heavy offset to this advantage was their excessive weight and cumber-someness and they were consequently not largely employed. Among the Dene this kind of armour was made with moose skin and in order to make it invulnerable to the arrow, it was prepared in a more elaborate way than among the Thompsons. It was first soaked in water and then repeatedly rubbed on the sandy shore of a stream or lake and dried with the sand and small pebbles sticking to it. After this it was thickly coated with a strong tenacious glue made from certain parts of the sturgeon. This process was repeated several times till the hide was perfectly arrow-proof.

Both shields and armour were commonly decorated with geometrical, animal and other designs in paint or with dyed feathers and quills.

The spears used by all the tribes were for thrusting and not for casting. For hunting in the forest, short handled spears were preferred. They were almost invariably stone tipped.

The war clubs were made in various styles of bone or wood or stone, the last named being the commonest material.
The tomahawks were of two kinds, one made from stone and the other from the pointed horn of the young deer. The latter was a very deadly weapon at close quarters. The English equivalent of its native name is "skull cracker" and nothing was ever more appropriately named. A single tap on the head from one of these instruments killed a man at once, leaving a hole in his skull as neatly cut as if it had been taken out with a punch. Many skulls have been found with holes of this kind in their crowns.

The implements used in the capture of fish have already been discussed.

All the hunting tribes were skillful in the use of snares of which several kinds were employed. There was the "fall-trap" made of logs for the larger game such as the bear, etc; the "moose-trap"; the "spring trap"; and the "pit trap". This last was employed for all kinds of game and consisted of a simple hole in the ground with sloping sides, the top of which was covered with brush wood, branches, leaves and dirt to mislead the game. The hole was generally dug in some frequented water trail.

Among the tools used in making the canoes were mentioned the stone hammers, axes and adzes.

Of the first of these, (the hammer), at least three distinct/
distinct forms or kinds are found among the native races of British Columbia. One of these is characteristic of the Salish tribes. They are pestle-shaped and by the uninformed are commonly regarded as pestles. Occasionally they may be employed by the old people to crush or pound tough meat or bones of fish when other foods are scarce; but as they have no grain and use no mortars, they were not used as pestles in the commonly accepted sense of the work.

The very large ones are generally rougher in make than the others and are employed only for driving stakes. It is with these hammers, together with the help of their horn or maple wedges, that they split out the cedar planks for their large permanent dwellings. With these also they drive the chisels with which they fell the trees for their canoes.

They strike with the base or thick end of the hammer. The material from which they are commonly made is some kind of hard, close grained, crystalline rock. For the larger ones, a block of granite is not unusually employed. Some are roughly made, others are beautifully formed and polished. The latter are highly valued and pass from father to son from generation to generation as treasured heirlooms. To make a new hammer is a lengthy and tedious/
tedious process. A stone, generally a water worn boulder, is chosen, the natural outlines of which conform as much as possible to the shape of the finished tool. This is pecked into the desired form with another stone; the rough surface is then rubbed down with sandstone, after which it is smoothed with rushes, the final polish being put on with the naked hand. The old Indians will sit around the camp fires during the evenings and rub away at these tools with their naked palms for hours at a stretch. To give the high polish, some of them have taken two or three generations of "rubbers", hence the great value set upon them by their owners. Some tribes were formerly more noted than others for the numbers and excellence of their stone tools and implements. In this respect the Thompsons of the Interior were prominent among all the Salish. This was partly because they were in many ways the most advanced in general culture of all the Salish tribes, and partly because they possessed an abundance of the best kind of tool making stones. All along the old benches of the Fraser, boulders of all kinds and sizes were easily found, among which were jadite and nephrite of varying colour and purity. It was from this region that most of the jade tools, found among the neighboring tribes, came; and in particular the adzes, axes/
axes and chisels. These were cut from the boulder in small slabs or slices by means of gritstones, files and water, or by crystals of which the agate was the commonest employed. The cutting was ordinarily done from both sides of the stone, the pieces being broken off by a sharp blow when the two approached each other. The rough edge of the fracture was then ground down smooth upon a sandstone and the tool otherwise shaped and sharpened by means of the same agency. In using the chisel, to prevent it from turning under the blows of the hammer, the butt end of it was commonly encased in a bone socket, this, and not the stone, receiving the direct impact of the hammer.

Hooks were made of two pieces of wood or bone fastened together at an obtuse angle; boxes, troughs and household dishes were made of wood, ladles and spoons of wood, horn and bone. Candle fish mounted with a wick of bark or pitch, served as lamps; drinking vessels and pipes were carved with great skill from stone. The Haidas were noted for their skill in the construction of their various instruments, particularly for sculpture in stone and ivory in which they are said to excel all the other tribes of Northern America.

The HAIDA weapons were spears from five to six feet long, some with a moveable head or barb which came off when/
when the seal or whale was struck; bows and arrows; hatchets of bone, horn or iron with which their planks were made; and daggers. Both spears and arrows were frequently pointed with iron, which whether it found its way across the continent from Hudson Bay Settlements or down the Coast from the Russians or was obtained from wrecked vessels, was certainly used in British Columbia for various purposes before the coming of the whites. Bows were made of cedar with sinew glued along one side. Poole states that before the introduction of firearms, the Queen Charlotte Islanders had no weapon save a club, but this is doubtful.

The NOOTKAS met their foes with lances and arrows pointed with shell, slate, flint or bone. The Native bow, like the canoe and paddle, was beautifully formed. It was generally made of yew or crab apple wood and was three and a half feet long with about two inches from each end turned sharply backwards from the string. The string was a piece of dried seal gut, deer sinew or twisted bark. The arrows were about 30 inches long and were made of pine or cedar, tipped with six inches of serrated bone or with unbarbed bone or iron prongs. These were the oldest weapons and later were displaced by firearms, metallic daggers and tomahawks.

They/
They had chests and boxes, buckets, cups, and eating troughs, all of wood, either dug out or pinned together, baskets of twigs and bags of matting, all neatly made, and many of the articles were painted or carved or ornamented with shell work.

The Nootka implements differed little from those of the Salish.

The pipe can hardly be classified as an implement of chase or war, but as it always had a place in all peace ceremonies, it may be mentioned here. There were two distinct forms of pipes in use by the Indians, one of which resembles an ordinary pipe and is clearly borrowed from the whites. The other is distinctly native and resembles a huge cigar holder. Pipes of this latter shape are now rare, being found only in ancient graves. The tobacco used seems to have been a real tobacco, for it is well known locally that this plant is found native in the Okanagans.

In other countries where the tobacco plant was not found, other vegetable substances were utilized, the commonest of which was the bark of certain willows. Even now some of the old Indians mix this with the tobaccos which they obtain from the trading posts or stores, preferring this mixture to pure tobacco.
REFERENCES.


Salish Peckles Hammers and Bowls.
HANDIWORK OF THE KWAKIUTL NOOTKA.
ARTS AND CRAFTS.

In the sections on Food, Implements and Dwellings of the Indians, much has been included which might well find a fitting place in this Section on Arts and Crafts, but which will not be repeated here.

Many regions in Canada are completely innocent of carving or modelling in the round, everything being flat. But the Haidas not only have been famed as hunters and canoe builders but they have also acquired a reputation as skilful artists in carving, not only in wood and stone but also in ivory, gold, and silver. Most of the stone pipes inlaid with fragments of Holiotis, or pearl shells, so common in ethnological collections, were their handiwork. The slate quarry from which the stone was obtained was situated on the North Island.

Probably their early efforts were confined to wood, as indicated by their totem poles, some of which are elaborately carved though crumbling to dust from age.

The intensive development of carving at the centre has had a noticeabe effect upon decoration. Boaz has shown how the very curious relief carving upon the outsides of wooden vessels results from the attempts to carry/
carry around the contour of animals or men in such a way that the whole may stand for a realistic model. Naturally when flat surfaces are treated, the whole figure is spread out upon it. Sometimes these designs are merely laid out in color and no doubt though more conventionalized thereby, they are still the undeniable offspring of carving.

All this is a feature of the groups of tribes - the Haidas, the Tsimshian and the Kwakiult-Nootka, where the art is more intensive and where it is in part at least the expression of a very complex system of beliefs concerning family ancestors.

North from the Tlingit and south from the Nootka of Vancouver Island, we find many vessels, carved in the life forms of animals but practically no trace of the relief ornamentation just mentioned, a fact which strongly suggests that the feature is purely a development of the more intense art at the centre and that it is therefore "relatively recent".

The stone weapons and tools of the Haida and also war clubs formed from the bones of the whale, all prove that the art of designing and carving has long been practised among them. The jaw bone of a whale was used as a war club, and often carved to represent a fish.

The/
Haida Carving.
Mortuary Columns or Totems.

Carved Haida Tomb.
The clubs belonging to chiefs were elaborately ornamented. Sproat found that the Tsimshian made figures in stone, dressed like Englishmen, plates and other utensils of civilization, ornamented pipe stems and heads, models of houses, stone flutes adorned with well carved figures of animals and these articles are remarkable for their symmetry of form and their excessively elaborated and intricate figures which are carved upon them.

"Many of their slate carvings are very good indeed, and their designs are most curious".

Poole has expressly described various beautifully wrought articles of the Skidegate design and make, and amongst them some flutes manufactured from an unctuous blue slate. The two ends were inlaid with lead, giving the idea of a fine silver mounting. Two of the keys perfectly represented frogs in a sitting posture, the eyes being picked out with burnished lead.

Their imitative skill is as noticeable as their dexterity in carving. "With respect for carving and a faculty for imitation the Queen Charlotte Islanders are equal to the most ingenious of the Polynesian Tribes. Like the Chinese they imitate anything that is given them to do, so that if you give them a cracked gun-stock to copy, /
copy, they will in their manufacture, repeat the blemish.\footnote{5}

Mackenzie\footnote{6} writes at length upon the sculpture of the Nootka Indians. "The supporting posts of their probable temples were carved into human figures and all painted red and black, but the sculpture of these people is superior to their painting."

The chief efforts of the Nootka were made on the posts of their houses and the wooden masks which they wore in war and some of their dances, but all implements were more or less carved according to the artist's fancy. They not only observed with great exactness, the general character of their faces, but finished the most minute parts with a degree of accuracy in proportion and neatness in execution.

They sometimes painted fishing and hunting scenes but generally their models existed only in imagination and their works consequently assume unintelligible forms. There seems to be no evidence that their carved images and complicated paintings were in any sense intended as idols or hieroglyphics.

A rude system of heraldry prevailed among them by which some animal was adopted as a family crest and its figure was painted or embroidered on canoes, paddles or blankets.

In/
In decorative art the Salish cannot be said to hold a high place compared with the other nations, their only superior work being the modelling of their canoes and the weaving of ornamental baskets.

To-day the Haidas of Skidegate possess a deposit of blackstone in the vicinity of their village, from which they obtain material to keep them engaged during their spare moments in designing and carving a variety of articles for sale.

Miniature totem poles, for mantel-piece ornaments, of various sizes, large and small dishes, sometimes inlaid with abalone and ornamented with rows of teeth of marine animals and fishes, and many other designs are carved and then smoothed by rubbing them with the dried skin of the shark which is superior to sand paper. During the winter the Indians of this tribe continue to prepare a stock of ornamental articles from this black stone which takes a fine polish and brings them a good sum of money when sold at various centres.

The possession of the stone is a treasure to them as it tends to preserve and improve the art of carving and designing amongst them, besides bringing in a revenue.

Just as the Coast tribes were noted for their carving, so did the Salish and Interior Tribes excel in/
in the weaving of cloth and the making of baskets and matting.

Cook saw amongst these tribes woven cloths of all degrees of fineness, made by hand and worked in figures, but could not ascertain the method of manufacture. There were no looms in the early days. The implement used by the Indians and especially by the Teets differed in no apparent respect from the rude loom of the days of the Pharaohs. Finger weaving was common, the Chilcat blanket being a unique example of this kind of manufacture. The blanket was woven downwards from wool manufactured from the hair of the Rocky Mountain Goat but more commonly from the hair of dogs of a peculiar breed. They were shorn each year and the long white hair obtained, mixed with fine hemp and cedar, made the best cloth. Vancouver calls attention to the large number of dogs the Coast Salish kept and bred for this purpose. He writes thus:- "The dogs were numerous and much resembled those of Pomerania though in general somewhat larger. They were all shorn close to the skin as sheep are in England and so compact were their fleeces that large portions could be lifted up by a corner without causing any separation. They were composed of a mixture of a coarse kind of wool with a very fine long hair capable of being spun into yarn".

This/
The Chilcot Blanket,
With Chief's Headress above.

Bird Totem.
This description of the native dogs is interesting from the fact that this fleece bearing animal has entirely disappeared and is no longer bred by the modern Indian.

Of bark fibres there are a respectable lot, willow bark and cedar fibres being the most common.

There is a peculiar type of sagebrush bark weaving among the Salish in which parallel twisted strands are joined by widely separated rows of twined thread in pairs.

One other class of fibre not generally recognized by us is sinew or tendon, universally used by the Nations.

Wherever cedar is found, neat baskets, hats and water-tight vessels are made of fine cedar roots. They boil the cedar roots on the rocks until it becomes pliable to be worked by the hand. It is then beaten with sticks and after they pick the fibres apart into threads. These are then spun with a rude kind of distaff or spindle and woven on a frame into the material for blankets, robes and mats, or twisted by the men into strong and even cord. The warp is often of a different material; sinew of whale or dried kelp thread is commonly used.

Strips of otter skin, bird feathers and other materials are also woven into the blankets.

Amongst the Nootks, matting and coarser kinds of cloths were made of rushes and of pine or of cedar bark.
The threads once obtained were twisted into cords between the hand and thigh. These cords were then hung to a horizontal beam and knotted with finer threads at regular intervals to form the cloth. Threads of the same bark was used with a sharpened twig for a needle.

The Chinook matting was made in a slightly different way. It was made by the women by placing side by side common bulrushes or flags, about three feet long, tying the ends, and passing strings of twisted rushes through the whole length, sometimes 20 or 30 feet, about 4 inches apart, by means of a bone needle.

By dyeing the different materials of the blankets and mats, regular colored patterns were produced, each tribe having had, it is said, a peculiar pattern by which its matting could be distinguished.

The weaving of bands containing quills or moosehair is a feature of the Dene region. The design upon quill bands and mats are almost without exception, geometric, while bags show two forms - purely textile geometric and realistic animal figures.

The designs employed for basketry are all the more or less conventionalized, the motive so far as discernible showing a strong tendency toward the development of geometrical forms.

This,
This, when the nature of the material and the decorative field, and the manner in which the designs are executed are considered, is only what one might expect. It is not easy at all times to discover what the designs are intended to represent, so conventionalized are they.

The designs are not intended to be merely decorative. The primary purpose of all designs or representations among primitive people is not decorative in the sense in which we use the term, but symbolical.

Designs painted by the Indians upon their persons were symbolical of certain ideas or represented their totems or tutelary spirits. It was customary also to paint or carve figures of these latter upon many of their personal belongings, especially upon their weapons and utensils and there is no doubt that the figures or designs on their baskets were primarily of the same nature.

The figures are worked into the baskets by a process which among American students has been called "imbrication". To imbricate is to overlap and "overlapping" is the term which exactly expresses the technique of these basketry designs, the figures being wrought by overlapping or imbricating colored straws or strips of bark upon the whip stitching or overcasting which binds the foundation splints/
splints together. This method of ornamentation is of extremely limited distribution, being confined to one or two small areas on the north Pacific slope and not known to be practised elsewhere in any part of the world.

To effect the pattern the straw is changed at certain points according to the requirements of the figures chosen.

The colors employed in the designs are invariably yellow, red, and black. The yellow is the natural color of the grass, the black is produced by dyeing wild cherry or birch bark and the red is cherry bark in its natural state. The dyeing is effected in several ways, the commonest of which is to bury the bark in black mud or peaty ground for a while.

Amongst the Salish, woven baskets served the people for dishes and were used for every purpose. The best baskets were of silk grass or fine fibre, of a conical form, woven in colors so closely as to hold liquids and with a capacity of from one to six gallons. Coarse baskets were made of roots and rushes, rude spoons of ashwood and circular mats did duty as plates.

Basketry falls naturally under two heads according to the methods employed in its construction, viz.- WOVEN BASKETRY and SEWN basketry. One is built by means of/
of warp and weft on the same principle as textile fabrics, the other by means of coils which are simply interlocked like chainwork, or if composed of cores are sewn together.

The splint-foundation kind of sewn basketry in British Columbia is characteristic of the Salish tribes of Lower Fraser embracing the Thompson, the Lillooet and Halkomelem tribes. It is also found among the Chilcotin Dene but is truly characteristic only of the Lower Fraser area.

The distinguishing feature of the splint-foundation is the manner in which the foundation is built up. The coils consist of a number of strands or splints bunched completely together, the stitching passing through the upper edges of the foundation. The grass coil foundation also used by certain of the Coastal Salish, differs in that its foundation is composed of bunches of grass or rush stems and such like soft substances. These are the two principles but by no means the only two styles of baskets made.

When coiled basketry is made, especially with the splint-foundation, it will hold liquids without difficulty. In some places where basket ware took the place and filled the use of earthenware, the natives lined the insides/
insides of their baskets with pitch, gum or some other adhesive and coating substance, but the Salish coiled basketry was so skilfully made that it would hold water without any assistance of this kind.

The roots of many kinds of plants or trees, whole or split into threads, are used in the stitching. That employed in making the finest of the Salish coiled basketry was taken from the smaller trailing roots of the cedar, but roots of the older and bigger trees are generally desired because of the superior toughness of their fibres. They are dug and gathered by the women who are everywhere the basketmakers of the Salish and Dene. They bring them home in bundles on their backs, a score or two at a time. The roots vary in length from one yard to three or four - the longer the better, and in thickness they are about the size of the base of one's thumb.

If the basketmaker does not intend to commence operations at once, the rootlets are buried in damp ground or placed in water to prevent them from dying out and becoming brittle. When ready to begin, she takes one rootlet, splits one end of it open, takes the part nearest her in the teeth, holds the other with her left hand and with a knife or some other similar instrument in/
Basketry Designs

Lower Thompson. "Flying geese" pattern.

Lillooet Tribe. Design representing a net with deer, man, dogs, flies, etc., in interspaces.

Lower Thompson. Head with open mouth and teeth hair along back of head.

Lower Thompson. "Grouse track" pattern.
in her hand, continues the splitting by levering the parts asunder. Treated in this way the rootlet splits into two fairly equal halves. Each half is divided in the same way again and so on until the size required is attained.

Owing to the cross in the grain in some of the rootlets, a good many pieces split out unevenly. These are either pared down to the required size or are set aside for building up the core or foundation so both the foundation and the stitching are made of the same material.

As each splint or strand is made, it is doubled up, tied into a kind of loose knot and thrown into a pail of water until it is needed.

When a sufficient number of splints have been made, both for thread and foundation work, the woman begins her baskets.

This she may do in two ways according to the use to which she intends to put it. If it is to be a water or cooking basket, she takes three or four or more of the foundation splints, puts them together, inserts the end of a thread strand among them and then winds the latter tightly around the whole for an inch or two from the end, according to the size and shape of the basket. She then doubles/
doubles the foundation sharply back upon itself and sews it by overstitching the wound part; this she does by piercing it with her awl and thrusting through the hold just made the end of her binding or sewing strand, which she pulls home tight and repeats the process, carrying the foundation round and round till the bottom of the basket is of the required dimensions when, instead of sewing on the next round of splints to the outer edge of the last as she has done hitherto, she sews it to the top of it and thus continues to carry the foundation work up in spirals till the full height of the basket is attained, when the foundation splints are gradually lessened in number and size, till the vanishing point is reached and the basket is completed.

The bottoms of most of the baskets now made and many of those formerly constructed, which were not intended to hold liquids, were made in a somewhat different manner from that just described. Instead of sewn coiled work, the bottom was made of wicker work, of the over and under kind that entirely covers and hides the warp which in these cases was composed of thin slats or strips of cedar wood, ranging in width from a quarter of an inch to a full inch, according to the size of the basket. A number of these of the desired length are taken and tied in parallel rows/
rows by means of two cross sticks. Between each, a space is left about the thickness of the weft thread which is the same as that used for the overcasting. This is wattled or woven on the warp slats continuously back and forth in order that there may be no loose ends; each thread is passed over and under in alternate order and then pressed home against the last by the point of the awl. When this is completed the weft end is securely fastened or else used to overstitch, as far as it will go, the first foundation spiral of the sides of the basket which are built up in the manner already described, the first row of the foundation work being sewed on to the edges of the bottom which at this stage has the appearance of a wicker work plaque.

To give the bottom the ovaloid form which most have, the warp slats are trimmed to the desired shape before the weft strand is woven into them.

In making a basket the Salish basket worker may treat the surface of her work in several ways. She may leave it in its natural state, the uniformity and regularity of the overcasting being its only decoration, or she may work in by the imbricating process certain patterns or designs by means of strips of colored bark; she may as she frequently does, cover the whole outer surface with imbricated/
imbricated straw work, or again she may combine, as she
does in her best specimen of basketry, the last two
processes.

If it is her intention to cover the outer surface
of her basket with straw work, she prepares this before-
hand as she does her splints. She goes to the swamp
where the kind of grass she wants grows and cuts an
armful or two and brings it home. She does not use the
whole grass, only its stems. These she cuts off in
lengths of about twelve or fourteen inches, that is
all the best part of the stems, and ties them up in small
bundles which she hangs near the fire to be dried and
smoked or else she boils them. This gives them a silvery
glistening appearance, very similar to bright clean wheat
stems. They are next flattened and opened out into
ribbon like strands and in this condition are ready for
use. When she has finished the bottom of the basket
and is ready to begin the spirals of the sides, she
inserts one end of a straw, the smooth outer face down-
wards, under the first whip stitch that binds the side-
foundation to the bottom of the basket, then draws the
stitch tight and thus secures it. If she is working
from left to right as she generally does, the straw
now lies pointing to her left. She next raises it as
one/
Imbricated Basketry (Coil)

Woven Basketry and Matting
one does the leaf of a book and passes it to her right, over the face of the stitch she has just made, so that its polished outer side is upwards. At a point a little beyond the stitch, about where the middle of the next will fall, she doubles back the straw again to her left, sews in the next stitch and fastens down the double end of the straw under this. She then turns the straw back to her right again, over the face of the second stitch, one at a time, in this way, till the basket is completed and its whole surface is covered with the bright shining straw, which gives it a very pretty and attractive appearance.

Of WOVEN basketry, the Salish possess several varieties, specimens of which are found among all the divisions. But just as the coiled work is characteristic of the Lower Fraser tribes, so the woven work may be said to be characteristic of the Vancouver Island tribes.

The materials employed in the manufacture of this basketry are the inner bark of the cedar, split cedar branches, thin uniform strands of cedar wood, of which the checker work is mostly composed, and various swamp grasses, of which the bulrush is the commonest specimen.

Skins were dressed by first spreading them out, scraping off the flesh, and for some purposes the hair, with/
with a sharp piece of bone, stone or iron attached to a short handle and used like an adze. The skin was then smeared with the animals brains and rubbed or pounded by a very tedious process till it became soft and white. Some hides were previously soaked and bleached with white clay.

Nets seem to be of old origin as notched pebbles used as sinkers have been excavated everywhere.

There was practically no painting or decorative drawing upon bark done by the Indians of British Columbia, and the whole area is without pottery.
Indian Masks.
The eyes and lower jaws are movable and are cleverly manipulated by the wearer by means of strings.

Fish Mask.


3. Mayne, R.C. Four Years in British Columbia and Vancouver Island, p.278.

4. Poole, Francis. Queen Charlotte Islands, p.258.


MISSIONS. The earliest missionary entrance into British Columbia was made by the CATHOLICS in 1839.

In 1838 the secular priests, Demers and Blanchet (afterwards Archbishop) had arrived at Fort Vancouver, Washington, to minister to the employees of the Hudson Bay Company. In the next year an Indian mission was organized at Cowlitz with visiting stations along the shores of Puget Sound, and Father Demers made a tour of Upper Columbia, as far as the Okanagan in British Columbia, preaching, baptizing and giving instruction by means of a pictograph device of Father Blanchet's invention, known as the "Catholic Ladder". Copies of this ladder were carried to the more remote Indians and tribes by the visiting Indians and thus the way was prepared for further efforts.

A second journey over the same route was made by Father Demers in the next year and in 1841 he preached for the first time to a great gathering of the tribes on Lower Fraser River. In the following year (1842), by arrangement with the local Hudson Bay Company's officers, he accompanied the annual supply caravan on its return from Fort Vancouver on the Columbia, to the remote Northern parts. On this trip ascending the Columbia and/
ALKali Lake.

William Lake.
and passing over to the Fraser, he visited successively the Okanagan, Kamloops, Shuswap and Takulli or Carriers, before arriving at their destination at Fort St James on Stuart Lake. Return was made in the following Spring and descending the Fraser, he found that the Shuswap had already erected a Chapel.

In the meantime De Smet and the Jesuits had already arrived in the Columbia Region and between 1841 and 1844 had established a chain of Missions throughout the territory including three in British Columbia among the Kutenai, Shuswap and Okanagan. In 1841, there were seven chapels or Mission stations in British Columbia, the Northernmost being amongst the Carriers at Stuart Lake. In 1843 the first Hudson Bay Post had been established on Vancouver Island at Camosun, now Victoria, and the beginning of Missionary work among the Songish and Cowichan was made by the secular priest, Father John Bulduc, already well known among the Sound tribes who had for this reason been brought over by the officers in charge to assist in winning the goodwill of the Indian neighbors.

The Jesuit prosperity was short lived. Owing to difficulties of communication and pressing needs in other fields, it was found necessary to abandon the British Columbia Missions except for an occasional visiting priest, until/
until the work was regularly taken up by the Oblates in 1865, by the establishment of St Joseph Mission near William's Lake by the Reverend J.M. McGuckin - the first missionary to the Tsilkotin Tribe. Within the next few years he extended his ministrations to the remote Tekani and Skeena. In 1873 the Stuart Lake Mission was re-established by Fathers Lejacz and Blanchet, and in 1885 was placed in charge of Father A.G. Morice, Oblate, the distinguished author who had already mastered the Tsilkotin language in his three years abode with the tribe. Aside from his missionary labors proper, which continued until nine years ago, he is perhaps best known as the inventor of the Dene Syllabary, by means of which nearly all the Canadian Indians of the great Athapascan stock are now able to read and write in their own language. His other works include a Tsilkotin dictionary, a Carrier Grammar, numerous religious and miscellaneous translations, an Indian Journal, Scientific Papers, Notes on the Western Denes (1893) and a History of Northern Interior of British Columbia (1904).

Father J.M. Lejeune, - a friend of the writer who assisted in condensing the foregoing survey of Catholic Missions in British Columbia, is of the same order as Father Morice. He has been stationed among the Thompson River/
River and Shuswap Indians since 1880 and is also noted as the inventor of a successful shorthand system by means of which those and other cognate tribes are able to read in their own languages. He is also the author of a number of religious text-books in the same languages, and of a weekly Indian Journal known as the "Kamloops Wawa", all of which are printed on a copying press in his own stenographic characters.

Another distinguished veteran of the same order is Bishop Paul Darieu, who from 1854 to his death in 1905 laboured successively among the tribes of Washington, Vancouver Island, Fort Rupert in Kwakiutl territory and Fraser River.

EPISCOPAL WORK began in 1857 with the remarkable and successful missionary enterprise undertaken by Mr William Duncan among the Tsimshian at Metlakatla, first in British Columbia and later in Alaska.

The Tsimshian were at that time among the fiercest and most degraded savages of the North West Coast, slavery, human Sacrifice and cannibalism being features of their tribal system to which they were rapidly adding all the vices introduced by the most depraved white men from the Coasting vessels.

Moved by reports of their miserable condition, Mr/
Pemberton Meadows. (Salish)

Stuart Lake. Dene.
Mr. Duncan voluntarily resigned a remunerative position in England to offer himself as a worker in their behalf under the auspices of the London Church Missionary Society.

He arrived at Port Simpson in October 1857 and after some months spent in learning the language and making acquaintance with the tribe, then numbering 2,300, opened his first school in June 1858. By courage and devotion through danger and difficulty, he built up a civilized Christian body which in 1860 he colonized to the number of about 340 in a regular town established at Metlakatla, an abandoned village site about 16 miles south of Port Simpson.

By systematic improvement of every industrial opportunity for years, the town had grown to a prosperous self-supporting community of 1000 persons, when by reasons of difficulties with the local bishop, upheld by the Colonial Government, Mr. Duncan and his Indians were compelled in 1887 to abandon their town and improvements and seek protection under United States in Alaska where they formed a new settlement known as New Metlakatla on Anette Island, sixty miles north of their former home.

The Island, which is about forty miles long by about three miles wide, has been reserved by Congress for their use, and the work of improvement and education is now progressing/
progressing as before the removal.

The first Episcopal bishop for British Columbia and Vancouver Island was appointed in 1859.

In 1861, the Reverend John B. Good, sent out also by the London Society, arrived at Esquimalt to preach alike to whites and Indians. At a later period his work was transferred to the Indians of Thompson and Lower Fraser Rivers with head quarters at St Paul's Mission, Lytton.

He had translated a large part of the liturgy into the Thompson River (Ntlakyapamuk) language besides being the author of a grammatic sketch and other papers.

In 1865, Kincolith Mission was established among the Niska branch of the Tsimshian on Nass River by Reverend R.A. Doolan and some years later another one higher up on the same stream.

Kitwingach station on Skeena River was established about the same time.

In 1871, Reverend Charles M. Tate took up his residence with the Nanaimo on Vancouver Island, laboring afterwards with the Tsimshian, Bella Bella and Fraser River Tribes.

In 1876, Reverend W.H. Collison began work among the Haida at Masset on the North end of Queen Charlotte Islands and in 1878 Reverend A.J. Hall arrived among the Kwakiutl at Fort Rupert, Vancouver Island.
Other stations had in the meantime been established throughout the South part of the Province, chiefly under the auspices of the London Church Missionary Society.

The first METHODIST (Wesleyan work) for the Indians of British Columbia was begun in 1863 at Nanaimo, Vancouver Island, by the late Reverend Thomas Crosby, an uncle of the writer, who at once applied himself to the study of the language with such success that he was soon able to preach it. In 1874, he transferred his labor to the Tsimshian at Port Simpson on the border of Alaska, who had already been predisposed to Christianity by the work at Metlakatla and by visiting Indians from the south.

Other stations were established on Nass River in 1877 and at Kitemat in the Bella Bella Tribe.

Statistics show that the Methodist work had been particularly successful all along the North West Coast and in portions of Vancouver.

The PRESBYTERIAN CHURCH as a body never undertook work in British Columbia but isolated families have always striven to do what missionary work was near at hand, and some 500 Indians are officially credited to that denomination along the West Coast of Vancouver Island.
Bella Coola

with the Methodist Church in the background.
MORALS. It is only during the last twenty-five and more particularly the last ten years that progress has been made with the Indians. The years of former discouragement and toil have at last borne fruit.

One of the great problems today is the morals of the Indians. It seems impossible to awaken in them an appreciation of the need of chastity in their sex relations and the influence of the trader is not helping the missionary in this respect. Where the arm of the law reaches them there is little trouble, but purity in home life is still an ideal afar off.

The Indians of the Babine agency are temperate in eating and drinking and in this there has been a marked improvement in late years, but their sexual relations are loose and their truthfulness and honesty cannot be depended upon.

The Indians of the Kamloops agency belong to the Salish Nation and are called the Chinook Indians. There is an utter disregard among the Indians of the Lower Nicola band of this agency for the marriage tie, and this continues to have its deteriorating effect on their morals.

When the Indians of the other tribes of this agency transgressed the moral law, it was generally through the influence/
influence of liquor which had its demoralizing effect on all moral problems but particularly on sex life, but since the advent of prohibition this problem has become less acute. In the last three or four years the Indians of these reserves seem to have awakened to the necessity of purity in the home, and in five instances irate fathers have thrashed the young man who has brought trouble on his daughter and has forced him to marry the girl.

In one case where the man was already married, the father following the example of the white man, was about to turn his daughter out of his home but the priest finally persuaded him this was not the Christian act to do. The Indian is by nature dramatic and perhaps that was the underlying ambition prompting the above, but it is encouraging to know that illegitimate children in these tribes at least are to be considered a disgrace and therefore discouraged.

With regard to the morality of the Kwawkeulth it may be stated that the code of ethics here, as among most of the other Indians is quite different from that of the whites. The marriage laws are very lax and they never wait for the formality of a legal divorce before marrying again, if it can be called a marriage at all. It is a strange but notable fact that it is the young men in this district/
district who are beginning to realize the necessity of purity and virtue, and where these young men reside improvement can be noted. These young men were all trained at Industrial Schools but are not professing Christians.

It seems strange that even amongst the Indians of Queen Charlotte Islands who have made such progress otherwise, that there is the same question of morals. The Indians here explain that they do not look upon the moral code of the white man as applicable to them. Their old marriage customs were different and they retain many of the characteristics of the ancient Indians when it suits their purposes. Men leave their wives and wives leave their husbands, and they think nothing of cohabiting with other Indians. The better class of Indian and the missionaries are fighting this great difficulty and although the history of our Indian tribes shows that each had a different law regarding marriage, which might have been acceptable before the advent of Christian teachers, yet they urge the government to pass legislation that where there are missionaries among the Indians, the same law regarding marriage that we have for the whites, should be carried out.

So far the government has refused to accede to the request.

As/
As well as they can the Indians of these Islands appreciate the endeavors made for their benefit. There are times when the problem of managing bands of Indians seems trying; but the petty difficulties give place to a measure of satisfaction when one considers that one is dealing with a people that knew little of civilization or Christianity a few years ago. Their advancement has been phenomenal, and it is to be hoped that the efforts among them will also bear fruit and tend to better the condition of those that follow in their footsteps.

The Indians on the whole are peaceful and law-abiding. They have wordy quarrels over their tribal customs but very rarely do they resort to blows. There are Indian Jails of long years standing which have never been used.

Liquor, always a curse, was doubly so in the case of the Indian and any infringement of the law could generally be traced to its influence. The traffic brought so much disgrace and misery on those Indians who broke the law to indulge, that they welcomed Prohibition with bonfires and rejoicing. They appreciated that the law was now the same for the White as for the Indian.

To-day they discuss prohibition in the light of their own experience and invariably express satisfaction with the new legislation.
In the four centuries of American History there is no more inspiring chapter of heroism, self-sacrifice and devotion to high ideals than offered by the Indian Missions.

Some of the missionaries were of noble birth and had renounced titles and estates to engage in the work; most of them were of finished scholarship and refined habits, and nearly all were of such exceptional ability as to have commanded attention in any community and to have possessed themselves of wealth and reputation had they so chosen; yet they deliberately faced poverty and sufferings, exile and oblivion, ingratitude, torture and death itself in the hope that some portion of a darkened world might be made better through their effort.

To the student who knows what infinite forms of cruelty, brutalishness and filthiness belonged to savagery from Alaska to Florida, it is beyond question that in spite of sectarian limitations and shortcomings of individuals, the missionaries have fought a good fight.

Where they have failed to accomplish large results, the reason lies in the irrepressible selfishness of the white man or in the innate incompetence and unworthiness of the people for whom they labored.

The/
The Christian Indians of British Columbia are classified as follows:

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<th>1920</th>
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<td>3075</td>
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<td>571</td>
<td>585</td>
<td>-</td>
<td>14</td>
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<td>12,883</td>
<td>13,039</td>
<td>-</td>
<td>156</td>
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<tr>
<td>Other Christian beliefs</td>
<td>345</td>
<td>369</td>
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EDUCATION OF THE INDIANS.

One of the most favorable influences of Europeans upon the British Columbia Indians is seen in the rapid progress education has made and the wonderful advantages which have accrued and seem likely to follow therefrom.

During the year 1921-1922, there were in operation some 57 schools with 160 teachers. The total enrolment was approximately 2,393 and the average attendance 2,233. The attendance at school has been made compulsory on all children between 7 and 14 years.

That the Indian Child of British Columbia is not inclined to learn from books is indicated by the fact that only 57 students are at present enrolled in Grade 6, the highest grade of the public schools, although in Grade 5 there are 140, in Grade 4 there are 276, and in Grade 1 there are 1,029. Therefore much practical work has been introduced into the schools, this being made possible by government financial aid and the fact that the education of the Indians otherwise is left generally in the hands of the missionaries who in the main, staff the schools. They show themselves most sympathetic to the needs of the Indian child and have introduced a most/
most practical curriculum as will be shown below.

Of these 57 schools in British Columbia only 5 are undenominational. Sixteen are under the supervision of the Roman Catholics, fifteen the Church of England, seventeen the Methodists, three the Presbyterian, and one the Salvation Army.

The bulk of expenditure on Indians arises from administration and supervision but mostly from education.

These activities result from agreements whereby large areas of lands valuable for agriculture, mining and ranching were transferred by Indians to the Crown and free from all aboriginal claims as to title. These activities would have arisen in any event when the government decided to adopt a parental policy towards the native, to educate and protect him and give him a chance to develop and prosper. These expenditures on education and other means of advancement can only be eliminated when the Indian ceases to be a ward, and will rather tend to increase until we have come in contact with all the Indians in the country, a time that is rapidly approaching owing to the development of the Northern Country.

The schools are classified as follows:

<table>
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<th>Type</th>
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<td>Boarding</td>
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</tr>
<tr>
<td>Day</td>
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The school buildings on the whole are well adapted for the purpose for which they were erected. They are also kept in good repair.

The Industrial school on Kuper Island has been in operation 25 years. The original buildings were frame. They had become too old and too small to accommodate the applicants of to-day. A splendid new building of brick veneer, modern in all its equipment, has just been completed. The building is one of the best school buildings in the province and has full manual training equipment.

The Kootenay Industrial school is another excellent building. The lower part is concrete and the upper part is constructed of concrete blocks. Everything is the very best of its kind. The school has its own electric light plant operated by the students.

In the day schools there is more variety. Port Simpson and Masset have two roomed buildings equipped with modern desks. A considerable number have single desks. Schools that have been erected of late years have been made to conform with modern ideas.

The greatest factor in any school system is the teacher. Many here have had special training for their work and a number have attended Normal School. The teachers/
teachers are genuinely interested in the physical, intellectual and moral development of the children; the last is generally the greatest problem of all.

Throughout the province there is a growing interest among the Indians in the subject of education and as a result the industrial and boarding schools are full to capacity.

In general the health of the pupils has been good, and the recuperative powers of the people are becoming stronger.

The attendance at the day schools shows a slight improvement. The parents of the children are anxious to send their children to school but they do not know how to organize the home so that the children may be regular and punctual in attendance.

General Subjects.

It is generally declared that marked progress is being made, but only the pupils of the Industrial and Boarding Schools have been tested in written examinations on spelling, hygiene, composition, geography and arithmetic. In the industrial department but generally throughout the school the aim is to make the work both educational and vocational. Farming, stock-raising, gardening/
gardening, fruitgrowing, carpentry and shoemaking engage
the attention of the boys. The girls are trained in
household science and dressmaking. In some of the schools
the girls are taught also to care for fowls. School
gardening has been introduced in the day schools and the
hope is that school gardening may multiply the home
gardens.

Callisthenics and deep breathing exercises are
practised daily with the object of developing the lung
capacity of the pupils.

Many field matrons, or as they might be called
welfare workers, have been appointed and frequently
teachers assume the responsibilities of such workers,
thus exercising a wholesome influence on the communities.

When the people are of a roving disposition or must
frequent hunting and trapping grounds for a living,
education proceeds slowly. In some instances the teachers
proceed with the tribes or accompany them to the canneries
or as at Kisgegas the children are left behind with the
old people in order to enable them to have the benefits
of School. Here the teacher is an intelligent native
missionary who is assisted by his wife. Throughout the
province, it was amazing to find how methods had been
invented to meet the prevailing conditions. At Homalco
School,
School, near Bute Inlet, when the parents are absent, the children reside in the School building under the supervision of the teacher, the parents providing the necessary food and clothing for them.

At Kamloops Industrial School the number enrolled is 72. The boys here cultivate a garden plot of about five acres which produces sufficient vegetables of every kind for the use of the Institution. They also care for and feed the Stock.

The girls devote the forenoon to the Domestic work of the Institution. Some are taught cooking, others sewing and knitting, while all take their turn in the work of general house-keeping.

The afternoon is given up entirely to the Class room.

At the Industrial School at Kootenay there is a Farm Instructor and Physical Science Teacher. The curriculum is much the same as that of Kamloops, only the boys also assist in looking after the heating, pumping and lighting plants while the girls are taught dairying in addition to the usual housekeeping subjects. As this is essentially a fruit growing district the Entomologist of the District visits the School very often and lectures on Insect life to a very apt and intelligent audience, for these people living so close to Nature are much interested/
The Staff.

Industrial School,
Alberni.
interested in animal and insect life.

The entomologist also gives the pupils instructions in pruning and the care and culture of fruit.

One other school which specialized in Nature Study was All Hallow's Boarding School for Indian girls, situated at Yale, and here again the liveliest interest was in evidence.

The Boothroyd Day School is deserving of special mention. It has been in operation nearly a year now, (October 1922) and is in charge of Miss Lily Blackford of Kamloops who is exceptionally well fitted for the work as she speaks the Thompson Language fluently. The progress made by the pupils is remarkable considering that none of them knew English ten months ago and that several of the children advanced in that time to the Second Reader.

Proceeding North, it was found that the greatest difficulty was the question of attendance. At Port Simpson Day School the apathy of the parents is due mainly to the questions appertaining to the lands and to the nomadic pursuits of the people.

At/
At Port Simpson Girls Boarding School, flower gardening is taught and several prizes were won for exhibits shown in open competition with the public schools of the North at the Northern British Columbia Exhibition held at Prince Rupert. Here also several prizes were won for drawing and writing by the pupils of the Metlakatla Day School. This school is under the absolute control of the Government. The local Indian Council favors the application of the School regulations at all times but recourse has never been had to their enforcement.

At Gwinoha and Aiyah, both very far North, there were no school buildings, but this year for the first time, school, properly speaking, is being held on these reserves – at Gwinoha in the local school building and at Aiyah in the chief's home. The government will erect school buildings next year.

Visiting these reserves, one realizes how lately these Indians stood beyond the pale of civilization. Even yet there is very little moral restraint practiced, and the homes and lives of these tribes stand in marked contrast to those where the school as well as the missionary has been established for some years. Aiyah is situated about 75 miles up the Nass River. Here the chiefs/
chiefs had persuaded the people that if they accepted schools from the government, their chances for a settlement of their land grievances would be thereby prejudiced.

However the Indian Commission (1915-1920) having visited their settlement and having listened to their grievances, the people decided to have a government School.

For the same reason a number of new schools are being opened in the course of the next few years.

At Coqualeetza Institute the cadet corps, 50 strong, organized at this school, receives drill instruction once a week. Each is armed with a wooden gun and their evolutions are very creditable. About ten of the ex-pupils joined the army and in talking with a number of these the writer learned that they had taken every opportunity when abroad to visit places of interest and they spoke with enthusiasm of the many historic buildings and scenes of the British Isles.

The Indians are exceedingly fond of music and apt in learning to play a musical instrument. Many of the Indians have a brass band. A few of the schools have added this to their curriculum and the pupils of the Squamish Mission boarding school R.C.(-) specially display/
The Band at Bella Coola, (Salish)

The Bandmaster
display a marked talent for music. Some of them are able to play two or three instruments with exceptional ability.

The sisters of the Schelt Boarding School visit the homes of the Indians and instruct the mothers in housekeeping and in the care of their children, and a decided change is taking place. The practice was not uncommon and everywhere there was a marked improvement in the appearance of the homes of these people. The mothers appreciate very much the presence of the white woman, particularly when any of the children are ill.

At Katzic Day School we had a very good opportunity of comparing the progress of the Indian child with the white. The Katzic band is small but intelligent, and the district surrounding is well populated with whites who are on very friendly terms with the Indians. The parents take a keen interest in the education of their children and are anxious that they should advance in their studies as rapidly as the white children in the community. They therefore send them regularly to school and the result is that it is clearly proven that the Katzic child is as intelligent as the white child. He progresses just as quickly, everything being equal, and/
and in a year's time some of the pupils will be attending a higher grade school.

At Langley the same conditions prevail. There is no Indian school on the reserve and the four children of this tribe are attending the public school in the vicinity and compare favorably with the white children in the same classes.

In all our Industrial and Boarding Schools, both by precept and example, the positive teaching of the New Testament is kept before the pupils. The object is to vitalize and to energize the whole being through religious instruction. The Day Schools are opened with prayer, scripture reading and singing. Nearly all the schools have a portrait of the King and Queen hanging on the walls.

One finds the progress of the ex-pupils varying with the different reserves.

In the Babine District the schools have hardly been established long enough to admit of giving a pronounced statement, but in instances under observation the results speak well of the benefit obtained.

In general, the influence of the school promotes a greater respect for law and order, cleanliness of habits and better understanding of how to avoid the contracting of/
of disease. The rules of hygiene are insisted on in the schools and this has a far reaching effect on the communities.

An ex-pupil of the Kootenay Industrial School was employed on the Government dredge and his work and conduct were highly commended. The ex-pupils with the exception of two continue to make their influence for good felt throughout this agency. They are proving useful, assisting greatly in bettering the condition of the Indians.

However the ex-pupils of Cape Mudge, though peaceful and law-abiding, are not making much progress. It is difficult to obtain regular employment as there are no factories, or any opportunities for agriculture owing to the physical nature of the country. The lack of progress therefore can be attributed to the lack of steady employment. Still the influence of the ex-pupil is being felt on the reserves as most of them are opposed to the old tribal customs and as their number increases they will be able to exert a greater influence against these old customs.

Only boys attend the Lytton Industrial School and so far the ex-pupils have not shown much progress owing principally to their having to go back to the reserve life/
life and work for their fathers on the reserve or go out laboring for themselves on the railroad. The scarcity of water for irrigation hinders the placing of ex-pupils on plots of land of their own. This is to be lamented as the school is situated on a good agricultural farm of about 600 acres and the pupils have ample opportunity to learn farming.

Progress will be very slow on this reserve for there are still a number of the older Indians very adverse to education.

In contrast to Lytton Industrial ex-pupils, the ex-pupils of All Hallows Boarding School for girls are making great progress throughout the province. They show what can be done by a thorough education. The education of Indian girls has a greater effect upon the reserve than that of the boys as the girls set a splendid example in their homes and greatly assist the agents in the matter of teaching the Indians to take more care of their homes.

At Lakkalzap Day School, situated about twenty-one miles up the Nass River, the teacher and Matron have conducted night classes which have aided greatly in making the older Indians realize the benefits of education.
Here one could not fail to notice the neat and cleanly condition of the pupils and the homelike influence of the school, and the parents really appreciated their advantages and expressed a grateful appreciation of the government for helping them in this manner.

It is very noticeable on the Katzic and Langley Reserves that the Indians are beginning to grasp the benefits derived from education and the ex-pupils in their homes are adopting more and more the manners and customs of the whites.

The male ex-pupils show a marked improvement in the management of their farms and in the care of their stock which in all cases comes quite up to the standard of that of the average white settler.

Reverend Father Maillard, principal of William's Lake Industrial School, claims that the ex-pupils are a credit to the School. "The Ex-pupils are beginning to realize the benefits of education as the knowledge of agriculture obtained at the school greatly assists them when they start for themselves. Tommy Wycott, an ex-pupil, assisted by his father-in-law, won the prize for the best kept farm in the agency. Ex-pupils dress well and take interest in their former studies. They/
They secure work from the whites more easily than those who have not attended school. The female ex-pupils are good housekeepers. They are better morally than those who have not been educated."

These two short summaries of the religious and educational activities amongst the Indians of British Columbia are intended to show that systematic influence is being brought to bear upon the Indians and how they are responding to same. At least through these agencies racial distrust and hatred have been greatly removed and the Indian is now in a receptive mood. The benefits visible from the contact of Indian and white vary with the tribes. Much has depended on their geographical position, their economical conditions and their customs. A tribe nomadic in tendency presents more difficulties to the missionary and teacher; their progress is not so marked.

Important amendments to the Indian Act with regard to education were passed during the 1920 Session of Parliament. The amendment provides for the repeal of sections 9, 10 and 11 of the act and the substitution of the sections drafted. Prior to the passing of these amendments/
amendments the Act did not give the Governor in Council power to make regulations enforcing the residence and attendance of Indian children at residential schools when a day school is provided and the child does not attend. The recent amendments give the Department control and removed from the Indian parent the responsibility for the care and education of his child, and the best interests of the Indians are promoted and fully protected. The clauses apply to every Indian child over seven and under the age of 15.

If a Day School is in operation there will be no interruption of such parental sway as exists. Where a day school cannot be properly operated, the child may be assigned to the nearest industrial or boarding school. All such schools are open to inspection and must be conducted according to a standard already in existence. A regular summer vacation is provided for and the transportation expenses are paid by the Department.

New obligations and occasions for expenditure arise as civilization forces its way into the wilderness. The compensation, if compensation is to be sought, for this drain upon the public expenditure and drain upon the public funds, is both ideal and practical — ideal in/
in the enviable position which the country occupies as the guardians of its native race, practical in the growing power of the Indian as a producer of wealth. There is no doubt that the Indian is capable of graduating into a useful and responsible citizen. The wisdom of the Department's policy is being confirmed by the consequent stream of applicants for enfranchisement and the fact that educated Indians are everywhere successfully engaging in ordinary vocations.

Unfortunately there are other influences introduced by the whites, not for the benefit of the Indians, which are also having far-reaching undesired results. The white man is the idol of the Indian woman and the unscrupulous can easily persuade them into immoral paths. The usual sins and vices attending civilization are prevalent. It was impossible to suppress wholly the illicit trade in spirits and to this trade can be traced much of the misery and degradation of the Indian.

It may be conceded that the typical Canadian Indian is the hunter and trapper and when one thinks of him, buckskins and beadwork and feathers are still cloaking him with a sort of romance. But these are rarely seen except in pageants and on holidays when the superior race must be amused by a glimpse of real savages in war paint.

The Indian hunter and trapper follows the craft of /
of his ancestors, clothed in the same manner as other people, his wife and children likewise. His domestic surroundings grow less and less savage. The rabbit-skin robe still holds its own and the snow-shoe, but the birch bark canoe is supplanted by bass wood or cedar variety; as likely as not he has a gramaphone and sewing machine in his tent. The aboriginal hunter is supreme no longer in his own craft. The white man equals him as a trapper and holds his own on the trail and in the canoe.

It may be confidently said that the Indian has justified the trust that the early missionary placed in him. His mentality, temperament and constitution fitted him for progress and he has valiantly borne the ordeal of contact with our boasted civilization. The vestiges of tribes that remain are of stronger stock as the years go by.

For 75 years after the conquest of Canada the Indian administration was in the hands of the Imperial Military authorities; it was not until 1845 that the responsibility was transferred to the Province of Canada. The Military had looked upon the Indians as potential allies or foes, and during the pioneer days the feeling was balanced between hope and apprehension. They were kept/
Teachers and Girls at William's Lake Industrial School.
Teachers and girls at William's Lake Industrial School.
kept quiet by presents of scarlet cloth, silver gorgets, brass kettles and ammunition, with an occasional ration of rum. The fur traders used the fluid as the most precious means of exchange and barter, and the restless dejected people that were handed over to the Province were indeed a problem. One governor of Upper Canada seeing them so wretched, resolved to send them back to nature for healing and to remove them to hunting grounds where they might recuperate or die away unseen.

But better counsels prevailed. The missionaries claimed them as material ready for evangelization and protested they were capable of lasting improvement. Upper and Lower Canada, not long after that, began a systematic endeavor to educate the Indians, supported by zealous missionary effort. The informal union between Church and State still exists and most Canadian Indian Schools are conducted upon a joint agreement between the government and the denominations as to finances and system. The method has proved successful.

The Indians in the older regions of the Provinces are every day more and more entering into the general life of the country as shown by the fact already stated that an increasing number are accepting enfranchisement and taking up the responsibilities of citizenship. Although there/
there are reactionary elements among the best educated tribes and stubborn paganism on the most progressive reserves, the irresistible movement is towards the goal of complete citizenship.

As a rule the Indians take kindly to the idea of having their children educated, though no doubt a number of old people would fain adhere to the old ignorance and superstitions, but as early as fifteen years ago the direct advantage of being able to talk English came home to the Indians generally. As the sealing and fishing industry decreased it was more and more necessary for the Indians to seek other outlets for their labor such as working in sawmills and logging camps. They found that while they could get work in both cases if they understood English, yet they were not wanted if they did not, as their managers and foremen would not bother with men who could not readily understand them. This idea, and indeed it was a fact, acted as a stimulant to the Indian to have his child educated.

That generation was too closely allied to old superstitions to break loose from them. Any civilization they had was only a veneer. But as the children grew up and passed through the schools, they became in a much better position to break away from the old traditions. They/
They are much more strongly imbued with our methods and ways of looking at things and when they left school they encountered a very much less opposition from their parents when they proposed to introduce reforms, than would have been the case if they had tried to do so.

People are apt to take a too superficial view of the matter and expect great and immediate results from the education of the Indian. They took a boy, practically a savage, the produce of centuries upon centuries of ignorance, degradation, superstitions, and lack of ethical standards, they gave him a few years schooling and expected to see him turned out a civilized, Christianized, white man with a white man's standards and ideals. The thing is an inherent impossibility. It will take as many generations as he has had years of schooling, to make such a transformation, which must be a gradual, almost unnoticed process rather than an abrupt change.

But when one recalls the fact that especially in the West Coast Agency, there are Indians of only middle age whose fathers were hanged for barbarous murders and who can themselves remember as children their village bombarded by British Gunboats because the inhabitants had seized a sloop and murdered the crew, when one realizes how comparatively recent these events were and/
and then looks around and observes the spread of knowledge and intelligence amongst the Indians, the confidence they have in the white man's law and justice, the extent to which they have adopted white man's habits and manners, the modification in the carrying out of such of their native ceremonies as they still cling to, the attendance at the schools and churches to be found in nearly all the villages, when one reflects that this change has taken place within less than one generation, one cannot escape the conviction that the education of these native races is making solid and satisfactory progress.
OCCUPATIONS AND PROGRESS.

It is impossible to give any comprehensive idea of the progress of the British Columbia Indian during the last 50 years, in a few words. The progress of each tribe has differed according to the geographical position of those tribes, according to the period when Christian influences first reached them, to the rapidity with which they assimilated that teaching, and the intellectual differences of the tribes. So it is only by dividing the country into Agencies and considering each district in turn that the subject of the progress of the Indians can be discussed.

The occupations of the Indians vary with the habitat. The Indians situated along the Coast earn their living principally by fishing. Many own their own motor boats, launches and gear, while others are supplied with them by the various canneries. Some of these gasolene launches the Indians have constructed themselves with great skill and efficiency. Many of the women are employed in the canneries or in the hop fields and make a very steady income. The occupations of the Coast Indians also include logging, teaming, boatbuilding and hunting.
The Haida Indians of Queen Charlotte Islands are particularly proficient and are considered to be among the best fishermen of the Pacific Coast. They operate their own plant for rendering the Oolachan or candle fish.

The Indians of the Lytton, Kamloops, Kootenay, Okanagan and New Westminster Agencies, engage in farming including the raising of grains, fruit and vegetables of all kinds.

Marked progress has of late years characterized the agricultural process. They are well supplied with farm machinery and equipment, of which they take good care. These farming operations are carried on mainly in the irrigated districts.

The Kootenay, Kamloops, Okanagan and New Westminster Indians own large herds of horses and cattle -- in the Kamloops agency there are to-day 5000 horses and about 2000 head of cattle.

For ten years now, the Indian progress in farming operations, has been steady from year to year and the Reserves where conditions are at all favorable are fast becoming prosperous communities. The reports show, for instance that in 1916, the land actually under cultivation was 11727 acres while in 1921 the total acreage was
was 31,918, and a glance at the other statistics at the close of this Section will show other advances in the Agricultural Industry.

Ever since the advent of white civilization into the life of the Indians, these have made a certain income through their old industries, fishing and trapping, which are now pursued by better methods. Other industries have been introduced since 1865 and now have the most important place in the economic life of the Indian.

The goal at present is to make the Indians self-supporting and the principal means to that end is to get them into mixed farming. Various native prejudices stand in the way, and one of these which seems hard to eradicate is that of regarding the horse as a standard of value. In the past, the Western Indian's wealth was judged by the number of horses he owned. That is what made him the horse thief. Instead of a real standard of value and an index of wealth, it is really in many instances an index of poverty. If they will raise good horses which they can sell there can be no objection, but 15 or 20 herd of unsaleable horses on a small Indian farm where there is work for only one team, makes it a losing game. When the Indian can be induced to substitute cattle and hogs for useless horses, now that liquor is placed/
placed beyond his reach, some real progress towards independence will be made.

In the Babine Agency the main occupation is fishing, hunting and trapping. During the season, a number work about the canneries of the Coast. Some pack and team, freight and work in the section parties along the Grand Trunk Pacific Railway line. Steadily more land is being broken up and fenced and the area of gardening increased. The fruit trees supplied to Glen Vowell by the Department in 1916, have been given careful attention by Mr. Jackson, the Salvation Army Officer, at this village, and are now in full bearing. Thus every family has its own supply of apples and interest in fruit growing has been aroused.

Till 1914, the Indians of the Bellacoola Agency derived their principal sustenance from the sea, but in that year agricultural pursuits were begun with success.

These Natives are discarding the old salt water canoes and many build or buy motor boats for themselves and in this sometimes go beyond their means. As a rule they learn to operate the engine well. They fish for home consumption with implements owned by themselves but when fishing for commercial purposes the instruments are generally supplied by their employers.

The Indian in this agency is gradually becoming more like/
like the white man in appearance and manner. He may be accused of being indolent at times, but anyone who has seen him engaged in occupations in which he is interested, would not stigmatize him as lazy. Few accumulate money but most of them acquire property, such as houses, boats and implements. They live extravagantly when they have money and readily buy expensive foods such as canned goods. In winter they congregate in their villages, while in summer they are scattered all along the Coast at various employments.

The Indians of the Cowichan Agency are chiefly engaged in farming, fishing, hunting, in the canneries, at stevedore work and as day labourers.

On the Songhees Reserve at Esquimalt, the land is subdivided into small plots for fruit and vegetable growing. All the available land is under cultivation. Young trees planted on this reserve in 1915 are bearing satisfactorily. The Orchards, have been kept trimmed and sprayed with lime and sulphur solution and the Indians compelled to treat obnoxious weeds as the law demands.

Since the year 1915, the Indians on these reserves have shown themselves to be really desirous of turning their attention to agriculture. In that year there was a/
a poor salmon run on the Fraser and only a medium crop of hops at the yards in Chilliwack, Agassiz and in the State of Washington. It was an exceptionally severe winter and times were so difficult that it was found necessary to issue relief to the Indians. This series of disasters greatly impressed the Indian mind of this district, and tended to make them realize the necessity of putting all their lands under cultivation.

The Indians throughout this agency are fairly industrious but having been so long on wages and quick returns, they have not the staying powers to stick to any one job and this is the reason that agriculture formerly received such scant attention.

A great majority of the Indians of the Shuswap tribe are industrious. Those who are devoting themselves to the cultivation of their farms are fast becoming skilful farmers, they are handling their land intelligently and are getting good results in the growing of cereals such as wheat, oats, barley and corn, as well as successfully growing all kinds of vegetables, pease, beans and melons. The orchards, now in bearing, show care and attention. A few of the Reserves, such as Kamloops, Adams Lake, Niskainlith, have now under cultivation nearly every inch of cultivable land for which water can be secured/
secured for irrigation.

The chief occupation of the Thompson and Okanagan tribes of the Shuswap, is mixed farming and stock raising of large herds of horses and cattle. In this particular, mention may be made of the Upper Nicola Band of the Okanagan tribe which occupies both the Douglas Lake and the Nicola Lake Reserves, notably the chief, among whose herds are to be found some of the finest bred horses in the Province and also a well selected grade of beef cattle and milk cows. These two bands are exceptionally well provided with the latest improved farming equipment of every description.

The Indians display at the Annual Fair of Kamloops every year cannot leave one in doubt as to the farming efficiency of the Shuswap tribes.

Most of the Indians of these tribes are neat in their dress and appearance. The young men take great interest in all forms of athletic sports and are usually in evidence at agricultural fairs, participating in all their athletic sports and games.

The principal occupation of the Indian of the Kwawkeulth Agency is fishing. During the canning season, the majority go to the various canneries. In Spring, commencing about April the 10th, the oolachan fish run in/
in the rivers at Kingcome Inlet and Knight Inlet and large quantities are caught; but at present the only use made of them is for the oil which is extracted and boiled, and forms an article of commerce amongst themselves. One logging camp is run by the Indians at Port Neville and when the log market is good they make good wages over and above expenses.

As a class the Indians of this agency are lazy and lack all desire for steady employment. They commence any operation with great zest, but the interest soon flags and after a short time, it is difficult to get them to do anything. This is one reason assigned by employers of labor for not engaging these Indians except for short jobs.

The chief occupations of the Indians of the Lytton Agency, are farming, fishing, hop-picking, a small amount of trapping and lumbering, and a little labouring. Many of the Indian women go in for basket-making and have been in the habit of deriving considerable income from this source.

Here may be mentioned a fact which has greatly changed the economic life of the Indian labourer, viz.—the great influx of Japanese, who owing to their steadiness and cleanliness have entirely superseded the Indians in many
many canneries, particularly in this district. The result has been great hardship to the Indians who must now depend on their farms and who have not hitherto been thrifty. The land holdings as a rule are not very large in this agency and cultivation of the little white bean has been a staple source of revenue in the past, and is likely to continue so. Irrigation and mixed farming are two ideas that need to be kept constantly before the Indian and more of them year by year are beginning to grasp this, as has been amply shown by the very favorable record made by this agency in the Department's farm competition. Frank Mitchell, an Indian of the Bridge River Band, won the prize offered by the Department for the best farm in the agency and also obtained the highest number of marks obtained by any Indian in British Columbia.

The year 1916 saw the completion of the Botanic Lake Storage Dam and construction of the Indian's new ditch to take advantage of it. In the past the salmon of the Fraser River was the great standby of the Indian for his food supply. This has failed him during the past two or three years owing, it is said, to obstruction in the Fraser at Hell Gate between Yale and North Bend; but with more attention to mixed farming he may become less/
less liable to suffer from deprivations of this kind. Until this is achieved, with conditions so altered from what they were, the present hardships will continue.

Most of the soil of the Nass River agency is unsuitable for agriculture, although small efforts at cultivation are made by some of the Indians. The Indians here are handy-men and are nomads. They seem to be able to adapt themselves to any kind of manual employment. Essentially they are fishermen, hunters and trappers, but when they are not following their common pursuits, they engage in boat building, carpentry, marine engineering, freighting and net, basket and souvenir making.

Some are good artists, others are storekeepers, and preachers. They are enthusiasts as evangelists.

Usually they are very industrious but are not adepts at keeping alive industries such as business partnerships, saw mill or fishing enterprises.

The Indian settlements as a rule appear quite modern. The old style of Indian house is fast disappearing, in fact only four are left in the whole agency.

The great war was instrumental in bringing about an era of economic resourcefulness on the part of these Indians as well as on the part of the white people. The cost of living was higher and the fur trade bad, and/
and this gave them a better sense of the value of money so that they hesitate now before wasting their money on unnecessary things.

The occupations of the New Westminster agency are the same as those of the Indians of the Cowichan district. In the words of a priest of St Louis school of New Westminster, "Through the influence of education, the Indians are making steady progress along the lines of civilization. They are adapting themselves to the white man's methods of cultivating the soil and raising stock. A number of them are excellent farmers and their crops in many instances compare favorably with those of their white neighbors."

Of late the Indians of this agency have taken a decided interest in fruit growing and the fruit trees supplied to them by the department are a great incentive to them to continue along this line. The trees are sprayed and pruned and well trimmed. New land is continually being cleared, new homes built or the old ones repaired, and noxious weeds rigorously treated.

In 1919, considerable assistance was given by the Department to Indians of different bands by supplying them with seeds, oats etc. At the Ysawwassen reserve, five tons of seed oats alone were purchased for them.
the Indians returning the cost of these to the Department from the heavy crops harvested.

At Schelt village in 1919 the old water flume was taken up and replaced by a new wooden pipe line, a mile long, at a cost of 900 dollars. The work was done by the Indians and material paid for from the funds, to the credit of this band, held by the Department.

In the Okanagan agency there are some very fine pedigree horses on the reserves, but otherwise the Indians here are slow to take advantage of the agricultural advantages offered to them, and still rely on old and antiquated practices. General farming and stock raising are the principal industries and the same economic conditions found here as in the Lytton Agency. But unlike the Indians of that agency, the Indians here have some of the finest arable land in the Province, and all it needs is thorough cultivation and manure to raise enormous crops. Efforts are being made to induce them to get rid of their surplus horses and keep more stock of other and more profitable kinds, and practise rotation of crops to improve the condition of their land. Just now they neglect the land and allow the hay meadows to get too old before renewal. Once educate these Indians into being good farmers and their success is assured.
The Indians of the Stikine Agency follow the same occupations as those of the Nass River. All are industrious with the exception of the Grahame and Nelson River nomads, and have greatly improved in the last decade. The younger members of the Tahltan, Teslin, Casca and Liard bands speak English and as a rule are well dressed. The Nelsons and Grahams have not had many opportunities of coming in contact with the whites and are consequently more backward than their more fortunate neighbors. All are extravagant and spend their money on luxuries and expensive clothing.

The first twenty bands mentioned as those comprising the Stuart Lake Agency are in the farming belt. The advance in agriculture, especially among the Indians of Stoney Creek, is very marked. During the years 1920-1 they doubled their acreage under crop. The Stonies are noted for their industry, being easily the most progressive in this agency. They earn money for their own sustenance and the improvement of the holdings, by clearing land for the whites and their own crops, is excellent. Important results are expected here as elsewhere from the Indian farm competitions in which the Stonies evince a lively interest.

The last four tribes mentioned are semi-nomadic, living
NanOOSE Indian Reserve

Typical Indian Holding VanC Is.
living mostly by hunting. They have no stock of any kind. Small gardens are generally put in each spring, but from want of attention during the growing season results are not very encouraging except at McLeod Lake, where fair crops of potatoes are raised every year.

Stock raising in this agency, particularly in the South, is receiving more attention and it is expected that this will develop into a very important industry within the next few years. A small start has been made with chickens and hogs. Six years ago the idea that chickens and hogs could be raised by these Indians was ridiculed, for then so many dogs were kept that it would have been impossible, but the Indians were persuaded to kill their dogs and make the experiment, with the promise that other dogs would be supplied to them in five years time. Each family was given a sow and five hens and a cock, while each band was given in addition a boar, and at the end of the five years, not one family petitioned for more than one dog and some not even that.

With the growth of agricultural pursuits the need for more farming implements is a natural sequence. Indians as a rule were ready purchasers of farm implements, and have been so exploited by commercial travellers that now before any purchase of over 25 dollars can be made by/
Sanghees Boy wearing sweater
woven by women of the tribe.
by any one Indian, the Department must be advised, or the traveller sells at his own risk. These implements are generally bought on credit. In one case an Indian with no stock whatever became possessed of a Milk Separator -- a drink of whiskey and the old Indian had readily entered into agreement. The common varieties of implements are steadily coming into use and are well kept. The Euchinico band has a large shed where all the tools, wagons, sleighs etc. are put when not in use, and other bands have smaller places for the same purpose.

The recent great progress of the tribes of this agency can be attributed largely to a general awakening. Six or eight years contact with the white man has apparently convinced the Indians that the white man's methods are the best, and in accepting them he has found that there are many things he can do just as well as the white man if he tries.

Through the operations of the Royal Indian Commission sitting 1914-8, adequate land provision has been made for all the bands. This action has produced the greatest satisfaction in that it has removed entirely the Indian's greatest grievance. It conceded him an existence and furnished a sure means of livelihood, of which he will doubtless fully avail himself.
The two large bands of Indians on Queen Charlotte Islands, the Massettes and Skidgates are located on Graham Island, the largest of the group of islands on the shores of Hecate Straits. Before the location of the Boundary line between United States and Canada, the Haida Indians crossed over to Prince of Wales Island and a number of the tribe located there. We had a visit in 1915 from the 55 of the American Haidas, now permanently located at Haidaburg, Alaska, and had the opportunity to meet with Indians who live under another form of Government, and an opportunity to compare the same nation who had long been granted privileges of citizenship and who are practically independent of Government control. They remained at Massett almost a month and the experience of the writer with them proved they are no further advanced than our Indians. A number of them read and write and speak the English language and they were met by Indians who addressed them in the same tongue.

They brought three large launches bearing the American flag. Our Indians met them with a uniformed brass band and the Union Jack was flying from the houses of our prominent Indians in places where a short time before the "Totem" poles of the hereditary chiefs stood.

The former so called "Head Hunters of the Pacific" met/
met as they did last year their former enemies, the
Tsimshian band and it was interesting to compare the
proceedings with those which would have taken place at
Confederation.

The chief Councillor addressed them in English and
there was little to show that it was not a gathering
of whites, modern in all its surroundings. What a con-
trast to the small villages where they formerly met, to
sail out to raids on their neighboring enemies.

Fifty years ago, these Indians were the "Terrors of
the North". Their progress is one of the most remarkable
circumstances in the History of British Columbia.
A large percentage of them read and write. They take a
keen interest in everything that goes on about them.
Their internal affairs are managed by councils elected
annually and working under by-laws approved by the
department. They have their Churches, brass bands,
gasoline launches, rowboats, horses, and all modern
improvements including water works.

When at their home towns, the school houses are
filled with pupils and they are asking for a boarding
school to which they guarantee to send every eligible
boy and girl.

They/
They all dress well and the able-bodied Indian asks for no relief, earning a living for himself and his family.

It is noticeable that the Indians elect some of the best of their bands as Councillors. Fortunately they understand all that is said, they study the by-laws and are in favor of improving things, even wishing very often to go further than the By-laws allow.

Before the Enfranchisement Act of 1920 there was great dissatisfaction amongst the majority of these Indians that they were under the same law and restrictions as what they considered, the "Blanket Indians". They claimed that some other form of government should be applied to them than that given to the ignorant Indians living along the Coast, in shacks, and making no efforts to improve. They ask, "Why are we educated"? "What are our prospects for the future"? They also used to say, "Our American Haidas, just across the boundary line are no better able to care for themselves than we are, yet they have the franchise and are not as children or wards."

The older Indians certainly were not fitted for self government, but the Indians under 40 years of age here are quite right in demanding self government.
The Massets and Skidgates are fishermen. At the "trolling grounds" or Indian Fishing Reserves and on the rivers, they work from April till August in each year. The remainder of the year they do little or nothing outside of gathering their own winter fish, obtaining wood and building their own boats. Recently new industries have started which will engage a number of men. A number have taken out logging licences and are cutting timber for mills. It is difficult to obtain for them areas of timber land. There are hundreds of thousands of timber lands on these islands but when we applied for a few limits for the Indians we were met by the answer that the timber limits were too valuable for logging. It would be advisable for the department to obtain timber limits for the Indians. They have a very restricted area now as Indian Reserves on which there is some timber, but they will require this in the future for firewood and for their own use as lumber.

The Indians of Massett and Skidgate are good boat builders. For the first time they have received orders to build boats for a cannery on which several of the men are now working.

An oilery owned by an Indian Company at Skidgate has been leased for a term of years. Indians will be employed there.
there catching dog-fish and extracting oil from the carcases.

The women are still the principal gardeners. They prepare small gardens before the fishing season and grow vegetables for winter use.

The women and children work in the canneries for about two months and the whole family make enough to carry them through the winter months. What they make in summer, they spend in winter. Few of them have any money when the spring opens up. They are willing to work at all seasons of the year, but there is little or nothing to do at certain seasons. The white working men leave the island during winter and seek work outside.

The Massets and Skidgates are not farmers. They have few implements, only those used in working small gardens. The Indians are usually away during the harvest season and make little provision for raising fodder for which the islands are at present not suitable, but they took notice of the lesson of 1915 when there was an unprecedented winter with snow and storms in which most of the stock on the island perished, and things are improving somewhat.

The following extract will enable one visiting these peaceful law-abiding Indians of British Columbia to-day to appreciate the advancement made:

"It/
Bella-bella- Plank road.

Built by the Indians from lumber sawn from their own logs at their own mill. On the road is the "logging railway" leading from the camp to the Inlet.
"It is among the Nootka Indians and those of the south that we find war to be more frequent and sanguinary than elsewhere. Certain tribes are more peaceful than others, but in the lives of only a few did war play an unimportant part. In addition to the evidence of actual fighting we have many accounts of the large part that war played in the upbringing of these races. 'The whole force of public opinion in our Indian communities', says Schoolcraft, 'is concentrated upon this point - its early lodge teachings, its dances, its religious rites, the harangues of prominent actors made at public assemblies, all in fact that serves to awaken the fire of ambition in the mind of the savage, is clustered about the idea of future destination in war'. 'They are', says an early 18th Century writer, 'early possessed with the notion that war ought to be the chief business of their lives'. 'All Indian tribes are frequently at war with one another', says Harmon. 'The Thlinkeet are often at war and the same applies to all the tribes of the Pacific Coast, including the Haidas, the Ahts and the Kwakiutl'. Among some of these tribes, as for example the Chinooks, 'frequent as the fighting may be it is not very sanguinary'. 'The Nootka tribes', says Bancroft, 'of the Interior, we have/
have seen to be at war with one another among the Eskimoes from time to time and we are told that amongst themselves, it is practically continuous. The Inland tribes are perhaps somewhat less warlike though from accounts of the Shuswaps, Lillooetts and Thompson Indians, the impression is gained that fighting, and of a severe nature, is by no means infrequent.¹

BUSHELS HARVESTED OF POTATOES.
### Grain, Vegetable and Root Production.

<table>
<thead>
<tr>
<th>Year</th>
<th>Wheat Acres sown</th>
<th>Wheat Bushels Harvested</th>
<th>Oats Acres sown</th>
<th>Oats Bushels Harvested</th>
<th>Other Grain Acres sown</th>
<th>Other Grain Bushels Harvested</th>
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<tbody>
<tr>
<td>1900</td>
<td>1,812</td>
<td>42,227</td>
<td>3,030</td>
<td>97,302</td>
<td>29</td>
<td>510</td>
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<tr>
<td>1910</td>
<td>1,613</td>
<td>30,935</td>
<td>5,357</td>
<td>119,865</td>
<td>69</td>
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<tr>
<td>1916</td>
<td>1,937</td>
<td>35,150</td>
<td>5,488</td>
<td>155,922</td>
<td>119</td>
<td>2,041</td>
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<tr>
<td>1920</td>
<td>1,564</td>
<td>36,438</td>
<td>3,950</td>
<td>101,920</td>
<td>284</td>
<td>7,182</td>
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<tr>
<td>1921</td>
<td>1,724</td>
<td>47,850</td>
<td>3,293</td>
<td>106,273</td>
<td>271</td>
<td>6,780</td>
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<tr>
<td>1922</td>
<td>2,098</td>
<td>58,728</td>
<td>4,178</td>
<td>123,911</td>
<td>280</td>
<td>7,826</td>
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<tr>
<td></td>
<td>Peas etc.</td>
<td>Potatoes</td>
<td>Other Roots</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------</td>
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<td></td>
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</tr>
<tr>
<td></td>
<td>Acres sown</td>
<td>Bushels harvested</td>
<td>Acres sown</td>
<td>Bushels harvested</td>
<td>Acres sown</td>
<td>Bushels harvested</td>
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<tr>
<td>1900</td>
<td>421,</td>
<td>13,371</td>
<td>111</td>
<td>5,054</td>
<td>159</td>
<td>19,369</td>
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<tr>
<td>1910</td>
<td>467</td>
<td>13,117</td>
<td>1,352</td>
<td>188,166</td>
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<td>1916</td>
<td>758</td>
<td>15,130</td>
<td>2,424</td>
<td>275,854</td>
<td>1,001</td>
<td>82,478</td>
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<tr>
<td>1920</td>
<td>1,006</td>
<td>23,292</td>
<td>2,738</td>
<td>308,001</td>
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<tr>
<td>1921</td>
<td>877</td>
<td>21,722</td>
<td>2,654</td>
<td>328,653</td>
<td>1,002</td>
<td>55,404</td>
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<tr>
<td>1922</td>
<td>863</td>
<td>28,515</td>
<td>2,584</td>
<td>321,106</td>
<td>890</td>
<td>46,018</td>
</tr>
<tr>
<td>Year</td>
<td>Horses</td>
<td>Steers and Work Oxen</td>
<td>Milch Cows</td>
<td>Young Stock</td>
<td>Poultry</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>--------</td>
<td>----------------------</td>
<td>------------</td>
<td>-------------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>1900</td>
<td>16,329</td>
<td>850</td>
<td>2,792</td>
<td>2,725</td>
<td>15,291</td>
<td></td>
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<tr>
<td>1910</td>
<td>13,136</td>
<td>677</td>
<td>4,535</td>
<td>4,296</td>
<td>19,641</td>
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<tr>
<td>1916</td>
<td>14,949</td>
<td>1,221</td>
<td>5,773</td>
<td>3,949</td>
<td>29,650</td>
<td></td>
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<tr>
<td>1920</td>
<td>12,899</td>
<td>2,166</td>
<td>5,266</td>
<td>4,312</td>
<td>30,888</td>
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<tr>
<td>1921</td>
<td>12,621</td>
<td>2,607</td>
<td>5,550</td>
<td>4,471</td>
<td>32,595</td>
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<tr>
<td>1922</td>
<td>11,327</td>
<td>2,975</td>
<td>5,619</td>
<td>4,067</td>
<td>34,140</td>
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</table>
### Total Acreage, Acres Cleared etc.,

<table>
<thead>
<tr>
<th>Year</th>
<th>Total area of Reserve</th>
<th>Acres under Wood</th>
<th>Acres cleared but not Cultivated</th>
<th>Acres under actual Cultivation</th>
<th>Acres fenced</th>
</tr>
</thead>
<tbody>
<tr>
<td>1900</td>
<td>722,100</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1910</td>
<td>724,231</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>1916</td>
<td>726,965</td>
<td>432,033</td>
<td>257,464</td>
<td>37,468</td>
<td>139,154</td>
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<tr>
<td>1920</td>
<td>729,258</td>
<td>418,706</td>
<td>282,822</td>
<td>39,918</td>
<td>157,954</td>
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<tr>
<td>1921</td>
<td>732,216</td>
<td>415,311</td>
<td>280,466</td>
<td>39,125</td>
<td>181,530</td>
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<tr>
<td>1922</td>
<td>732,216</td>
<td>400,225</td>
<td>279,774</td>
<td>42,217</td>
<td>213,635</td>
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<tr>
<td>Year</td>
<td>Hay Cultivated</td>
<td>Hay Wild</td>
<td>Other Fodder</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>----------------</td>
<td>----------</td>
<td>--------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1900</td>
<td>4,580</td>
<td>3,261</td>
<td>1,646</td>
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<tr>
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<td>9,329</td>
<td>3,672</td>
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<td>6,613</td>
<td>1,643</td>
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<td>6,479</td>
<td>1,609</td>
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<tr>
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<td>7,218</td>
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<tr>
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<td>14,289</td>
<td>7,539</td>
<td>1,395</td>
<td></td>
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</tr>
<tr>
<td>Year</td>
<td>Plows, Harrows, Drills etc.</td>
<td>Mowers, Reapers, Binders</td>
<td>Carts, Wagons and Vehicles</td>
<td>Tools and Small Instruments</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-----------------------------</td>
<td>--------------------------</td>
<td>---------------------------</td>
<td>---------------------------</td>
<td></td>
</tr>
<tr>
<td>1900</td>
<td>2,112</td>
<td>209</td>
<td>1,359</td>
<td>17,517</td>
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<tr>
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<td>1,100</td>
<td>2,983</td>
<td>17,671</td>
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<tr>
<td>1920</td>
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<td>2,788</td>
<td>28,636</td>
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<td>1921</td>
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<td>1,070</td>
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<td>3,171</td>
<td>1,025</td>
<td>2,703</td>
<td>28,370</td>
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</table>
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BIBLIOGRAPHY.


Atlantic Monthly

Atwater, Caleb. The Indians of the North West, their manners, customs etc., Transactions and Collections, Worcester. (4. vol).

American Antiquarian Society.


American Quarterly Register. Philadelphia.

American Quarterly Review


American Journal of Science.

American Anthropologist.

Archaeological Reports (Canadian).

American Journal of Sociology.

Ball, W.H. Tribes of the North west.

Barrett, Lennard C. Travels in British Columbia.

Boxley, Willis What I saw on the West Coast of North and South America.

Bureau of Ethnology and other Publications.
Reports of Smithsonian Institution
" " United States, National Museum.
Memoirs of the American Museum of Natural History.
Journal of the Anthropological Institute.
Memoirs of the American Folk-lore Society.
Canadian Medical and Surgical Journal.
Journal of American Folklore.
Transactions of the Canadian Institute.
Transactions of the Royal Society of Canada.
Geological Survey of Canada.
Foreign Quarterly Review.
Gazlay's Pacific Monthly.

Boaz, Franz. Reports Smithsonian Institute
Also Mem. Am. Museum Natural History.

Brown, R. The Races of Mankind.

Brinton, Professor W.G. Myths of the New World.
British Columbia. Map of B.C. being a geographical division of the Indians of the Provinces according to their nationality or dialect. Victoria B.C. 1872

Bancroft, H.H. Native Tribes.
Beckwith, Marthe Warren. Dance Forms of the Maqui and Kwakiutl Indians. (Congrès International des Americanistes, Quebec.)
Catlin, George. *Illustrations of the Manners, Customs and Conditions of the North American Indians.*

Chittenden and Richardson. *Life and Travels of Father de Smet.*

Canadian Medical and Surgical Journal.


Clark, W.P. *The Indian Sign Language.*

Cook, *Cook's Voyages.*

Carr-Saunders, A.M. *The Population Problem.*

Conyngham, *An Indian Bathe.* J.A. Med: Assoc:

Crosby, Rev. T. *Up and Down the North Pacific Coast by Canoe and Mission Ship.*

Collison, W.H. *In the Wake of the War Canoe.*

De Groat. *British Columbia San Francisco. 1859.*

De Smet, P.J. *Letters and Sketches.*

Oregon Missions and Travels over the Rocky Mountains.

Voyages aux Montagnes Rocheuses.

Western Missions and Missionaries.

Dragoon, *Campaigne through the Rocky Mountains.*


" Whale House of the Chilcat.

Anthropological Papers. Am. Mus. of Natural History. (1916).*
Ethnology Magazine (Published in Berlin).
Ethnological Society of London.
Elliot, G.T.S. Romance of Savage Life.

Farrand, L. Basketry Designs of the Salish Indians.
(Smith Inst. Contribution).
Fraser, J.F. Totism. Totemism and Exogamy.
Flynn The American Indian as the Product of Environment.
Forbes Charles. Prize Essay Vancouver Island (1862).
Foreign Quarterly Review London 1827.
Franchere Gabriel Narrative of a Voyage to the N.W. Coast of America 1854.

Giles, Peter Philology. Encyclopedia Britannica.
Grosse, E. The Beginnings of Art.
Geological Survey of Canada.
Government Reports of Canada and British Columbia.


Harper's New Monthly Magazine.


"   "  British Columbia and Vancouver Island.

Hutchings California Magazines.

Histories of Canada and in particular of British Columbia.

Haddon, A.C.  Headhunters.

Hiltott, C.  Streelis and Skanlit Tribes of British Columbia.

(J.A.I.)

Harris, M.D.  History of Folk Lore of Cowichan Indians.

Victoria B.C. 1901.

James, G.W.  Indian Basketry (privately printed for the author)


Journal of the Anthropological Institute.

Journal of American Folk Lore.

"   "   "  Medical Association.

"   "  London Geographical Society.

Johnson, Pauline  Legends of Vancouver Island

(Saturday Sunset Press) Vancouver.
Kane, Paul. Wanderings of an Artist among the Indians of North America.

Keane, A.H. Man, Past and Present.

(Aufträge der Bremer geographischen Gesellschaft 1860 - 81.

Lewis and Clarke Travels of Lord, John Keast. The Naturalist in Vancouver Island and British Columbia.


Lloyd, P.D. Message of an Indian Relic (Totem Pole) Seattle 1909.

Lang, Andrew. The Secret of the Totem.

Morany's Series of Makers of Canada.


Macfie, Matthew. Vancouver Island and British Columbia.

MacKenzie, Alex. Voyages from Montreal through the Continent of North America.

Martin, R. Montgomery. The Hudson Bay Territories and Vancouver Island.
Mayne, R.C. Four Years in British Columbia and Vancouver Island. (1862).


" " History of the Northern Interior of British Columbia.

" Au Pays d'ours Noir. Paris 1897


Murphy and Harned The Puget Sound

Meltakatlah Ten Years Work among the Tsimshian Indians. London Church Missionary House 1869.

Memoir of Acton Wenderyer Sillitoe on the Pioneer Church of British Columbia.

Newcombe, Guide to Anthropological collection of the Provincial Museum. Victoria B.C.


" Reviews.

Overland Monthly San Francisco.
Parkman, Francis  History of Canada
The Jesuits in North America.

Pemberton, J. Despard  Facts and Figures relating to Vancouver's Island and British Columbia.

Pickering, Charles  The Races of Man and their Geographical Distribution.

Poole, Francis  Queen Charlotte Islands.


Popular Science Monthly (U.S.)

Publications of the Church Missionary Home.

Quarterly Review  London 1809 seq.

Rattray, Alex.  Vancouver Island.  British Columbia.

Ross, Alex.  Adventures of the first settlers on the Oregon or Columbia Rivers.  1849.

"  "  Fur Hunters of the Far West.  1855.

Reports of United States National Museum.

"  "  British Association for the Advancement of Science.

"  "  Smithsonian Institution.

"  "  U.S. National Museum.

"  "  Scottish Historical M.S.S. Commission.

Royal Geographical Society. (London).
Schoolcraft, Henry R. Western Scenes and Reminiscences.
Sapir, E. Contributions to American Anthropologist.

Saturday Magazine. London 1834 - 41.


Snow The Question of Aborigines.

Simpson, George Narrative of a Journey round the World.

Smith, Harlow J. Smithsonian Institute Contributions.

G. Fouke, Cairns of British Columbia.


Swan, J.G. Haida Indians of Queen Charlotte Islands.

Scottish Historical Review. (Notes on Emigration).

Sillitoe, A.W. Memoirs.


Transactions of the Canadian Institute.

" " " Royal Society of Canada.
Thornbilt, John Bensley. *British Columbia in the Making.*

Vancouver, George. *A Voyage of Discovery to the North Pacific Ocean and Round the World.* London 1798.

Vancouver Province. *The British Columbia Indian. Articles by J.P. Shaw since 1898.*

Vancouver World. *Articles by Effie Gillies or Shaw, since 1912.*

Weeks, C.E. *Narrative of Captivity in Queen Charlotte Islands. (Olymp. Wash. Standard 1868.)*

Western Monthly.

Wilkeson, Notes on Puget Sound.


Wilson, Captain. *Report on the Indian Tribes inhabiting the Country in the Vicinity of the 49th Parallel B.C.*