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ETHNOLOGY OF CANADA AND NEWFOUNDLAND.

In the following papers we have brief, general accounts of Canadian aboriginal people—something never before attempted in anything like a methodical and scientific way by writers who have made special studies of our Indians. For the suggestion of this idea, as well as for the carrying of it out, too much credit cannot be given Dr. Franz Boas, professor of ethnology in Columbia University, New York.

It is really remarkable to find so many otherwise quite intelligent people who regard all Indians just as Indians and nothing more. It is sometimes even supposed that there is an Indian language, so that when a Mississauga meets an Iroquois, or a Blackfoot a Micmac, conversation should be easy; and any differences that exist are thought to be simply those arising from degrees of savagery, or of civilization, or because of climate and environment.

Ethnologically it is fortunate for us that our so-called "red" brothers have afforded so many opportunities to study primitive conditions of life, in various circumstances, and under different skies, for in many respects the American Indian stands head and shoulders above most other aboriginal peoples, except perhaps the Maoris, and some South Sea Islanders.

It is quite true that among all primitive races there are similarities, and, not seldom, very strong ones, as there are among those who regard themselves highly civilized, but these coincidences exist because of our common humanity. We are all subject to like desires, wishes, hopes, and fears. Food is necessary, and we must provide it in one or more of numerous ways; yet, we are not all the product of one mould physically or mentally, and in the latter respect we differ much more from one another than in the former, individually, tribally, and nationally. To account for the cause of these divergencies is not always an easy task, even when the peoples concerned are geographically far apart; it is sometimes difficult to do so when they are neighbors; and in numerous instances, no reason is forthcoming.

Perhaps we shall never be able to explain all that is now so problematical, or to understand much of what remains in doubt, but year by year we seem to overcome what hitherto have seemed insuperable obstacles. The following essays are from the pens of living writers, and cannot fail to prove of great service to readers who desire to understand the relationship that exists among British American Indians from Vancouver to Newfoundland. It will be observed that the statements of the writers are sometimes at variance in matters of detail—this is inevitable when any subject is treated independently by various hands, but as a whole, readers have reason to congratulate themselves on the present opportunity to learn at first hand what are the opinions of so many acknowledged authorities on such an extremely interesting subject.

D. B.

I. HISTORICAL ACCOUNT.

By Cyrus Thomas.

At the time of the first post-Columbian contact of the Indians of Canada with Europeans, the country now embraced under this name was occupied by natives of several different linguistic stocks. These

groups were—following Major J. W. Powell's classification and nomenclature—the Algonquian, Iroquoian, Esquimauan, Athapascan, Beothukan and Chimmesyan families, the Siouan in part, the Kitunahan, Skittegatan, and the Salishan and Wakashan in part.

However, the dawn of Indian history in the Dominion of Canada dates back of Cartier's entrance into the St. Lawrence (1534) and even back of the appearance of Cabot on the coast of Labrador (1497). For the date of the first contact of the natives of Canada with people of the white race we must go back in the past to the appearance of the adventurous Northmen on the northeastern coast, which has perhaps a more important bearing in the study of prehistoric North America than is generally conceded. The recent re-examination by Storm, Reeves, Fischer, and others of the data relating to the discovery by the Northmen, has resulted not only in limiting the range of these adventurers along the coast of the New World, but also in determining more satisfactorily the localities visited. For example, it is now generally conceded that Helluland is Labrador; Markland, the Island of Newfoundland; and Vinland, or Wineland, the eastern part of Nova Scotia. The opinion formerly held that the natives encountered by Thorfinn Karlsefne in Vinland were Eskimo (Skrelings) is now considered erroneous; the two or three words uttered by them and the few characteristics noticed are not considered Esquimauan, but more likely Micmac or Beothukan—probably the former. If this conclusion be accepted, as now seems probable, then, to those who hold the theory that man's first appearance in North America was on the northwest coast in the post-Glacial era, this, and the additional fact that the Eskimo were most certainly met by the Northmen in Greenland, are positive proofs that these tribes or their ancestors had traversed the continent by the tenth century. Already the Eskimo had become an arctic people, had already skirted the northern coasts, and already adopted the customs suited to their habitats and mode of life. Already the great Algonquian stock had reached the Atlantic coast in its progress eastward. These facts must, therefore, form a basis of comparison and of time estimates in studying the traditions and early movements of the northern tribes.

The Eskimo, or Innuit, as they call themselves, have in the past occupied, and do yet in part occupy, a fringe of land along the Atlantic coast north of the Gulf of St. Lawrence; around the east and west sides of Hudson Bay; the Arctic coast and neighboring islands westward to Bering Strait, and down the northwest coast to the Alaskan Peninsula. They have seldom penetrated far into the interior, being essentially a littoral people, relying upon the products of the sea for food, clothing, and implements. From Alaska along the whole immense stretch of several thousand miles to, and including, Greenland, they all speak the same langüage, with but minor dialectic variations, and have the same general customs. They have always been a comparatively gentle and peaceable people, as is apparent not only from the reports of Arctic explorers, but also from the fact that they have always rendered assistance to these explorers when needed, and have never been known to attack isolated parties of whites who were not aggressors, however enfeebled by hunger, though these helpless visitors may have possessed many objects tempting to them.

We agree with S. E. Dawson (Can. and N. Fr. Stanford's Compend. N. Am. I. 67, 1897), in the belief that the general tenor of the

more reliable origin myths and traditions of the Indians of the Atlantic section of North America point to the northwest as the direction whence they came; the few traditions indicating movements from the east being comparatively modern and unreliable as indications of pristine habitats. Hence it has been in the past largely from the region north of the international boundary, as traditions testify, that the territory of the United States, especially east of the plains, has been peopled with a native population. It is our opinion that the Lenni Lenape started from the cold region north of the lakes on their migration to the south of the chain of great lakes and eastward to the coast; from whom offshoots were to branch out into New England and southward along the Atlantic coast to Pamlico Sound; that from the same region came the Iroquois, who sent offshoots to Virginia and the mountains of Tennessee and North Carolina. It was from the region north of Lake Superior the Chippewas of Wisconsin and Michigan came; and from the same region came the Miamis and Potawotomies; also the Winnebagoes and their southern offshoots. It was from British Columbia that the Athapascan offshoots made their way into Arizona and New Mexico, and it may be that from there also the Shoshoni group drifted southward. It is to Canada, since the white man gained control, that many of the remnants of tribes from New England and other parts of the United States have made their way in search of a final resting place.

Turning now to a brief consideration of the groups separately, we begin with those at the eastern extremity and move westward, somewhat along the lines of progress by the whites, to the tribes of the interior.

A small group consisting of a single tribe known as the Beothuks resided at the time of the Columbian discovery on the island of Newfoundland. These, probably first seen in post-Columbian times by Cabot, in 1497, and subsequently visited by Cartier in 1534, constituted, according to Major Powell's classification (Seventh Ann. Rep., Bur. Amer. Eth., 57) a distinct linguistic stock. It is probable that at the time of Cabot's discovery they occupied or had control of the whole island, but a century and a quarter later they had abandoned the southern portions, this change having been made on account of the frequent attacks upon them by the Micmacs and European settlers. They retired to the northern and eastern sections of the island; but their retreat was of no avail; pursued by the Micmacs, who took possession of the section they had abandoned, and warred upon by the European invaders, they rapidly wasted away, and by 1827 became extinct as a tribe. Possibly a few fled to Labrador to join the Nascapes.

The stock most widely distributed in the Dominion of Canada is the Algonquian, which extends (or did, before being gathered on reservations) from the Atlantic Ocean to the Rocky Mountains. In the eastern provinces were the Micmacs, Malecites, and Abnaki; in Labrador and eastern Quebec, the Nascapes, Mistassins, and Montagnais; in western Quebec and Ontario, the Missisaugas, Nipissings, and Ottawas, and the Chippewas in part; in Manitoba and the regions thence westward, the Chippewas in part, the Crees, and the Blackfeet group—though the Blackfeet have in recent years mostly drifted south of the international boundary. This widely extended stock, which was as widely-spread south of the boundary, was interrupted

about Lakes Erie and Ontario by the tribes of the Iroquoian stock, whose habitats were on both sides of these lakes.

At the time the first attempts were made to plant settlements along the Atlantic coast south of the Gulf of St. Lawrence, the Micmacs, called by the early explorers the Souriquois, were then inhabitating Nova Scotia and a part of the gulf coast of New Brunswick, also the neighboring islands. Their first contact with Europeans was probably at a very early date, as the Basque fishermen were in that region before Cartier's visit in 1534. However, continued intercourse with the whites did not begin until 1604, when Sieur de Monts attempted to plant a colony at Port Royal.

The French immigrants were kindly received by the natives, and allowed to settle on their lands without objection, and friendly relations were established between the two peoples which, notwithstanding the misfortunes of the colony, were maintained throughout, with a few slight interruptions. This friendship was largely due to the numerous marriages of Frenchmen with Micmac women. The history of these Indians for the next eighty years consists chiefly of wars with other tribes and the assistance they rendered the French in their contests with the English. The extinction of the Beothuks was largely due to the attacks of the Micmacs. The latter were, however, brought under the influence of the Catholic missionaries at an early day. The tribe seems to have been one tenacious of life, for, notwithstanding the vicissitudes through which they were forced to pass because of their exposed position, it appears from the later reports of the Canadian Department of Indian Affairs that they still number over three thousand persons—a thousand more than Biard's estimate in 1611. They are located in the Provinces of New Brunswick, Nova Scotia, and Prince Edward Island; nine-tenths of them being Roman Catholics. It is said that these Indians and some allied tribes had in use at the time they were first visited by Europeans a system of symbolic writing by means of which they were enabled to communicate with one another.

Other tribes of the Maritime Provinces are the Malecites, or Etchimins of early writers, and the Passamaquoddies, the two forming a sub-group of the Abnaki; to which sub-group the name Etchimin has been more correctly applied. These tribes formed an early attachment for the French, chiefly through the influence of their missionaries, and, with the other Abnaki, carried on an almost constant war with the English colonists until the fall of the French power in America. Although the other Abnaki tribes, as the whites encroached upon them, gradually withdrew to Canada, the Penobscots, Passamaquoddies, and Malecites remained in their ancient homes. The Abnaki, numbering some 400, are now at St. Francis and Becancour in Quebec; the Malecites, numbering 800, in several villages in New Brunswick and Quebec; while the remnants of the Penobscot and Passamaquoddy tribes have homes in Maine.

The vast extent of territory embraced in the Labrador Peninsula has been thinly peopled in the past by semi-nomadic bands of Montagnais, Nascapes, Mistassins, and Swamp Crees, in addition to the Eskimo along the coast. The Montagnais group with whom the French came in contact at an early day, having joined Champlain in his first expedition against the Iroquois, was a confederacy of cognate tribes rather than a single integral body. These were the

Bersiamites, Tadousacs, Papinachois, Chisedecs, Ecoumains, and Nekoubanistes, though they were usually designated by the collective term Montagnais, or Lower Algonkins. Their linguistic relation appears to be closer with the Crees than with any other branch of the Algonquian family. The Nascapes appear also to be closely related to them.

The Montagnais are doubtless the Agouionda of Cartier, a name which he says the Indians of Hochelaga applied to those of Saguenay. They are spoken of in the first Jesuit Relation (Biard, 1611-1616) as friends of the French. Missionary labors among them were begun in 1615, and continued, with occasional interruptions, until 1776. They were at war at an early date, and probably in prehistoric times, with the Micmacs, and to some extent with the Eskimo; but their chief and inveterate foes were the Iroquois, who drove them for a time from the banks of the St. Lawrence, pursuing them to their strongholds about the upper Saguenay, compelling them to seek safety at more interior points. Sagard describes them as the lowest type of Indians in Canada, and Parkman says that they were the lowest and most degraded people of the Algonquian stock. They were to a large extent nomadic, unwilling, even under missionary influences, to settle down and cultivate the soil for subsistence. In 1812 they were estimated roundly at 1,500; in 1837, at 1,100; in 1884, the number officially reported was 1,395; in 1897, the Montagnais and Nascapes together numbered 1,741. At the last mentioned date they were gathered chiefly on the reserve at Lake St. John, Chicoutimi County, Quebec Province, the number at this point being 404. Although on a reserve and having a school with a competent teacher, they have made but little progress toward farming, still depending largely on hunting and fishing for subsistence, with such income as they receive as guides and for bark canoes, snow-shoes, moccasins, etc.

The Nascapes, the most northeastern Algonquian tribe, ranged over the interior of Labrador north of the Montagnais to Ungava Bay, and from Lake Mistassini to the Atlantic coast. Their usual habitat has been the interior tableland of the peninsula, it being only in recent years that they have visited the banks of the St. Lawrence. They have been, until very recently, semi-nomadic, their habits and customs being similar to those of the Montagnais. It is the general belief of the Nascapes that they were driven to their northern habitat by the Iroquois, who formerly waged war upon them. They have a definite tradition that their original home was west of Hudson Bay, and that when they reached northern Labrador they found the region uninhabited save by some Eskimo, chiefly along Hudson's Strait. It is possible that the Indians seen by Gasper Cortereal in 1499, seven of whom he carried to Portugal, were of this tribe, as the description given will not apply to the Eskimo. There was but little intercourse between them and the French.

Although the Iroquois played such an important role in the history of Canada, holding for a time the balance of power between the French and English, and certainly had their pristine home north of the lakes,* and have in part found their final resting place in Canada—yet, in the limited sense of the term *Iroquois*, the six (originally five) confederated tribes do not belong in historic times to Can-

* See page —— and following.

ada, but to the United States. The long and cruel war carried on by them against the French of Canada and their Indian allies has been so often written up and is so well known as not to require repetition here, did our space permit it.

It may be assumed as probable that, like other groups of the Atlantic section, they came originally from the northwest, as part, at least, of the Iroquoian family was located at an early day chiefly in the pensinsula north of Lake Erie. If credence is to be given to the tradition that they, or a part of the group—possibly some of the Iroquois—moved at an early date up the St. Lawrence from near its mouth, this may be explained by the supposition that some division pressed on in advance of the group to the gulf coast in search of a bountiful food supply. It is probable that, while the group was located chiefly in the region immediately north of Lake Erie, which section became the Huron country, the Cherokees, and possibly the Eries also, broke away from the parent stem and moved south of the lakes into the region now embraced in Ohio.

It is true that the people of Hochelaga, visited by Cartier in 1534, were of the Iroquian stock; but Mr. Hewitt concludes from his close study of the languages and history of the group that the evidence does not sustain the general opinion that a part of the Iroquois proper were living north of the St. Lawrence River at that time. The people of Hochelaga were most likely Hurons, or possibly one of the smaller cognate tribes. Seventy years later, when Champlain appeared on the scene, the Hochelaga and Stadicone of Cartier had disappeared, and Algonquian tribes were in possession of the St. Lawrence valley.

Although the Iroquois had battled so long and so persistently against the French while they retained the power in Canada, yet it was chiefly in this section that they sought a final retreat when conquered by the United States troops under Sullivan. Their number at present in the Dominion—chiefly at the Bay of Quinte, the Thames and Grand River, Ontario, and Caunawaga, St. Regis and Lake of the Two Mountains, Quebec—amounts to something like ten thousand persons (9,671 in 1897).)

The tribes of the Iroquoian family in this region, other than the Six Nations, were, at the time that Europeans appeared on the scene, as follows: The Hurons, occupying the section immediately north of Lake Erie and from Lake Huron eastward well toward Niagara river. Immediately east of them was the little tribe or sub-division named Tionontatis, known also as the Patun or Tobacco nation; east of these and occupying both banks of Niagara river the Neuter tribe, so named from their effort in their intermediate position to remain neutral in the war waged between the tribes on the opposite sides of them.

The saddest episode in the history of the Indians of Canada is that of the relentless warring upon the Hurons and, incidentally, the other two small tribes, and their final ruin, by the Iroquois. Not satisfied with massacring many of their people, and driving them from their homes, these relentless victors followed them into their retreats, forcing the scattered remnants to retire still further into the interior. During the strife the two smaller bodies—the Tionontatis and the Neuters—were entirely destroyed, becoming extinct at an early day.

Not only had the Huron towns been destroyed, and the nation scattered in fragments to the east, west and south, but the Indian

country all along the waterway from Montreal to Georgian Bay had been literally depopulated and turned into a wilderness. Moreover, we may add with Justin Winsor, "the Huron country never again knew the traces of this people, and only the modern archæologist, wandering between the latter-day villages of an alien race, finds in the forest the evidences of the former occupants" (Cartier to Frontenac).

The remnants of the Hurons, who are known, in part, as Wyandots or Wendats, are as follows: Hurons at Lorette, Province of Quebec, Canada, 456; Wyandots in Indian Territory, U.S., 365.

The area north of Lake Erie, from which the Hurons were driven by the Iroquois, was subsequently in part taken possession of by the Mississaugas. The people of the latter tribe, when they first became known to the French—about the middle of the seventeenth century—were located on Mississauga river north of Lake Huron, and in part on Manitoulin island. Not long subsequent to this date they moved east and south, taking possession of the region abandoned by the Hurons, and soon spread over the peninsula of southern Ontario from Lake St. Clair to the outlet of Lake Ontario. They also made raids to some extent on the Iroquois in New York. About the close of the revolution they had one village on the south side of Lake Erie, near Conneaut, Ashtabula county, Ohio. The land on which the Iroquois are now settled at Grand River, Ontario, was bought from the Mississaugas. In 1746 they were received by the Iroquois into their league as the seventh tribe, though not, as it seems, with the full privileges and rights of the other six tribes. However, this alliance lasted only until the French and Indian war, a few years later. The Mississaugas are closely related to, and seem to have been originally a part of, the Chippewas. In 1897 the population officially reported was 1,109, residing at Mud Lake, Rice Lake, Scugog, Alnwick, and New Credit, Ontario.

The Nipissings, though forming a comparatively small and unimportant tribe, are brought into early notice from the position which they occupied on the lake of the same name at the head of Ottawa river, the early travel-route to the upper lakes. Champlain met with them in 1615; Jean Nicolet was next among them for some time previous to 1632; and in 1637 they were visited by the missionaries, Garnier and Chastelain. In 1650 the Iroquois penetrated to their habitat, and, having massacred a large number of them, forced the others to seek safety in a more northern region. They chose as their retreat the shores of Lake Nepigon, where they remained until 1667, when they returned to their former home about Lake Nipissing. Their reputation as practicers of magic gave them the name of sorcerers which is frequently referred to by early writers. They have no history separate from other related Algonquin tribes of the same northern region. The chief remnants of the tribe are living on the reservation at Lake Nipissing. These, numbering about two hundred, are all Roman Catholics, and have an excellent church. They also have a school, usually taught by a female teacher.

The region about the northern end of Lake Huron seems to have been an important locality to the natives in the prehistoric era, a meeting point of the tribes. It was the chief crossing place from the north to the south side of the lakes in the early migrations. It was here that more than one of the original groups separated into tri-

bal divisions which started hence on their individual life history. It was here, also, that a number of these divisions which had not wandered away to other sections still lingered at the coming of the whites. It was in this region, as we have seen, that the Mississauga first became known to the whites.

Another minor Algonquin tribe of this section was that known as the Amikwa, or "Beaver Nation," found by the French on the north shore of Lake Huron opposite Manitoulin island. Bacqueville de la Potherie says that they and the Nipissings once inhabited the shores of Lake Nipissing, and that they made themselves masters of all the other tribes of that section until reduced by disease, and the Iroquois compelled the remainder of the tribe to retreat, some to the French settlements, others to Lake Superior and Green Bay, Wisconsin. In 1740 they settled on Manitoulin Island.

According to the traditions of the Ottawa, Chippewa, and Potawotomi tribes, the three groups are descended from the same stem and were formerly united as one people at some point north of the lakes, apparently north of Lake Superior; whence the Ottawa and Potawotomi tribes, and the Chippewa in part, migrated southward. They separated in the region of Mackinaw, the Potawotomis and southern Chippewas going west into the section now embraced in Wisconsin, while the Ottawas turned to the southeast. The earliest mention of the latter places them on Manitoulin Island, Lake Huron, and along the northeast coast of this lake. They were among the first of the western tribes to navigate Ottawa river on trading expeditions to the French settlements, and it is probable the river received its name from them. They were allies and firm friends of the French and the Hurons.

The Iroquois, having destroyed the Hurons in 1646, and still thirsting for blood, turned their arms against the Ottawas, who fled, with a remnant of the Hurons, first to the islands at the entrance of Green Bay, Wisconsin, where they were kindly received by the Potawotomis. A few years later they moved westward, a portion going to Keweena Bay, where they were found by Father Menard in 1660. Another portion fled, with a band of Hurons, to the Mississippi, and settled on an island, at the entrance of Lake Pepin. Driven thence by the Sioux, whom they had foolishly attacked, they moved to Chequamegon Bay. Harrassed here by the Sioux and being assured of protection by the French, they returned in 1670-71 to Manitoulin island, a former home. Their stay here was short, as by 1680 most of them had joined the Hurons at Mackinew about the station established by Marquette in 1671. The two tribes lived together until about 1700, when the Hurons removed to the vicinity of Detroit. About the same time a portion of the Ottawas seem to have settled on the east coast of Michigan between Saginaw Bay and Detroit. The band which had moved to Southeastern Michigan returned to Mackinaw in 1706. Soon after this the chief seat of the tribe was established at L'Arbre Croche, Michigan. From this point they spread southward to various places in this state.

The Ottawas were strong adherents to the English interests, as against the United States; and a small part of the tribe which refused to submit to United States' authority removed to Canada and settled on Walpole island in Lake St. Clair. The other Ottawas in Canada are on Manitoulin and Cockburn islands, and the adjacent shores of

Lake Huron. As early as 1859 those in Canada had mostly become agriculturists, living in good comfortable log cabins; and most of those in Michigan have become citizens.

Originally the Ottawas were divided into four bands—the Keinouche, Kiskakon, Nassauaketon, and Sable, though it does not appear that there were any differences in the language spoken by these divisions. The total number of Ottawas at present is about 5,000, of whom one-fifth reside in Ontario, Canada.

Of the other two tribes, the Potawotomi and the Chippewa, of the confederated group mentioned above, we have only to refer here to the latter, as the Potawotomi, although originally on the Canadian side, have in historic times made their home chiefly south of the lakes. The Chippewas, or Ojibwas, at the time of their greatest numerical strength, formed the largest single tribe of Indians north of Mexico. Their former range was the region bordering Hudson and James bays on the north and Lakes Superior and Huron on the south, and also the southern shore of Lake Superior. The region immediately about Sault Ste. Marie seems also to have been a favorite resort and food-gathering point for them. The first knowledge of the tribe obtained by the French related to those residing at these falls, from which fact the name "Saulteurs" or "Falls Indians" was often applied to them, and also occasionally to the entire tribe. Their tradition seems to point to the shore of Hudson or James' Bay as their pristine home.

It is possible that Nicollet met with them in 1634 (or 1639); however, the earliest recorded notice of them is that in the Jesuit Relation for 1640, where they are mentioned under the name Baouichtigouin, as then residing at the Sault. In 1642 they were visited by the missionaries Raymbout and Joques, who found them at the Sault engaged in a war with a people to the west, apparently the Sioux.

Although the Chippewas have, since they first became known to the whites, been strong in numbers, spreading over an extensive territory, they have not occupied a prominent place in the pioneer history of the country, owing to their remoteness from the frontier during the colonial wars. The southern division—those living south of Lake Superior—being more warlike in disposition than those of the northern group, have played a much more important role in the intertribal wars of the northwest than the latter. Step by step they drove the Sioux westward, until they forced them out upon the plains. By them the Foxes, diminished in numbers by the attacks made upon them, were forced to seek safety by uniting with the Sauks. While the Chippewas, who had received fire-arms in advance of the other tribes west of Lake Michigan, were thus pushing back the eastern Sioux, many of their people, chiefly the Mississauga, already mentioned, had made their way eastward into the peninsula between Lakes Huron and Erie.

The Chippewas dwelling north of Lake Superior were comparatively unknown to the whites until long after intercourse with those south had been established. The location of this northern group being off the usual lines of travel, they seldom came in contact with the whites. They were generally mild and harmless, little disposed to war upon their tribes. On account of this peaceful disposition the name "Rabbits" was bestowed upon them by their more warlike southern brethren. They consisted of two local divisions known as

"Men of the Thick Woods" and the "Swamp People"—names derived from the character of the country they inhabited. The Maramegs, a tribe closely related to the Chippewas, if not actually a division of them, was incorporated with the northern group previous to 1670. The northern Chippewas are so intimately connected with the Crees and Maskegons that the three can be distinguished only by those acquainted with their dialects and customs; while south of the lake the Chippewas, Ottawas, and Potawotomis have always formed a kind of loose confederacy, frequently designated "The Three Fires."

The Maskegons, it is said, sprang from the three Chippewa gentes, the lynx, the reindeer, and the pike—which went northward from Sault Ste. Marie when the southern group started thence westward into the regions now embraced in Wisconsin, driven there possibly by some incoming tribe.

From the various estimates and enumerations of the population of the entire Chippewa tribe from 1764 to the present time, it would seem that there has been but little if any diminution in numbers. In 1764 the estimate was 25,000; in 1843, about 30,000; while the number at present is supposed to be between 30,000 and 32,000, of which 15,000 are in Canada and between 15,000 and 17,000 in the United States.

One of the most important of the tribes formerly inhabiting the region around the southern end and southwest of Hudson bay was that known as the Crees, but variously termed by early writers Cristeneaux, Knisteneaux, Klistenos, etc. The territorial limits of the tribe does not seem to have been definitely given by early explorers who visited the section before the relations of tribes were disturbed by the incoming of the whites. However, it is known that the Crees hunted over the region extending from Moose river, which enters James' bay, northwest to Churchill river, and westward from the vicinity of Hudson Bay to the head of Beaver river, and thence south to the hunting grounds of the Dakotas.

When they first became known to the Jesuit missionaries a part of the tribe resided in the vicinity of James' Bay, as it is stated as early as 1640 that "they dwell on the rivers of the north sea where the Nipissings go to trade with them." However, the relations of 1661 and 1667 indicate a region more to the northwest as the home of the larger part of the tribe. According to tradition, a portion of the tribe lived for a time about Red river, associated with the Chippewas and Maskegons, but were attracted to the plains by the buffalo. Although the Crees were essentially a woods people, many bands were virtually nomadic, their movements being governed largely by the food supply.

Ethnically and linguistically the Crees are closely related to the Chippewas—Hayden, in fact, makes them an off-shoot of the latter, and the Maskegons another division of the same group. However, Brinton and, perhaps, most ethnologists would be inclined to consider the Crees as representing the original stem of the sub-family to which these tribes belong. The tribe is, in fact, a typical member of the Algonquian stock, and, as was suggested more than half a century ago, may be the most direct representative of the original form of that stock, and, until gathered on reservations, had remained nearest the pristine home of the family. However, Hayden (Ethnography of the Indian Tribes of Missouri Valley) says the Crees assert

that formerly they inhabited a district much farther north than at the date at which he was writing (1865), their range at that former period being along the borders of Slave and Athapasca lakes, and thence to the northern end of Lake Winnipeg.

After obtaining arms the Crees made frequent war raids into the very heart of the Athapascan country, even to the Rocky mountains, but the Missiwipi river was accounted the northern limit of their territory, and their cessions of land to Canada claimed nothing beyond this line.

According to Hayden the Crees were divided, in 1865, into nine regular bands, which he names, in addition to which there were several small, unnamed bands besides a number of the tribe around Cross lake. So far as now known, the true ethnic divisions are the Crees proper, the Maskegons or "Swampy Crees," and the Monsonis or "Moose Tribe." The division into "Woods Crees" and "Plains Crees" has no reference to ethnic relations. The total population at the present time is estimated at 15,000.

One of the tribes of the Dominion which presents points of considerable interest to ethnologists is that known as the Assiniboins (or "Stone Sioux"). The chief point of interest in this case is that the origin and history of the tribe can be traced from the initiatory stage to its full formation. This tribe, which belongs to the Dakota group of the Siouan stock, forming one of the two primary divisions of that group, is an offshoot thereof. According to tradition the tribe was originally a part of the Wazikute gens of the Yanktonai, one of the Dakota tribes—a tradition which is confirmed by linguistic evidence. The separation from the parent stem, judging by the slight dialectal difference in the language, could not have greatly preceded the appearance of the whites. Nevertheless it must have taken place before 1640, as the Assiniboins are mentioned by the Jesuit Relation of that year as a distinct tribe. The indications, so far as apparent, point to the Lake of the Woods as the region where this separation took place, and the date thereof as not long prior to 1640. The relation of 1658 places them in the vicinity of Lake Alimibeg (Nipigon, Jeffery's map of 1762) between Lake Superior and Hudson Bay. From here they moved northwest to the vicinity of Lake Winnipeg, where they were living in 1670, having joined the Crees, who received them with open arms, and admitted them to friendly association. After separation from the parent stem they were henceforth at war with their Dakota brethren, their lot being cast with the Crees. During this association, which continued without interruption until comparatively recent years, the Assiniboins rapidly increased in numbers. They appear to have gradually moved westward upon the plains, becoming to a large extent nomadic; their range during the latter half of the eighteenth and first half of the nineteenth century, and until gathered on reservations, extending along the Saskatchewan and Assiniboin rivers, in the Dominion of Canada, from the forest limit westward well up toward the spurs of the Rocky mountains.

A band of this tribe accompanied La Verendrye in his expedition of 1738 to the Mandan villages of the upper Missouri, by which the whites obtained their first knowledge of that region. As they lived beyond the white settlements and away from the principal lines of travel, their history so far as known relates chiefly to their conflicts

with surrounding tribes. Besides their contests with their inveterate enemies, the Dakotas, they were frequently at war with the Gros Ventres and the Arikaras, forcing the latter from their earthen villages on the eastern bank of the upper Missouri and compelling them to seek a home further west.

At one period in their history they had pushed their way to the south side of Missouri river, along the Yellowstone, but the continued attacks of the Crows, the Blackfeet, and the Dakotas forced them, after suffering heavy losses, to return to their northern range. Previous to the great smallpox epidemic of 1836, the Assiniboin population was estimated at from eight to ten thousand, but this fearful scourge swept away in a single season fully one-half their numbers. In 1902 there were in the United States 699 at the Fort Belknap reservation, Montana, and 535 at the Fort Peck Agency—a total of 1,234; in Canada there were at various points 1,371, making the total population 2,605.

Farther to the west, in the region where the international boundary line approaches the eastern skirts of the Rocky mountains, is found an Algonquian group which seems, as it were, a tribe born out of due season—the Siksika, or, as better known, the Blackfeet, including, in the broader use of the term, not only the Blackfeet proper, but also the minor tribes known as the Kino, or Blood Indians, and the Piegans. These Indians, whom we shall include here under the term Blackfeet, though now chiefly south of the boundary, are Canadian in origin. They are of special interest to the antiquary and ethnologist in the study of the prehistoric northwest. Their country in modern times, until they were placed on reservations, was northern Montana and the adjacent portions of British possessions, extending from the Rocky mountains on the west to the junction of Milk river with the Missouri on the east, and north and south from Musselshell river in Montana to Belly and South Saskatchewan rivers in British territory. However, their history and traditions indicate a more northern origin.

When they were first encountered by employes of the Hudson Bay Company, they were living along Saskatchewan river and its tributaries. After this, driven apparently by the attacks of the Crees, they began to move south and west, and not long thereafter came into possession of horses taken in war from the Crows and Shoshoni. By 1816, aided only by the Gros Ventres, they had conquered a large territory from the Assiniboins, Crows, Flatheads, Shoshoni and other tribes. Their hunting grounds then extended from the Saskatchewan to the Yellowstone. However, Dr. Hayden and G. B. Grinnell agree in locating the early home of the Blackfeet far north in British America; the latter bringing forward a considerable array of evidence that their original home was in the country north of the Lesser Slave Lake and next south of the Beaver Indians. This tradition is fortified by their terms for the cardinal points, by the names applied to them by the Crees, by the evidence that they formerly inhabited a timbered country, and by the recollection of their first arrival at the Rocky mountains from or through a timbered region. But more especially does their long and intimate association with the Sarcees, an Athapascan tribe which certainly came from the north, indicate the region of their pristine home and the direction of their chief migratory movement.

All the evidence, therefore, leads to the conclusion that the Blackfeet were, within traditional times, the most northwestern representative of the Algonquian stock. Mackenzie tells of a people, whose name and further history he was unable to obtain, who were formerly wedged in between the Crees and the Athapascans, who were pressed back toward the mountains or else exterminated. It is now quite evident that these were the Blackfeet, who, when driven out, were accompanied by the Sarcees.

The questions which these facts bring forward, bearing on the prehistoric movements in the northwest, though belonging to the speculative field are nevertheless interesting. Were the Blackfeet, the last of the Algonquian procession developing and moving toward the southeast? Or were they, according to the opposite theory, the pioneer Algonquians in a movement to the northwest? Possibly the tribe was developed from an isolated or estranged element; nevertheless, speculation as to their origin brings before us the more important inquiry, was this northwestern section, the place of the development of the Algonquian stock?

In the more distant northwest, beyond Churchill river to Lake Athapasca, and thence to Great Bear lake, we meet with a number of tribes belonging to the Athapascan stock—a group which touches in its northern extremity, the Eskimo fringe along the Arctic coast, and in its southern extension reaches into northern Mexico. From east to west they roam over nearly the entire breadth of land from the Pacific ocean to Hudson bay. But the Indians of this area constitute only one of the groups of this great family. It is represented by a number of small colonies scattered along or in the vicinity of the Pacific coast in Oregon and California; and by the various Navaho and Apache tribes of Colorado, New Mexico, Arizona, and northern Mexico, and the Lipans along the lower Rio Grande. The tribes of this stock are of more than ordinary interest to the ethnologist and philologist, because the geographical positions of the various offshoots show beyond question evidences of extensive prehistoric migrations; and also, notwithstanding the larger portion of the northern group is found east of the Rocky mountains, that the family belongs essentially to what we have termed the Pacific section, that is, the western ethnological section of North America, the Atlantic or eastern section comprising only that portion east of the Rocky mountains and north of the Rio Grande.

The Indians of the northern group, the only division of the family found in Canada and Alaska, have very commonly in recent years been designated by the term Tinneh, or Dené, a name which they apply to themselves.

The Dené had until recently very little intercourse with the whites, this being limited to their fur-trading relations with the Hudson Bay Company, and occasional contact with an explorer. It is known, from the first knowledge of them obtained by the whites, that they carried on a desultory warfare with the Crees and other tribes living south of them, and that those living on the lower Mackenzie river were almost constantly at war with the Eskimo.

II. PHYSICAL TYPES OF THE INDIANS OF CANADA.

By Franz Boas.

Although anthropometric material from Canada is very incomplete, it is possible to describe a few of the prominent types inhabiting the country. Unfortunately, two large regions must be excepted from our consideration, because practically no material to speak of is available. These regions are the Mackenzie basin, extending from the Rocky Mountains to Hudson Bay, and the whole interior of Labrador. A determination of the physical types of the region between the St. Lawrence and Lake Superior is also difficult, because at the present time the natives are so much mixed with white blood that an accurate determination of the earlier types is almost impossible. Therefore all we can do at the present time is to describe from the material heretofore collected the distribution of types found along the Arctic coast, the Pacific coast, and along the western part of southern Canada. In this area four distinct types may be distinguished: first, the Eskimo type, which is found in its most marked form along the shores of Hudson Bay and in the Arctic archipelago; second, the north Pacific coast type, which occupies the coast extending from the Aleutian Islands, southward along the coast of British Columbia, showing, however, in this district considerable variations; third, the western plateau type, which is found in the interior of British Columbia; fourth, the Mississippi Basin type, which occupies the whole of the southern prairies of Canada. While the Eskimo type, the plateau type and the Mississippi Valley type are each quite uniform in the territory in which they occur, the Pacific coast type shows a remarkable degree of variability in different parts of the coast.

Before describing the types of these various regions, it may be well to make a few remarks regarding the position of the Canadian Indians in relation to the American race, and to the Asiatic race. Taking the anatomical traits of the tribes of northwestern Canada as a whole, we are impressed by their resemblance to Siberian tribes. The color of the skin, the texture and color of the hair, the form of the head, and the conformation of the face of the inhabitants of these areas show undeniable similarities. At the same time, the Asiatic types differ from their nearest American neighbors in the more pronounced Mongoloid development of the eye and in smaller measures of the face. In recent times opportunity is frequently given to see American Indians, Japanese, and Chinese, in the same costumes, on board of vessels plying on the Pacific coast, and notwithstanding their far-reaching similarity, it is on the whole, not difficult to recognize the Asiatic by the two traits just mentioned, although a considerable number of cases occur in which it is not quite easy to judge whether the subject is an Asiatic or an Indian.

On the other hand, if we compare the northwestern Canadian Indian with types like that of the Indians of southern California, or with that of the Indians of the central parts of the United States, the differences of type are striking. The color, formation of the head, conformation of the face, and shape of the nose are so fundamentally different in these regions that the similarity between the northwestern

Canadian and the Asiatic types seem to be greater than that between this type and that of the California Indian or of the Indian of the middle Mississippi.

It appears, therefore, that we must consider the inhabitants of northeastern Asia and of America as a unit divided into a great many distinct types, but belonging to one and the same of the large divisions of mankind.

After these introductory remarks, we will briefly describe the various types enumerated above.

The Eskimo type, as stated before, is found in its most pronounced characteristics in the Hudson Bay region. Their stature is short, the men averaging, approximately, 158 centimeters, the women 148 centimeters. Their heads are characterized by large size and great capacity of the cranium. The cephalic index is very low, averaging approximately 72; the skulls, at the same time, are very high, the index averaging nearly 77. At the same time the head is absolutely very long and very high, the average length of the head being about 195 mm., the width 144 mm., the height 150 mm. One peculiar trait of the Eskimo skull is the great width of the face as compared with the width of the skull. Eighty-five skulls from Smith sound, measured by Bessels, give an average breadth of head of 130 millimeters, while the width of the face is 133 millimeters. Similar conditions prevail among all the pure eastern Eskimo. Combined with the great width of the face, is a pronounced prominence of the cheek-bones, which gives to the whole face a remarkable flatness and width, extending from the malar points across the nose. In contrast with this great width is the narrowness of the nose, which almost seems incongruous. While, in most races we are accustomed to combine with a wide face a wide nose, the Eskimo has a very narrow nasal aperture, and, compartively speaking, high nasal bones, which give to the men, at least, a high-bridged nose. The color of the skin is, on the whole, light but when exposed to the sun, it assumes a dark reddish tinge. The hands and feet are remarkably small.

West of the Mackenzie, these traits are not so marked. The average stature in this region is much higher, the men averaging about 168 centimeters, the women about 156 centimeters. The length of the head is still considerable, reaching in the men, approximately, 190 millimeters, while the width of the head is about 154 millimeters, the cephalic index being approximately 80, but the trait that the width of the face is greater than the width of the head still persists, the width of the face in this region being approximately, 156 millimeters. Although nasal measurements are few in number, it seems that the peculiar narrow nose is characteristic of these tribes also.

It was stated before that very little is known of the type of people of the Mackenzie basin. The few skulls and measurements that are available suggest a fairly close relation between this type and that of the northern part of the coast of British Columbia. The inhabitants of the region west of the Mackenzie seem to have a stature of about 166 centimeters and their heads are moderately long, averaging about 195 millimeters, and the width of the head averaging about 153 mm. The face is wide, having about the same width as the face of the Indians of the Mississippi basin and of those of the northern parts of the Pacific coast, averaging 148 millimeters. The cephalic index is about 79. It would seem that the cheek bones are

not as prominent as those of the Eskimo. The nose seems to be much smaller than that of the Indians of the Mississippi basin.

The physical characteristics of the Indians of British Columbia are by no means homogeneous. As compared to the Indians east of the Rocky mountains and further south, they have in common a lighter complexion and lighter hair, but the shapes of their heads and faces differ considerably. Two sub-types may easily be distinguished—the northern type, represented by the Haida, the Indians of Nass River, and the Tsimshian; and the Kwakiutl type. In the Province of British Columbia is also found the type of the western plateaus.

These types may be characterized by the following measurements:—

I. MEN.

	Northern Type.		Kwakiutl Type.		Type of the Western Plateaus.	
	Average.	Mean Error.	Average.	Mean Error.	Average.	Mean Error.
	mm.		mm.		mm.	
Stature	1675	±7.40	1645	±5.90	1634	±7.90
Length of head	194.6	±0.80	188.7	±1.19	186.5	±0.85
Breadth of head	160.6	±0.67	159.0	±1.00	155.9	±0.52
Breadth of face	153.7	±0.85	151.4	±0.54	147.4	±0.41
Height of face	121.6	±0.87	128.0	±0.67	120.3	±0.71

II. WOMEN.

Stature	1542	±5.70	1537	±5.90	1560	±6.00
Length of head	185.6	±0.88	186.9	±1.64	179.5	±0.83
Breadth of head	153.2	±0.90	154.3	±1.44	150.0	±0.41
Breadth of face	143.9	±0.80	144.3	±0.64	138.8	±0.40
Height of face	114.3	±0.93	119.3	±0.82	112.5	±0.54

They may be described as follows: All these types are of medium stature, and their arms are relatively long, their bodies short. Among the northern type we find a very large head. The transversal diameter is very great. The same may be said of the face, which has an enormous breadth. The height of the face is moderate, and therefore its form appears decidedly low. The nose is often concave or straight, seldom convex. The noses of the women are decidedly concave. The elevation of the nose over the face is slight. The point of the nose is short.

The dimensions of the head of the Kwakiutl are similar to those of the northern types, but the head seems to be slightly smaller. The face shows a remarkably different type, which distinguishes it fundamentally from the faces of the other groups. The breadth of face is nearly the same as that of the northern type, but its height is enormous. The same may be said of the nose, which is very high and comparatively narrow. The point of the nose is short: its eleva-

tion is also very great. The nasal bones are strongly developed, and form a steep arch, their lower ends rising high above the face. For this reason convex noses are found very frequently among this type. Convex noses also prevail among the women, and for this reason the difference between the female form of the Kwakiutl and the female form of the northern type is very great.

The western plateau type is characterized by a very small head, both diameters being much shorter than those found on the coast, while the proportions are nearly the same. The transversal diameter of the face is much shorter than that of the coast Indians, being nearly the same as that found among the Indians of the plains. The face is much lower than that of the Kwakiutl type, and also slightly lower than that of the northern type. The nose is convex and heavy. Its point is much longer and heavier than the point of the nose among the coast types.

There are good indications of the existence of a distinct type on the most southern part of the coast, but the evidence is not quite satisfactory. The Lillooet of the Harrison lake region are remarkable on account of their very short stature, which averages less than 160 centimeters, and for the great breadth of head, which is indicated by a cephalic index of nearly 89. The northern branch of the Lillooet are slightly taller, averaging 162 centimeters in stature, and the heads are not quite so broad, having an index of about 87. The coast Salish of the Fraser River delta, southern Vancouver Island, and of the Puget Sound region seem to be closely allied to this type. The head form is not quite certain, since it can be determined only among young children who have not been subjected to the custom of deformation, which prevailed until recent times all along the coast. They all seem to be characterized by great shortness of the head, the index ranging between 84 and 87. The average stature is, approximately, 164 centimeters; the face is characterized by great breadth, flat, often concave, nose, thick lips and receding chin. It is worth remarking that further to the south a sudden change of type takes place on the Columbia River, where narrow and high ridged noses are found, and taller statures. In some respects the Columbia River type resembles the type of the Kwakiutl.

The Kootenay are in type similar to the Indians of the plains. They are much taller than the Indians of British Columbia, averaging 169 centimeters; their heads are more elongated, the average index being about 80. At the same time, their color is darker, the face slightly heavier than that of the Indians of the interior of British Columbia and the nose is more like that of the plains Indian than that of the more western tribes. In general, it would seem that the type of the southern interior of British Columbia is more closely affiliated to this type than to those of the coast.

Very little is know of the physical characteristics of the Tlingit of the coats of Alaska, but the few measurements and descriptions that have been obtained, suggest that they resemble the tribes of northern British Columbia.

It is also remarkable that the Aleutians differ entirely from the Eskimo of the neighboring mainland. The skulls that have been described are short, and, so far as we can judge, entirely different from the skulls of the Alaskan Eskimo, and also from those of the native tribes of northeastern Asia.

In southern Canada, east of the Rocky Mountains we find the type which is characteristic of the Mississippi basin. The cephalic index ranges a little below 80, while the stature ranges from 168 to 172 centimeters, the more southern tribes being, on the whole, the taller ones. The cephalic index, in the region of the great lakes, is a little higher than that found further to the west. The average is about 80 among the western Ojibwa, and about 82 among the eastern Ojibwa. The distribution of the index suggests that among the eastern Ojibwa a very short-headed type may survive. Further to the east, we find the Iroquois, whose heads are more elongated, having an index of approximately 79. The same index is found among the present inhabitants of the Atlantic Provinces. The stature of the Iroquois and Indians of the Atlantic Provinces at present is approximately 172 centimeters. It must, however, be borne in mind that the bulk of the present population are mixed bloods.

It is important to note that skulls collected from ancient cemetries of the region inhabited by the Hurons, and extending from there to the mounds of Dakota are very long. An average of 35 supposed Huron skulls gives an index of not quite 75, and the same value is obtained from 19 skulls from Dakota mounds. One hundred and one skulls from Illinois mounds gave an average index of 77. We have therefore the peculiar condition that at the present time a somewhat short-headed population is found in this area, which was preceded by a population characterized by very long heads. Detailed descriptions of the cranial conditions are not available, so that no thorough comparison of the types in question can be made.

Turning farther to the east, it is worth mentioning that 75 skulls from Indian burial places in New England, all of which probably precede the period of white contact, give an average index of 75. It seems instructive to compare the absolute skull measurements of these areas.

	Length of skull.	Width of skull.	Height of skull.
Eastern Eskimo	185	132	138
New England	181	136	136
Sioux	180	142	131

It appears that the New England type, so far as expressed by skull diameters, is intermediate between the type of the Eskimo and that of the Mississippi Valley Indians. Whether this may be assumed as proof of an admixture of Eskimo blood is a point that I do not venture to decide at the present time. It would be interesting to know the relation of this type to the long-headed Huron type.

III. THE INDIAN LANGUAGES OF CANADA.

By Franz Boas.

One of the most peculiar ethnographic phenomena of the American continent is the great diversity of native languages. The number of distinct linguistic families in North and South America is very large, probably exceeding one hundred. On the whole, the number of

*The section on Kootenay has been contributed by Dr. A. F. Chamberlain.

families on the Pacific coast is much larger than that on the Atlantic coast, the majority being found in the region of the Rocky Mountain system and of the Andes, including their eastern foothills. In North America, particularly, large areas are inhabited by tribes speaking cognate languages, on the plains and on the Atlantic coast, while on the Pacific slope, a surprising diversity of language is found. Similar diversity prevails on the coast of the Gulf of Mexico.

It has frequently been claimed that all the American languages have certain traits in common. They have been called incorporating and polysynthetic languages; incorporating, in so far as there is a strong tendency to embody the object of the sentence in the verbal forms; polysynthetic, in so far as a great number of material ideas are combined into a single word by means of grammatical processes.

Closer studies of the American languages which have been carried on during the last twenty-five years show very clearly that such a generalized view of the type of American languages is not admissible, and that a great variety of forms occurs.

The characteristics of distribution and the diversity of form here referred to are also found in Canada. Of the fifty-four linguistic stocks which are enumerated north of Mexico, ten or eleven are spoken in Canada.

(1) *The Eskimo*, which is spoken all along the Arctic coast of our continent. At the present time it extends as far south as the southern coast of Labrador, while we have evidence that in former times it was spoken for a considerable distance along the shores of the Gulf of St. Lawrence, perhaps even on its southern side. The whole coast line of Labrador, the shores of Hudson Bay, with the exception of its extreme southern part, the inhabited islands of the Arctic Ocean, and the coasts of Greenland, with the exception of its uninhabited northeast portion, are the home of the Eskimo. Ruins of houses found all over the Arctic archipelago, and practically all along the coast of Greenland, indicate that at times their habitat extended much further to the north than it does now. Only in the regions west of Hudson Bay are Eskimo tribes found living far from the sea—on the large lakes and rivers with which that country abounds.

(2) *The Athapascan* or Tinneh (Dené). Numerous dialects of the Athapascan languages are spoken in the northern part of Canada. Athapascan tribes occupy the whole interior of Alaska and extend from there over the Mackenzie basin eastward towards Hudson Bay, and westward to the coast range.

Isolated Athapascan bands were also located in the Nicola and Similkameen valleys in southern British Columbia, and an offshoot of this family is found east of the Rocky Mountains near Calgary, forming part of the Blackfoot Confederacy. The western isolated Athapascan bands belonged to the large group of Athapascan tribes which are found all along the Pacific coast, extending through the States of Washington, Oregon, and California, and connecting with the Apache, Navaho and Lipan, the most southwestern tribes of this stock.

(3) *The Algonquin*. The Algonquin occupy practically the whole southern part of Canada east of the Rocky Mountains. By far the greatest number of Algonquin tribes belong to the central group. These include the Cree, who extend through the most northern part of the region occupied by the Algonquin tribes, from the Rocky

Mountains to the interior of Labrador, and the Ojibwa, who occupy the more southern part of the country. In the Atlantic region a number of distinct dialects are found, the principal of which is that of the Micmac of Nova Scotia.

At present a branch of the Siouan family, the Assiniboine, inhabit a small part of the plains of Canada. Orinigally the habitat of this tribe was farther east and south.

(4) *The Iroquois.* In the eastern part of Canada, the Iroquois are found. Although their principal habitat was in the State of New York, a number of important tribes occupy the north side of the St. Lawrence River and the shores of Lake Ontario and Lake Erie.

(5) *The Beothuk* of Newfoundland have become extinct, but it seems probable that they represented a distinct linguistic family.

(6) *The Kootenay.* Proceeding westward from the territory occupied by the Algonquin stock, we find the Kootenay, who inhabit principally the valley between the Rocky Mountains and the Selkirk range, and speak an independent language.

(7) *The Salish.* West of them is found the important Salish family, occupying the whole southern interior of British Columbia and extending northward to the southern boundary of the region occupied by the Athapascans. In the southern part of the Pacific coast of British Columbia they have crossed the mountains and occupy the coasts of the Gulf of Georgia. Their territory extends southward into the United States, where they border on the Sehaptin. An isolated Salish dialect is spoken on the Pacific coast, south of Columbia River, while another isolated dialect is spoken on the northern part of the coast of British Columbia on Dean Inlet. Salish is divided into a great number of dialects.

(8) *The Wakashan.* On western and northern Vancouver Island and on the coast of British Columbia, northward from the Gulf of Georgia, reaching to Douglas Channel, are spoken the Wakashan languages, which embrace the two important dialects of the Nootka and Kwakiutl.

(9) *The Tsimshian.* On the Skeena and Nass Rivers are located the Tsimshian, whose language differs fundamentally from those of all the neighboring tribes.

(10) *The Haida.* On Queen Charlotte Islands in the northern extremity of British Columbia the Haida language is spoken, which at present also extends into southern Alaska.

(11) Although outside of the limits of Canada, *Tlingit* or Koloshan must be mentioned, the last of the great linguistic stocks of the northern coast of the Pacific Ocean.

In the following pages a brief characterization of these linguistic stocks will be given.

(10) *The Haida.* On Queen Charlotte Island, in the northern characterized by a simplicity of consonantic clusters, by the avoidance of consonantic clusters at the beginning and at the end of words, by the occurrence of a considerable number of velars, stops as well as aspirates and nasals; by the absence of labiodentals and the occurrence of a number of palatalized l's. Its vowel system is simple. The word in Eskimo forms a firm unit, held together by word-form-

ing suffixes, which are of verbal, nominal and pronominal character. Derivations are formed exclusively by means of suffixes. Whenever a word appears provided with suffixes, it loses its word-forming elements, and in more or less modified form enters into composition with these suffixes.

The number of etymological suffixes is very considerable, 143 suffixes being counted, which may be attached to any verb or noun, the limits of their variability being determined only by the requirements of the sense. On account of the great variety of ideas expressed by these suffixes, the single Eskimo word often expresses ideas which in European languages are expressed by sentences. The etymological suffixes include not only the elements which transform verbs into nouns, expressing the ideas of the actor, the abstract noun, the passive participle, the place or time where something is done, instrument, etc., and also elements which transform nouns into verbs, like "to be," "to have," " to do something to somebody," "to use," "to become',, etc., but also a very large number of adjectival and adverbial ideas like, "small," "nice," "ugly," "miserable," "only," "much," "very," "exactly," "for a little while," "badly," "more," "really," "entirely," etc. Many adverbial suffixes are more readily translated in English by subordination of verbs, such as, "to begin to do," "to cease to," "to be able to," "to desire to," "to intend to." To this group must be added also suffixes which have to be translated by our tenses, which, in Eskimo, are morphologically of the same order as the adverbial suffixes here described. Many of the suffixes here enumerated have very special significance, such as, "to smell," "to call," "to be tired of." As an example of etymological composition the following may be given:

Takusariartorumagaluarnerpâ? Do you think he really intends to go to look after it?

Takusar(pâ), he looks after it; —iartor(poq), he goes to;—; —uma(voq), he intends to—; —(g)aluar(poq), he does so—but—; —nerpoq, do you think he—.

It is evident, therefore, that much of the syntax of Indo-European languages is expressed in Eskimo, by means of etymological suffixes.

While the tenses of the verb, as mentioned before, are expressed by means of etymological suffixes, the modal development of the verb is quite considerable. The indicative, interrogative, optative, and three subordinate moods occur, in all of which the pronoun shows separate forms. The pronoun has also developed separate forms for the single intransitive subject and for all the combinations of subject-object. The compound forms expressing the relation of a pronominal subject and pronominal object have been so much modified that the component pronominal elements can no longer be clearly traced. The transitive forms of the verb expressing the subjects of the various persons combined with the object of the third person singular are closely related to the possessive form, so that the expression "I see him," is practically the same in form as the word, "my-seeing." This analogy becomes still more apparent when we consider the methods of expressing the subject of a transitive sentence and the possessor of an object. The Eskimo language possesses two cases, one of which, generally called the objective, is used for expressing the object of transitive verbs and the subject of intransitive verbs, while the second case, generally called subjective, is used

for expressing the subject of the transitive verb and the possessor. If this form be expressed by the English possessive case, we may translate the forms found in Eskimo as follows: "the man's, his house," or, "the man's, he sees him," which, as stated before, is in form analogous to the possessive, and might therefore be expressed by "the man's, his seeing him." The possessive forms have also a separate development for the subjective and for the objective, so that forms occur like "his house's, its door," where "his house's" would occur in the subjective form. It is important to note that these subjective forms of the possessive are analogous to one of the subordinate moods, so that a sentence like "I met him when he came" might be considered as analogous to the form, "his coming's, my meeting."

Eskimo has three numbers, singular, dual, and plural, which are expressed in the noun as well as in the verb. The demonstrative pronoun is highly developed, there being twelve distinct pronouns, which express position in relation to the speaker, the person addressed, and the person spoken of, also distance, directions to the right, left, in front, behind, above, and below the speaker, and probably also the direction south and the position at a distance from the speaker in relation to the house, namely, outside, when he is inside, and inside, when he is outside.

Since etymological suffixes do not embrace any local adverbs, local relations are expressed by means of nominal suffixes, expressing the ideas of "to," "from," "through," "towards," "by means of," and "like."*

(2) *Athapascan.* The Athapascan or Dené languages, notwithstanding their wide distribution and dialectic differentiation, have preserved the same fundamental grammatical traits. Their phonetics are rather harsh, the vowel system variable. They lack all traces of reduplication and use for expressing grammatical concepts principally composition and position, to a less extent phonetic changes of the stem. The restriction of the use of certain stems, particularly of verbs, to the singular, dual, or plural number, or to certain tenses, or even to certain persons, is developed to an unusual degree in this linguistic family. Although this feature is primarily a lexicographic character, it is used to such an extraordinary extent by all the Athapascan dialects, that it must be mentioned in a morphological sketch of the language. The change of stem occurs particularly in verbs expressing kinds of motion, position, mental action, in verbs expressing actions done by certain instruments and in some other verbs not readily classified. The same characteristic changes, although too a much more limited extent, occur in other Canadian languages, like Tsimshian, Salish, and Kwakiutl.

The number of etymological affixes which transform verbs into nouns is small; most nouns being independent stems. Verbal phrases have, however, often a denominating function. Many compound

*S. Kleinschmidt. Grammatik der grönländischen sprache. Berlin, 1851.
Theodor Bourquin. Grammatik der Eskimo-Sprache. Gnadau, 1891. (Labrador.)
E. Petitot. Vocabulaire Francais-Esquimau, Paris, 1876 (Mackenzie River).
Francis Barnum. Grammatical Fundamentals of the Innuit Language. Boston, 1901. (Alaska.)
William Thalbitzer. A Phonetical Study of the Eskimo Language. Copenhagen, 1904.

nouns are formed by juxtaposition. A true nominal plural and dual are not found, but these ideas are expressed by suffixes expressing "many" and "feet" "(*i.e.*, two). Only a few terms designating animal beings have in their plural form a suffix that cannot be explained in this manner. There is no formal classification of nouns according to sex, form, animation, but classes are distinguished by the use of distinct verbal stems relating to states or acts of objects of different form.

Verbal forms originate by composition of an extended series of elements which are quite varied in character and very numerous. In many compounds they are also apparently so equal in weight, that the distinction of affixes and stems is somewhat arbitrary. Ordinarily the essential idea is expressed by the terminal element which is regularly preceded by pronominal elements and which, therefore, may be considered as the stem to which the others are prefixed. Suffixes seem to express only syntactic relations.

The first group of component elements express ideas like those of completion, negation, repetition, but also many local ideas, like: out of, through, back towards the speaker, back from the speaker, falling, rising. In compounds these may be followed by another group expressing adverbial ideas like: up, down, into, hardly, badly, well. Besides these two classes there are many nominal elements which are used as prefixes immediately preceding the verbal stem with the pronominal subject. These express locatives and instrumentals; for instance, in the air, on the ground, in water, in fire, with the hand, with the foot, with the back.

Possession is expressed by the pronominal elements which precede the noun. In many cases their connection with the noun is so close that the initial sound of the latter is modified when preceded by possessive elements.

The verb in syntactic construction with pronominal subject takes its pronominal element following the etymological prefixes before described, and preceding the terminal verbal stem of the compound. Although the pronouns for different tenses and different verbs seem to be derived originally from the same forms, they are so much differentiated in the present state of the language, that they appear in quite different forms in aorist, present, past, future, and imperative. Each tense seems to contain certain characteristic phonetic elements which have become closely amalgamated with the pronouns. Furthermore, different classes of verbs have different characteristic elements—on the whole vocalic—which precede the pronoun. These vocalic elements may have had a separate meaning at one time, but their significance is not apparent, and they give the impression of purely formal elements.

The subjective pronoun has a singular and a dual. The plural is formed from the dual by an additional element preceding the dual form and, in some cases, by slight modifications of the dual forms.

The objective pronouns differ from the subjective ones, and are identical with the possessive forms. In transitive verbs the pronominal object precedes the subject with which it forms contractions. In a great many cases the verb has an indirect object which is expressed by means of postpositions. In sentences which have nominal subject and object, the object always precedes the verb with which it

forms a firm unit. The subject either precedes the object, or it is placed at the end of the sentence, following the verb.*

(3) *Algonquin.* Of the numerous Algonquin dialects the western, central and eastern groups are represented in Canada. The Blackfoot belongs to the western group, and differs very much from the other groups. The central group is represented by the Cree and Ojibwa with their subdialects, while the Micmac of Nova Scotia is the characteristic type of the eastern group. The following remarks are based primarily on the central dialects.

The grammatical processes employed in Algonquin are varied. Prefixing, suffixing, vowel change and reduplication are utilized for expressing grammatical categories. The etymological structure of the word is very complex. The method of composition is somewhat different in nouns and in verbs. In the latter generally two important component elements are found which are apparently nearly co-ordinate in value. Since, however, the total number of initial stems is much greater than that of second place stems, the former appear on the whole as primary, the latter as subsidiary elements. The ideas expressed by either group are very general and qualify each other. Many initial stems express ideas of motion in a certain direction, while secondary stems express more often concepts of manner of motion, such as "slowly," "quickly." Other ideas, however, all of a very general character, are expressed by these stems. Initial stems convey ideas like: to busy oneself with a fluid, to wipe, association, beginning, completion. Secondary stems comprise not only modal ideas like those expressed by our adverbs, but also those of form, like: relating to a hole, matter at rest; and in a more general way qualities, such as color, mental state, feeling; and limitations of space, like relations to parts of the body. Still another group of stems follow in position the secondary stems here described. Many of these designate manner of motion, as to dance, to swim, to move through air, to crawl, to move on land. These elements are often followed by classifying elements, to most of which no definite meaning can be ascribed. In a similar position, following the initial or secondary stems, occurr instrumentals which express ideas like: to do with the hand, the mouth, with a point or general causality.

These elements occur, also, in nouns in which sometimes a secondary stem may appear in initial position. The noun has also many generic suffixes denoting ideas like: fluid, string, fruit, instrument.

Reduplication is used to express intensity of action, customary action, continuity, repetition, distribution and duration.

All objects are classified as animate or inanimate, and this distinction pervades the whole language, animate and inanimate gender being expressed in the noun, pronoun, and verb. Plurality is also always expressed.

The pronominal elements used in syntactic construction of verbs are quite complex. They differ considerably in different tenses, and particularly in moods. The forms expressing the combination of pro-

*E. Petitot. Dictionnaire de la langue Dènè-Dindjié. Paris, 1876.
A. G. Morice. The Déné languages. Canadian Institute Transactions. 1891. Vol. I., pp. 170-212.
Pliny Earle Goddard. The Morphology of the Hupa Language. Berkeley, 1905.

nominal subject and object are so much specialized that their relation to the simple pronominal forms is quite obscure. First and second persons, third person animate, third person inanimate, inclusive, exclusive, are distinguished, and in the plural occur second person and third person animate and inanimate. First and second persons indicative are prefixed while the third persons are suffixed. The inclusive has the second person prefix and a special suffix; the exclusive has the first person prefix and the same suffix. In the future tense the prefixes amalgamate with a future element.

In dependent clauses an entirely different set of pronominal elements is employed, which contains only suffixes. Various types of subordination are expressed by pronominal elements, most of which are related to this series. Various prefixes differentiate temporal, causal, and other forms of subordination. The exuberance of these forms is quite remarkable.

In transitive verbs in the indicative mood the prefixes of the first and second persons reappear. Whenever the second person appears in subject or object its prefix is used, while that of the first person is used only in relation to the third person. The multitude of forms of the dependent moods is here, of course, still greater than in the intransitive verb. In most dialects identity and difference of several third persons occurring in a sentence and relating to preceding sentences are expressed with great nicety.

In the substantive three syntactic cases occur: subjective, objective, and locative, to which may be added a vocative. Possession is expressed by prefixed personal elements and by suffixes which differ in singular and plural, animate and inanimate. In these forms, also, the cases above mentioned are distinguished, and, in the third person, the relation of the possessor to the other third persons contained in the sentences modify the possessive forms.

Owing to the high development of syntactic, particularly pronominal forms, and the close amalgamation of etymological elements the word of the Algonquin languages presents a firm unit.*

(4) *The Iroquois.* The Iroquois is spoken in a number of closely related dialects by tribes whose habitat was in the region of the Great Lakes. The stock embraces two important groups of languages, the Iroquois proper and the Cherokee, the latter originally spoken in the southern Alleghanies. The Iroquois proper differs in phonetic character and in form considerably from other Canadian languages. The system of consonants is very meager. We find no labial stops, but

*F. A. Cuoq. Etudes philologiques sur quelques langues sauvages de l'Amérique. Montréal, 1866.

F. Baraga. A Theoretical and Practical Grammar of the Otchipwe Language. Detroit, 1850; Montreal, 1878.

F. Baraga. A Dictionary of the Otchipwe Language. Cincinnati, 1853; Montreal, 1878, 1880.

E. F. Wilson. The Ojebway Language. Toronto, 1874.

A. Lacombe. Dictionnaire et grammaire de la langue crise. Montreal, 1872, 1874.

F. W. Tims. Grammar and Dictionary of the Blackfoot Language. London, 1887.

S. T. Rand. Dictionary of the language of the Micmac Indians. Halifax, 1888.

A. S. Maillard. Grammar of the Mikmaque Language. New York, 1864.

Wm. Jones. Principles of Algonquian Word-Formation. American Anthropologist, N.S., Vol. VI., 1904, pp. 369-411.

only two dentals and one palatal, both surds and sonants. The spirant series is more fully developed, including an *f*, various dentals and palatals. Among the nasals only *n* and *ñ*(*ng*) occur. An *r*, which is common, shows close affinity to *l*. A very weak breath, and the glottal stop occur also. Nasalized vowels are common.

Grammatical processes are essentially prefixing and suffixing. Reduplication is absent, but intricate phonetic changes are very frequent. Denominating terms are classed as masculine, non-masculine, and indefinite; but also as animate and inanimate. Singular, dual and plural are distinguished. In the verb many adverbial ideas, such as tense and habit, are expressed by derivative affixes. The passive is expressed in the same manner. Temporal forms are quite numerous, while there are only three moods, the indicative, one subjunctive, and the imperative. On the whole, however, the verb is not rich in derivational elements, and local adverbial affixes are not found, different verbal stems expressing the idea of motion in various directions, such as up, down, into, out of, etc.

Syntactic relations of inanimate nouns and verbs are ordinarily expressed by incorporation of the noun in the verb, the noun being placed between the prefixed pronoun and the verbal stem, in the same manner as is done in Kootenay, Shoshone, and Nahua. In this case the noun loses its word-forming prefixes, the most common of which are *a*— and *ga*—, while it is increased by certain new suffixes. The subject of the intransitive as well as the object of the transitive are thus incorporated. For this reason adjectival terms appear also generally as intransitive verbs with incorporated nominal subject. Animate nouns are not thus incorporated. The animate subject precedes the verb, the animate object follows it.

In the noun, singular, dual, and plural are distinguished. Both have the same suffix, but the dual has besides a prefix derived from the numeral "two." The independent pronoun shows no distinction in the first and second persons between singular, dual and plural, while the third persons differ in singular and plural. A similar lack of distinction appears in those combinations of subject and object in which the two differ in number. In this case the form remains the same, no matter whether subject or object are singular, *viz.*, dual or plural. The possessive pronoun and the objective pronoun are closely related. Both possess eleven forms: first and second person singular, dual, and plural, third person masculine and non-masculine singular and plural, and indefinite. The subject of the verb, on the other hand, has fifteen forms: first, second, third person masculine and non-masculine, in singular, dual and plural, indefinite, and a subdivision of the first person dual and plural in inclusive and exclusive. It is very remarkable that the locative forms of the possessive, expressing "at, like, in, under, near," have the same set of fifteen forms, as though they were really verbs. The transitive forms include the object and the component elements are highly modified. All pronouns are prefixed to nouns as well as to verbs. Various classes of words present variations of the pronominal forms which affect principally their terminal sounds. Similar variations occur in plural forms as well as in the endings of incorporated words referred to before. These modifications are apparently quite irregularly distributed and have not, so far, been brought into such order, that the type of a word would indicate the class of modification that has to be used.

(5) *Beothuk.* Practically nothing is known of the grammar of the Beothuk, the only available material being a few brief vocabularies.*

(6) *The Kootenay* (by A. F. Chamberlain). The Kootenay is spoken in two dialects, the Upper and Lower Kootenay, which, however, differ only slightly in phonetics, grammar, and lexical material. In phonetics the velar stops abound, likewise, the broad lateral stop (similar to tl) which is so characteristic of many western languages. Surds and sonants are difficult to distinguish. The language does not possess the consonants *b, v, f, r.* The e and i series and the o and u series are interchangeable.

The indefinite ɛ is common. Reduplication has no rôle in Kootenay, occurring only in a few words of onomatopœic origin (chiefly bird names), even the *puspus* ("cat") of the Chinook Jargon has been reduced to *pus.* Words of onomatopœic type seem, likewise, rare. Monosyllables are very few, the characteristic word being evidently a compound.

The Kootenay language possesses a very large number of suffixes and prefixes, the terminal-*tl* and initial *aq-* (*aqk-*) being very common the latter, indeed, occurs in several hundred words, and is a notable feature of this interesting tongue. Another marked characteristic of Kootenay is the incorporation (after the fashion in Nahuatl) of noun-objects and also pronominal objects in the verb. Besides composition by juxta-position of independent words and by means of radicals with other suffixes and prefixes, Kootenay has a series of "radical suffixes," used in composition to express actions done with the various members of the body (also in water, in fire, etc.). Thus, from the radical *it-* ("to do") are formed *itɑane*, "he bites" (*-ɑa-*"with the teeth;) *itkine*, "he does something with the hand" (*-kin-*"with the hand"); *itɑaine*, "he lies down" (*-ɑa-*"with the back"). The "radical suffixes" are not at all related to the terms for the members whose actions they denote (the root of the word for "back," *e.g.*, is *-tlak*).

There is no grammatical gender in Kootenay. The noun has an indefinite suffix in-*nam* (*titonam*, "father of some man," *aqkitlanam*, "somebody's house); an oblique case in *-es* or *-s*, plural form in *-nintik*, a dual in-*kistik* and a distributive in-*kantik*. The form of a noun used in composition is different from that of the same word used independently (e.g. *aqkinmituk*, "river," *nâimanmitukine*, "there are two rivers;" *aqko'ktle*, "horn," *quwitlk'tle*, "big horn." here the composition-forms are *-mituk* and *-ktle* respectively). As a rather lengthy compound may be cited *aqkinkanu'ktla'mnam*, "crown of the head," composed of *aqkink'an*, top," *-uk*, "point," *-tlam*, "head," the first part being further separable into *aq-*, *-kin-*, *-k'an*, the last the radical suffix, apparently for "top," and *-kin-* another interpretative particle. As an instance of verbal composition may be given *tsɑatlitɑanawasine* "he is going to bite us," resolvable into *asɑatl-* (particle indicating the future), *itɑane* (from *it-* to do," *ɑa-*, "with the teeth"), "bite," *-awa*, "he. . . us,-*ine* verbal auxiliary.

The adjective usually precedes the noun. Of the numerals four (*ɑaɛtsa*) and eight (*woɑaɛtsa*) are related, the latter meaning "second four." The third personal pronoun, *ninko'is* ("he, she"), is derived from the second, *ninko* ("thou"). The subject-pronouns used

*A. S. Gatschet. Proceedings of the American Philosophical Society, XXII., 1885, pp. 408-424; XXIII., pp. 411-432.

with the verb are different from the independent personal pronouns. The possessive is related to the personal.

The sign of the future tense in the verb is *tsqatl-*, of the past *ma-*. There is an auxiliary verb (radical *-a-*), which often corresponds to our "to be" e.g., *sukine*, "it is good," *ipine*, "he is dead," *wagine* "it is thick," etc. Several particles of negation and privation exist. The radical of the verb can be obtained by removing the termination of the second singular imperative (e.g., *ike*, "eat thou" radical *ik-*, "to eat." The letters employed here have their continental sounds.)

While the Kootenay stands alone lexically, some of its peculiarities of morphology suggest comparison with the Shoshonean (Nahuatl) Athaspascan and Siouan stocks.*

(7) *Salish.* The Salish may be divided into two large groups, the Salish of the interior and the coast Salish. The former group embraces the Calispelm, which is spoken by the Pends d'Oreilles, Flatheads, Spokane, Cœurs d'Alène, Okanagan; the Shuswap of eastern British Columbia; the Thompson Indian language, which is spoken in the region of the confluence of the Thompson and Fraser Rivers and in the canyon of the Fraser River; and the Lillooet. The coast Salish dialects extend from the coast of northern Oregon as far north as Dean Inlet. They may be divided into a number of groups; the Tillamook, south of Columbia River, separated from other Salish dialects by the Chinook; the Chehalis group, spoken on the outer coast of Washington and probably closely related to the Upper Chehalis and Cowlitz, which dialect is spoken in the valley extending from Puget Sound southward toward the Columbia River. On Puget Sound is found a group of dialects, the representatives of which are the Puyallup and the Nisqualli. The isolated dialect of the Twana is found in the southwestern part of Puget Sound. North of this group are found the dialects represented by the Songish of Victoria. These include the Clallam of the south coast of Juan de Fuca Strait and the Lummi south of Mt. Baker. North of this group are located the dialects of Cowichan, including the Cowichan proper and the Nanaimo of Vancouver Island, and including dialects spoken in the Fraser River delta. On the mainland north of the Fraser delta, on Burrard Inlet and Howe Sound, an isolated dialect is found—the Squamish. The dialects north of these groups, embracing the Sechelt of Jervis Inlet, the Claamen of Toba Inlet the Puntlatch of Comox and the Comox, formerly of Cape Mudge, may be combined in a single group. Separated from these by a stretch of country inhabited by Wakashan tribes are found the Bella Coola of Bentinck Arm and Dean Inlet.

The phonetics of all the Salish dialects are characterized by a very strong tendency towards clustering of consonants, a superabundance of s, l, and k sounds, with a strongly developed velar series; and the inclination to weaken and eliminate vowels. The labiodentals are absent. In the coast dialects no r sound is found, which, however, occurs in some of the dialects of the interior. The most southern coast dialect, the Tillamook, has lost all its labials, while the elimination of vowels has developed most extensively among the most northern tribe of the group, the Bella Coola. The process of disintegration has proceeded so far in this dialect that a considerable

*F. Boas, in Report of the 59th Meeting of the British Association for the Advancement of Science. 1889. pp. 889-892.
A. F. Chamberlain, Ibid. 62nd Meeting. 1892. pp. 589-615.

number of words are found which have lost all their vowels; as, for instance, smnt (mountain), tqt (stone), sts (salt).

The tendency to elimination of the vowels seems to be closely connected with the extended use of reduplication, accompanied by a weakening of the stem vowel.

The grammatical processes applied in all the Salish dialects are prefixing, suffixing, reduplication, and vocalic changes of the stem. Grammatical forms are often influenced by laws of euphony. A very considerable number of stems, particularly of verbal stems, are restricted in their use either to singular or plural. In transitive verbs the use of singular or plural stems and forms is determined by the object, not by the subject.

The number of etymological affixes is considerable. Most of these are suffixes. There seems to be a complete absence of instrumental etymological affixes, while the number of local elements is very considerable. Prominent among these are a great number of suffixes indicating parts of the body, which, although practically local in character, are used to express the objects of transitive verbs, as, for instance, "I strike his hand" would be "I hand-strike him." Verbal nouns and elements transforming the noun into verbs are numerous. There are also many suffixes or other derivative elements which express ideas that might be expressed by auxiliary verbs or adverbs. Among these may be mentioned causative, duplicative, (formed by reduplication), iterative, often formed by a prefix; frequentative, formed by a suffix; diminutive, formed by a prefix; reciprocal, reflexive, collective, and desiderative. Many adverbial local ideas are expressed by verbal prefixes. Such are into, from, on, etc. Similar ideas may also be expressed by affixes of nouns. Verbal nouns are quite numerous and are formed by the use of prefixes and of suffixes. The demonstrative has in most of the Salish dialects a double development, designating presence and absence, as well as visibility and invisibility.

There are some remarkable differences in regard to the ideas expressed by grammatical processes in the coast Salish, as compared with the dialects of the interior. In the dialects of the interior no trace of grammatical gender is found. The tendency to form compounds is very strong, and in one at least of the dialects of the interior a distinction is made between the inclusive and the exclusive first person plural.

In the coast dialects there is a strong development of grammatical gender, which, however, is found only in the pronoun. In this the coast Salish dialects resemble the Chemakum and the Chinook. There is no indication of inclusive and exclusive plural forms, and it would seem that the complex verbal forms of the dialects of the interior have undergone some disintegration. There is a very extended use of auxiliary verbs in the coast dialects, more so than in the interior.

The numeral systems of the various groups of dialects show important differences. It would seem that different groups of radicals are used in the various dialects. In counting, the objects are classified by means of suffixes according to form. The local suffixes referred to before are also used in classifying numerals. The numerals for counting animate objects are formed by reduplication, those used for counting persons, either by another kind of duplication or by triplication.

The possessive pronoun is expressed partly by prefixes, partly by suffixes. Its form depends often upon the initial sound of the noun. The pronominal elements of the verb have apparently different forms for different tenses. This, however, is probably due to a contraction of the pronoun with temporal elements or prefixes. Similar changes in pronominal forms occur in various moods. The transitive verb incorporates pronominal forms expressing both subject and object, and these are evidently derived from the simple pronouns, but considerably modified and have different forms for different tenses. In the coast dialects there is a strong tendency to separate the subjective from the objective pronoun whenever the verb is accompanied by an adverb, the adverb being treated as an intransitive verb, while the transitive verb retains its object.*

(8) *Wakashan.* The Wakashan is divided into two principal dialects, the Nootka and Kwakiutl, which are distantly related. The Kwakiutl is spoken in three principal dialects, and the dialect of northern Vancouver Island is selected here for describing the principal characteristics of this linguistic family. The phonetic character of the Kwakiutl is similar to that of other North Pacific languages. The language avoids, however, such clusters of consonants as are frequent in Salish. The words begin with a single consonant. The k series is very fully developed, the three series of anterior and medial palatals and of velars being present. The "l" series is also very fully developed, the sonant, surd, fortis, aspirate, and paltalized "l" being found. Every single stop occurs as sonant, surd, and fortis. Nasals are rare, only n and m occurring. The r and dentolabials are absent. The vowels are quite variable; probably only an e, a, and o series are found. All words occur with word-forming suffixes. There is a great abundance of etymological suffixes, which are joined to words in a way similar to that found among the Eskimo, namely, after a loss of the word-forming suffix of the stem and with modification of the phonetic character of the stem. No prefixes occur and all grammatical relations are expressed by means of suffixes or by reduplication and by *umlaut*. Reduplication is abundant and serves a variety of purposes, so that under certain conditions, even triplication may occur. The etymological suffixes express a very great number of ideas. Some transform verbs into nouns, others nouns into verbs. To the former class belong suffixes

*G. Mengarini. Grammatica Linguæ Selicæ. New York, 1681.

Giorda. A Dictionary of the Kalispel Language. St. Ignatius Print. Montana, 1877-79.

F. Boas. Grammatical Sketches of Bella Coola, Nanaimo, Shuswap, Lillooet, Okanagan, in Report of the 60th Meeting of the British Association for the Advancement of Science, 1890, pp. 679-715.

F. Boas. Grammatical Sketch of the Thompson Language. Ibid. 68th Meeting, pp. 654-663.

C. Hill-Tout. (The same dialect.) Ibid. 69th Meeting, pp. 22-38.

F. Boas. Bella Coola Texts. Proceedings American Philosophical Society, Vol. XXXIV., 1895, pp. 31-48.

C. Hill-Tout. Grammatical Notes on the Squamish. Report of the 70th Meeting of the British Association for the Advancement of Science, 1900, pp. 495-518.

——— Grammatical Notes on the dialects of the Fraser River Delta. Ibid. 72nd Meeting, pp. 17-48, 63-89.

——— Grammatical Notes on the Sechelt. Journ. Anthrop. Inst. XXXIV., 1904, pp. 58-91.

——— Grammatical Notes on the Lillooet. Ibid. Vol. XXXV., p. 1[illegible]

indicating the actor, the abstract noun, the instrument, place, time, passive participle, etc. To the latter class belong suffixes like those expressing "to make," "to desire," "to obtain," "to have," etc. Besides these, adverbial suffixes are very common. Most numerous among these are the local suffixes, expressing the place where an action occurs, as, "in the house," "on the ground," "in the water," "on the beach," "on the rocks," etc.; temporal ideas, as, past, present, and future, transition from existence to non-existence, inchoative, continuative, exhortative, dubitative, and others. Even a considerable number of our conjunctional ideas are expressed in the same manner. A number of these suffixes have very special meanings. Adjectival suffixes are not numerous. Among the local suffixes mentioned one class deserves special attention, namely, the group of suffixes indicating parts of the body. These are used quite frequently with transitive verbs, and as in Salish, acquire an objective meaning signifying the part of the body to which an action is done, not the instrument, such as we find in the Siouan, Kootenay and Athapascan languages. There are, however, a small number of instrumental suffixes which indicate the organs with which an act is performed, as "with the hand," or "with the eyes," or, "with the sense of smell."

The idea of plurality is not strongly developed. Where the idea of distribution or the idea of collectivity is to be expressed reduplicated forms are used.

The development of the demonstrative pronoun is very remarkable. Three positions are distinguished, that, near the speaker, near the person addressed, and near the person spoken of, or, first, second or third person demonstrative. Each of these occurs in two forms, as visible and invisible. All these demonstrative ideas are expressed by means of nominal and verbal suffixes, which possess certain differences in form, so that the total number of demonstrative forms is very great. In every sentence the location of subject and object is expressed by the proper demonstrative suffixes.

The syntatic relation of parts of the sentence is expressed exclusively by three forms of the pronoun, the subjective, the instrumental (genitive) and objective. For instance, the sentence "I strike him with it," would be expressed in the form, "strike-I-him-with-it." These pronominal elements are, on the whole, phonetically weak, consisting only of a single sound. When subject, object, or instrument are nouns, these nouns are placed immediately following the pronominal element designating their grammatical function, so that the sentence, "the man strikes him with it" would have the form, "strikes-he-the-man-him-with-it." On account of this peculiar position of the noun, the weak pronominal elements become apparently suffixes to the noun. This becomes still more apparent in the case where, for instance, the object is expressed by a noun, as, "he strikes the child with it." "Strikes-he-it-the-child-with-it." This insertion of the noun in the verb with its pronominal suffixes makes the syntactic word-unit very indefinite. Obviously the whole sentence must be considered as a unit; its breaking up into words is entirely arbitrary.

A very peculiar process which is closely related to the preceding is, that wherever possessive pronouns occur, they combine regularly with the pronominal elements, and in this way become detached from

the nouns to which they belong. While the word-complex "my-child" is expressed by the word "child" with the suffix "my," the sentence "he strikes my child with it," takes the form "strikes-he-it-mine-child-with-it." Or, in the same way, "my friend comes," will have to be expressed in the form "comes-he-mine-friend." Related to this phenomenon is also the tendency of Kwakiutl to break up its transitive verbs whenever they are accompanied by adverbs, into an intransitive verb and a transitive verb. For instance, "I did not see him" would be expressed by "not-I seeing-him," "not" being treated as an intransitive verb, while "to see" takes only the object. The whole series of forms of the pronoun which develops from this peculiar treatment in combination with the demonstrative pronouns is very numerous, and exhibits a considerable number of peculiar irregularities.

Since many of our conjunctions and modal ideas are expressed by etymological suffixes, the modal development of the verb is very slight. There is practically only one mood: the indicative, although the imperative and exhortative have a number of peculiar forms.

Subordination of sentences is accomplished almost exclusively by means of nominal forms, in which an interesting transition of the demonstrative to the personal pronoun takes place, the demonstrative of the first, second, and third persons being always used to express subordination of sentences with first, second and third person subject. For instance, the sentence, "the wind began to blow when I came," might be translated literally "the wind began to blow at this (my) coming;" and "the wind began to blow when he came," by "the wind began to blow at that (his) coming." In both of these cases, the demonstrative pronouns are sufficient to express the personal pronoun.

It seems worth while to mention the use to which reduplication is put. The most common form of reduplication is that used for expressing distribution of plurality. Ordinarily this reduplication is used with the vowel *e*. Diminution is expressed by reduplication with the vowel *a* combined with a suffix. "To endeavor to do" is expressed by reduplication with the vowel *a* combined with a suffix. "To eat something" is also expressed by a peculiar reduplication of the stem of the noun.

Numerals are formed on the decimal system. They take classifying suffixes, the most important of which are those for designating human beings, round, long, and flat objects.*

(9) *Tsimshian.* The dialects of Tsimshian show no considerable degree of differentiation and the description of one of them will be sufficient to illustrate the characteristic points of the morphology of the language. The phonetics of Tsimshian do not differ much from those of the other languages on the north Pacific coast, but the Tsimshian proper seems to be most closely related in its phonetic character

*F. Boas, in Report of the 60th Meeting of the British Association for the Advancement of Science, 1890, pp. 655-679; also 1896, pp. 585-586.

——— Sketch of the Kwakiutl Language. American Anthropologist, N.S., Vol. II., pp. 708-721.

A. F. Hall. A Grammar of the Kwagiutl Language. Trans. Royal Society of Canada, 1888, II., pp. 57-105.

F. Boas and George Hunt. Kwakiutl Texts. Publications of the Jesup North Pacific Expedition. Vol. III. Leiden, 1905. Vol. X., Part I., Leiden, 1906.

to the Tlingit of Alaska. The use of the fortis is not common, if it occurs at all, and there is a tendency to transform the velar sonat *g* into a very weak velar *r*. Considerable clusters of consonants occur in the middle and at the end of the words, but consonantic clusters at the beginning of words are not common. The grammatical processes found in Tsimshian are prefixing, suffixing, and reduplication, with a very strong preponderance of prefixes which, however, generally remain phonetically separate from the word stem. The structure of the language is such that the unit of the word is ill defined and it is arbitrary whether the prefixes here referred to are considered as portions of the word or as proclitic particles.

A very great variety of ideas are expressed by means of prefixes or proclitic particles. These ideas are both verbal and nominal. They embrace an extensive group of local adverbial ideas, such as, "into," "out of," "from land to sea," "from sea to land," "up river," "down river," etc. All local adverbial prefixes have either parallel independent nouns of location or parallel nominal prefixes, so that the expression "he goes down to the beach," would be translated in Tsimshian, "down-to-the-beach-goes-he to the beach." Or in case where there is a parallel prefix we find expressions like "Into-goes-he to inside-house." There is also a large number of modal prefixes, for instance, "properly," "improperly," "well," "miserably," "in the dark," etc.; and there are others which correspond to ideas that we are accustomed to express by means of conjunctions. The principal one among these expresses the idea of cause and is used often for expressing causal relation of sentences. Besides these, a considerable number of particles are found which seem to have a somewhat greater freedom of position, and although they carry no accent and are proclitics, they seem to be somewhat different in type from the etymological prefixes, although closely related to them. To this group belong particularly the temporal and semi-temporal ideas, such as past, present, future and their combinations, also ideas like "on his part," "again."

The difference between the two groups of proclitics is that the former always form a unit with the verb and cannot be separated from it by any other syntactic elements, while the latter are often separated from the verb by pronominal elements. It is obvious that with the great development of these proclitics or prefixes a very large portion of the ideas which in other languages are expressed by syntactic processes become in Tsimshian part of etymological processes, and reduce the frequency of occurrence of subordinate clauses.

The idea of plurality shows a very remarkable development in Tsimshian. The method of forming the plural is the same in both nouns and verbs. A considerable number of verbs which, however, cannot be classified, the names of animals, with few exceptions, and miscellaneous groups of nouns have no separate forms for singular and plural. By far the greatest number of words form their plural by reduplication with weakened stem vowel, the reduplication extending to the first consonant following the first vowel of the stem. Still another class of words forms its plural by prefixes. There are two entirely different groups of prefixes of this kind: one group beginning with the velar k, the other beginning with an l. The latter group has a strong tendency to irregularity. We also find certain groups of words, the plural of which is formed by combined pre-

fix and suffix. The number of stems, the use of which is restricted either to singular or to plural, is very great. Cases of this character occur even among the etymological prefixes.

The personal pronouns and the possessive pronoun have two distinct forms: one group is used to express the possessive pronoun, the subject of the intransitive verb and the object of the transitive verb; while the second group embraces the subject of the transitive verb. These two groups of pronouns are entirely distinct; while the former are suffixed and coalesce with the nominal and verbal stems, the transitive subject is prefixed and remains phonetically as independent as the etymological prefixes. The difference in treatment of the two groups characterized before as etymological prefixes and as proclitic particles, consists in the position of the subject of the transitive verb, which in the second group is always placed following the proclitic particle; while in the first group it always precedes the verb with all its etymological prefixes. The modal development is slight. Passive and medial forms are found with great frequency. They are formed by means of suffixes which depend upon the character of the terminal consonant of the verb. The interrogative is formed by the suffix *a*. The imperative is generally expressed by the phrase "It would be well if you did so and so" combined with the future.

Owing to the strong tendency to incorporate local ideas in the verb, the Tsimshian has no nominal cases, syntactic relation between the parts of the sentence being expressed by a consonantic suffix, which indicates that the word provided with the suffix has a syntactic relation to the following word. This consonantic connection differs according to various classes of words, it has a definite form used with proper names, terms of relationship and pronouns, and another one used with common nouns.

The demonstrative ideas of absence and presence are expressed by means of suffixes. In other dialects this idea is not so rigidly expressed.

There is an indefinite preposition which is used to express all local, temporal and modal relations, its sense being determined partly by the verbal etymological prefixes, partly by the parallel nouns referred to before.

Subordination of sentences is generally brought about by means of nominal constructions, which in the case of temporal subordination are introduced by the temporal proclitics, which, however, often assume the sense of finality or causation. The subordination of negative sentences is brought about by transforming the verb into a noun and giving it an etymological prefix signifying "without." There are only two demonstrative pronouns expressing presence and absence, but, as indicated before, demonstrative position is expressed throughout by means of syntactic connectives.

The numeral system shows a very peculiar development. There are separate sets of numerals used for counting, and for enumeration of men, long objects, flat objects, measures. In some cases the numerals of the various series are derived from distinct stems, while in other cases, classes are indicated by suffixes.

Notwithstanding the great number of clearly defined etymological prefixes, and the much lesser number of etymological suffixes, the analysis of Tsimshian stems, verbs as well as nouns, is difficult. While among most of the neighboring languages it is easy to isolate brief stems, Tsimshian stems are apparently complex. This seems

to be due partly to a tendency to contraction, the rules of which have not been discovered so far. Since many of these stems are long, while at the same time there is considerable similarity in certain endings, it seems plausible that the Tsimshian stems, as we know them at the present time, have undergone considerable change, so that without a comparative study of the dialects and a more thorough knowledge of the grammar their history cannot be traced.*

(10) *Haida.* The Haida is spoken in two slightly different dialects on Queen Charlotte Islands and in the southern part of the Prince of Wales archipelago. Until about one hundred and fifty years ago, the language was entirely confined to the Queen Charlotte Islands.

The phonetic system is quite similar to that of the more southern languages of the north Pacific coast. The vowel system is simple, and there is no clear distinction between the *i e* series, on the one hand, and the *u o* series on the other. The anterior palatals, which are prominent in other languages of the north Pacific coast are absent. Labials are very rare. All the stops occur as sonant, surd, and fortis. The nasal ñ (ng) is very common. In the northern dialect the velars are often very much weakened. The only processes by which grammatical ideas are expressed, are prefixing and suffixing, the function of each part of the sentence being determined also by position. Reduplication and diæresis are absent, with the exception of one or two doubtful cases. There is a strong tendency to build up complex words by means of composition of independent stems.

The etymological analysis of words shows them to be compositions partly of stems, which also occur independently, partly of subordinate elements that have no independent existence. Among the ideas that are expressed by etymological processes, those concerning instrumentality deserve particular mention. Action done by means of the back, by shooting, pushing, pulling, by walking, by stamping, grinding, chopping, with the hand, with a stick, by fire, etc., are expressed by means of prefixes. While most of these occur only as subordinate prefixes, a considerable number of them are identical with the nouns designating the instrument, as, for instance, to do with the foot, or to do with the hand, or by canoe, which are expressed by the independent words designating these objects.

Another prominent group is that of classifiers. These are used with verbs as well, as with numerals and nouns. The ideas thus expressed are essentially those of form, like flat, cubic, ring-shaped, cylindrical, long, etc. The total number of these classifiers is remarkable, there being about twenty-five in all.

While these two groups of ideas are expressed by prefixes, locative ideas are expressed by suffixes. We find here suffixes expressing motion into, out of, across, downward, upward, under water, towards a shut place, towards an open place, etc. Of similar character are temporal suffixes, which indicate the past, a quotative past, and future. There are also semi-temporal suffixes signifying con-

*F. Boas, in Report of the 58th Meeting of the British Association for the Advancement of Science, 1888, pp. 878-890; also 1895, pp. 521-524, 1896, pp. 586-591.

F. Boas. Tsimshian Texts. Bulletin 27, Bureau of American Ethnology. Washington. 1902.

A. C. Graf von der Schulenburg. Die Sprache der Zimshian-Indianer. Brunswick, 1894.

tinuatives, frequentatives, completives. Related in form to these temporal and local suffixes are a number or modal suffixes expressing ideas like early in the morning, by sea, here and there, potentiality. It is somewhat difficult to draw the line between these suffixes and a few others which determine the syntactic function of the verb, as imperative, interrogative, negative, etc. While in form they seem to be the same as the adverbial suffixes, their sense implies that they serve a syntactic function. It may also be mentioned that Haida has a few suffixes to indicate the social relation of the speaker and the person addressed. As, for instance, a suffix indicating that the speaker addresses a person of lower rank.

There are very few suffixes in Haida by means of which nouns can be formed from verbs.

It is important to note that in many cases nouns may be used in the same position which is occupied by the two important groups of prefixes, namely, instrumentals and classifiers.

In the pronouns, two sets of forms must be distinguished, the active, and the neutral or objective. These forms differ in the first and second persons singular and in the first person plural. In the third person singular a definite and indefinite singular may be distinguished. A similar distinction may be made in the plural. These pronouns do not firmly coalesce with the verb. In the transitive verb the object always precedes the subject, although in cases in which nouns accompany the verb, the subject precedes the object, probably because the object forms a firm unit with the verb. The possessive pronoun is closely related to the objective pronoun.

The idea of plurality is not strongly developed. In most cases nouns do not change their form, while those indicating relationship, and a few others take plural suffixes. Other words expressing human beings also take a plural suffix. In other cases, plurality is expressed by means of indefinite pronouns. In the verb, a double suffix may be used for expressing repetition, and the idea of collectivity is expressed by a classifying prefix. Adjectives expressing shape and size also take a peculiar plural suffix.

In the sentence the verb almost always stands at the end. Adjectives and possessives always follow the nouns they refer to.*

*F. Boas in Report of the 58th Meeting of the British Association for the Advancement of Science, 1888, pp. 868-878.

John R. Swanton. Notes on the Haida Language. American Anthropologist. N.S., Vol. IV., 1902, pp. 393-403.

John R. Swanton. Haida Texts and Myths. Bulletin 29. Bureau of American Ethnology. Washington, 1905.

A Translation of the papers by F. Boas, full of misprints, and reprints from a few gospel translations with faulty interlinear translations, were published by Raoul de la Grasserie, Cinq Langues de la Colombie Britannique: Haida Tshimshian Kwagiutl Nootka et Thinkit. Paris 1902. The book is from beginning to end an appropriation of material from English sources. M. de la Grasserie himself has not contributed anything to what was previously known about these languages.

IV. ETHNOGRAPHIC.

1. The Eskimo.

By Franz Boas.

The Eskimo inhabit the whole coast of Arctic America, extending on the east to Greenland, and westward to the East Cape of Asia. Their southern limits are near the Gulf of St. Lawrence, the extreme southern part of Hudson Bay and southeast of the Peninsula of Alaska. They are essentially a litoral people, living primarily on sea-mammals. In some regions fishing supplies an important part of their sustenance. Caribou and polar-bear and, where it occurs, musk-ox are hunted both for their meat and for their skins, which are used for clothing. The vegetable diet used by the Eskimo is insignificant, consisting only of the few berries that ripen in the Arctic.

The villages of the Eskimo are located in those places where the pursuit of sea mammals is productive, and for this reason their villages change somewhat with the seasons; but, on the whole, the same community shifts from one definite location to another, according to the season. They are not migratory in the sense that their villages are located sometimes in one part of a large territory, sometimes in other regions. In summer the animals hunted are primarily various kinds of seal, walrus, white whale, narwal, and the whale. Late in summer is the season for the summer hunt of the reindeer and musk-ox. In the fall the pursuit of the sea-mammals is continued until the sea is covered with ice. In those regions where open water is found in winter not far from the villages, such sea-mammals as frequent the edge of the land-floe are hunted. In other regions, where the winter village is located on the coast, far away from open water, the Eskimos live on the common seal, which has breathing-holes that are kept open throughout the winter.

The material for clothing, for household utensils, and for building, is obtained almost entirely from the animals hunted, and of a few kinds of rock easily worked. Wood is so scarce that very little of it is used, except in those regions where drift-wood is plentiful.

The economic conditions of life are practically the same all along the Arctic coast. The only regions where certain differences are found are the extreme southern parts of Labrador and Alaska, where the forests approach the coast inhabited by the Eskimo, and the interior of the region northwest of Hudson Bay, where the Eskimo live on large lakes and rivers.

Partly owing to the uniformity of geographical surroundings, the occupations of the Eskimo are very uniform in the whole district inhabited by them. A considerable degree of differentiation of culture is found in the region west of the Mackenzie River, where they seem to be influenced by the neighboring Indian tribes, and in the extreme west, where they are also influenced by the Chukchee of Northeastern Siberia. Notwithstanding these differences, the Eskimo appear as exceedingly conservative in preserving their cultural possessions. This phenomenon may be observed as well in the remarkable uniformity of the Eskimo dialects from Greenland to Alaska, as in the similarity of the material possessions and in the uniformity of their folk-lore. It was stated before (p. 79) that there is evidence that the Eskimo west

of the Mackenzie River are not of pure Eskimo descent, but probably mixed with Indian elements.

The inventions of the Eskimo used in the pursuit of sea-mammals are remarkably ingenious. The animals are killed by means of harpoons. In regions where wood is not available, the harpoon-shaft often consists of bone or of narwal tusk. To this is attached a moveable fore-shaft, connected with the shaft by means of thongs. The attachment of the foreshaft to the shaft is such that when there is no lateral pressure, the shaft and foreshaft form a straight line, but as soon as there is a strong lateral pressure, the foreshaft turns over and disengages the harpoon point, which is placed at the extreme end of the foreshaft. The detailed arrangement of these harpoons differs with different regions. The harpoon used in winter in hunting on the ice has no moveable foreshaft, but the harpoon point alone is detachable. Harpoons that are used in hunting animals which swim about in open water are provided with bladders intended to keep the shaft afloat. These floats are either tied firmly to the shaft, or, in other cases, they are attached to the harpoon line, preventing in this way the sinking of the animal after it has been killed. While the harpoon is primarily used for securing the game, the lance is used for dispatching the harpooned animal. The lance generally consists of a shaft with movable foreshaft attached in the same manner as that of the harpoon, but provided with a cutting edge. In some cases, the shaft is provided with a socket, into which lance-points may be inserted, which, after stabbing the animal, remain in the body. For hunting larger game in open water, drags are attached to the harpoon line, which hinder the movements of the wounded animal.

For the pursuit of the game in open water a peculiar hunting-canoe is used, called the kayak. It consists of a light framework made of wood, whalebone, or bone, over which is stretched a skin cover. The details of the form show considerable variation in various regions, but all kayaks are built on the same fundamental plan, the whole frame being enclosed with skin, leaving open only a central hole in which the hunter sits. In regions where very light kayaks are used the hunter wears a water-tight garment, which is fastened around the kayak hole, so that no water can enter the hold. In regions where larger kayaks are used, this is not the case. The kayak is propelled by a double-bladed paddle. The harpoon and lines are placed in front of the hunter on the deck of the kayak, while the drags and floats attached to the harpoon-line are placed aft. The quarry is tied on the deck of the kayak aft. Whale-hunters and travellers use the large so-called "woman's boat," a flat-bottomed structure having a framework made of wood and covered with the thick hide of large seals or walruses. The woman's boat is propelled by oars, which are held in place by means of oar-locks. Sails made of intestines are also used, and allow the boat to sail before the wind. Its course is directed by a large stearing paddle.

Fish are caught with nets and hooks; salmon with three-pointed fish-spears. Birds are caught with nets and with the bird-spear, which is provided with lateral prongs, and is cast by means of a throwing-board; waterfowl are caught with snares made of whalebone. For hunting large game like caribou and musk-ox, the bow and arrow are used. The brittle driftwood cannot be utilized for making elastic bows; and elasticity is secured by an ingenious backing

with twisted sinews, taken either from the caribou or from the white whale. The arrows have wooden shafts and foreshafts made of bone. Caribou are often driven into the water and then hunted from the kayak by means of lances.

The habitations of the Eskimo are well adapted for protection against the inclemencies of the Arctic climate. Two types of winter-houses are found, a semi-subterranean structure, the sides of which are built of stone and supported by whalebone. The roof of the structure is formed of poles or bones, over which is stretched a cover of skin. The skin-covering is protected by a layer of small shrubs or similar material, which, in turn, are covered by a second skin-cover which is weighted down with stone. The entrance to this dwelling is generally a subterranean passage covered with flat slabs of stone and soil, and sloping slightly upward so as to prevent the cold air from entering the living room. Large dwellings of this type are found in Greenland, while the dwellings in the central regions are generally small. The second type of winter house is built of snow, in form of a vault. Blocks of snow are cut out with ivory or bone snow-knives, and are built up into a vault by means of a spiral construction, every newly added block of snow resting on the lower course of the spiral and on the last preceding block. In a few regions, stone houses built on a similar principle are used. The invention of these vaulted structures may be considered one of the most remarkable achievements of the Eskimo. Generally, the rear part of the house is occupied by the bed, which is covered with shrubs and caribou skins, while to the right and left the lamps and kettles are found, which are used for heating the houses and for cooking. Attached to the snow-house there are generally a number of storerooms in which provisions are kept. In summer the people live in tents made of skins. In northern Greenland these tents consist simply of a few poles of wood or bone, each being often spliced together of short pieces, over which sealskins are thrown. In other regions, the tent is more carefully constructed, being similar in plan to the winter-house. A semi-circular rear portion is set off from a longer entrance. The rear portion contains the bed, while the entrance, which is covered with the transparent inner layer of sealskin, admits light and is used as a store-room. In the southern parts of the west coast of Hudson Bay conical tents with a framework of converging poles are used. Farther north the tent is supported by a single pole over which a stout thong is stretched. In summer the cooking is done outside of the tent over an open fire.

The most important part of the household belongings of the winter-house is the lamp. This is made of soapstone, and is a flat crescent-shaped dish. A wick made of moss or from vegetable fibre is spread along the straight front edge, while the bowl of the lamp is filled with seal-blubber which sustains the light. When cooking has to be done, the kettle, also made of soapstone, is hung over the wick. When not in use it is pushed back. Over the lamp is a frame used for drying clothing. On account of the importance of soapstone for the manufacture of kettles and lamps, the Eskimo make long trading-trips from regions where no soapstone occurs to those where this material is found, the distance covered being sometimes as much as a thousand miles. Similar trading-trips are made for driftwood. On Southampton Island, a large island in Hudson Bay, where no soapstone occurs, lamps and kettles of the same type as those used else-

where are made of thin slabs of limestone, which are sewed together and caulked by means of a mixture of blood and soot. Dishes are made of skin and whalebone. In those regions where wood is available, they are bent of pieces of wood made pliable by steaming.

Among the tools of the Eskimo may be mentioned the drill, originally a piece of flint or other stone, inserted in a long bone handle. The drill is set in motion by means of a bow, generally made of the rib of a seal. The string of this bow is a thong and is quite loose. It is twisted once around the drill. The butt-end of the drill is placed against a mouthpiece, and the drill is rotated by rapid motion of the bow. Knives were generally made of flint and similar material. In Arctic Greenland, where meteoric iron is found, knives were also made of small bits of iron. Flints and pieces of iron were inserted in the cutting edge, and in this way a long saw-like edge was secured. It is remarkable that in cutting off pieces of bone, the Eskimos did not ordinarily use a stone saw, but preferred to make drill-holes close together and then to wedge the bone apart. For arrowheads and lanceheads, points made of flint and of slate were used. Women's knives, used in the preparation of skins, and in sewing garments, were made of slate or similar material, and were similar in form to our butcher-knives. The typical knife of the men was double-edged.

Of greatest importance in the domestic economy of the Eskimo is the dog, which is used for hunting as well as for drawing sledges. The distances that must be covered by the hunter every day are considerable, and the daily trip from the home to the hunting-ground is generally made by dog-sleds. The long and frequent travels of the Eskimo families from one winter village to another, for purposes of trade, or for visits, are also made by dog-sleds. East of the Mackenzie River the sled has two low solid runners of wood or bone, connected by cross-bars, and generally a high back is used for steering. The dogs are harnessed by means of long lines and are attached to a stout thong, so that, when running, they are arranged fan-like. One dog has a longer line and serves as leader of the team. The driver generally sits on the sled and directs the dogs by means of calls and of a long-lashed short-handled whip. The domestication of the dogs is very imperfect. They are badly fed and allowed to run wild in summer when they are generally placed on an island where they have to find their own food. The dog resembles the Arctic gray wolf, with which it frequently intercrosses.

The caribou is nowhere domesticated in America. Clothing is made of furs. In most regions sealskin is worn in summer, caribou skin in winter; but there is considerable differentiation in the style of clothing. Both sexes wear long stockings and boots, trousers, and a short jacket provided with a hood. All these garments are double. The inner one is worn with the fur side to the skin, the outer one with the fur side out. The jacket of the married women has a very large hood which extends far down the back. A belt is attached around the jacket under this hood, which serves for carrying the infant, the infant being put into the hood on the back of the mother. The arrangement of different colored skin in the garments follows a definite style and differs somewhat in the two sexes. In Greenland clothing is generally ornamented with dyed skins from which the hair has been removed. Almost everywhere the jacket is provided with a short tail

in front and another one behind. These tails are generally longer in women's garments than in men's. In Labrador and Baffin's Land the tails of the women's garments reach an extraordinary size, reaching down to the ground. On the west coast of Hudson Bay a most remarkable development of the stocking is found, which practically supplants the women's trousers. These stockings are extraordinarily wide, forming enormous pouches above and below the knee. Similar pouches are found in the sleeves of the jackets of this region. The ornamentation of the garments seems to emphasize, on the whole, the form of the body. We find very often that the shoulder-blades and the breastbone are indicated by skin of lighter color.

The preparation of the skins is in most regions the work of the women, although in a few cases the men do this work. The skins are carefully cleaned and subjected to various kinds of treatment, according to their use. Watertight hides are prepared for kayak covers and for boot-soles, while skin that is to be used for clothing is carefully treated so as to be as soft as possible and to hold the hair.

On the whole, the decorative art of the Eskimo is not remarkably developed. The fairly rich ornamentation found in Alaska is probably partly due to foreign influences. The same may be true of the decorative art of Greenland. In the central regions, practically all utensils are of rude form, and there are very slight indications of any tendency to decorate the objects of daily use. Where such decoration occurs it generally consists of a series of dots and lines in ivory, which are filled with black. These dots are arranged in geometrical lines; they sometimes represent human or animal figures. Old specimens from this area show, that the elements of decorative geometrical designs in Alaska and in the Hudson Bay region were of the same character. On the other hand, the Eskimo have a well-developed plastic art. They are fond of carving in ivory and make a great many good realistic carvings, which, however, on the whole, do not serve any practical end. Most of such carvings are toys, or are made for the pleasure of the work. Handles of quivers, toggles and similar objects, which lend themselves readily to realistic representations, are carved in this manner. The lack of decorative art is, therefore, not due to a lack of artistic sense on the part of the Eskimo.

The social organization of the Eskimo is very simple. The social unit is the family, which is reckoned in both paternal and material line. The household—consisting of father and mother, children, and sometimes a brother and widowed relatives—forms the social unit. In many cases, the children after marriage continue to form part of the household. There is no strict rule of residence, the husband sometimes residing with his wife's parents, and the wife sometimes moving to her husband's house. The various households which live in the same locality do not form a strict political or social unit. Their union is temporary and may be dissolved at any moment. It is clear that under these conditions no well-developed chieftaincy can exist. In some regions the experienced hunter who knows the movements of the game well, and who by his advice can guide the men of his village, may attain a certain degree of authority. This is particularly true in cases where in pursuit of game the tribe makes habitually long trips every year. Such is the case, for instance, in regions where the people hunt seals in winter on the sea-ice, while they spend the summer a long distance from their winter hunting-

grounds in the interior of the country. Nowhere, however, do we find chiefs who exert strict authority over their tribes. Owing to intermarriages, distant relatives and friends are often scattered over a vast territory. This leads to frequent visits and the temporary residence of a family in various parts of the country. The distances covered in such migrations are remarkable, and cases are known of families that have resided at one time on the shores of Hudson Bay, while at other times they were found on the shores of Smith Sound.

Notwithstanding the looseness of the village unit, there is a certain sense of unity of tribal organization which manifests itself particularly in the distrust of strangers. It seems that in olden times, among all Eskimo tribes, certain ceremonial forms of meeting strangers were in use. In the central regions these generally consisted in a formal contest, which sometimes ended in the death of one of the contestants, but it generally had a more harmless character and merely preceded the hospitable reception of the stranger. These contests consisted in wrestling matches or in trials of endurance.

Although there is no definite form of government in the village community, the men, at certain times, act in the capacity of an informal council. Thus, if a man has made himself obnoxious, the men of the village may consult, and agree on the desirability of ridding the community of that particular person. After this, any man has the right to kill the disturber of the peace without fear of blood revenge.

Both polygamy and polyandry occur among the Eskimo. A man may marry several sisters, and where women are few in number, families are found consisting of several brothers and of unrelated men who are married to one woman. Scarcity of women is largely due to the custom of infanticide, female children being often considered as a burden and being killed shortly after birth. Where this custom does not prevail, the dangers that beset the life of the hunter are liable to bring about a preponderance of women in the tribe, which leads to greater frequency of polygamy. It is interesting to note that among the Eskimo cases of men remaining bachelors are not by any means infrequent. Old people are generally treated with respect, but in cases of famine they are often left to die, and when they feel themselves an incumbrance on the tribe they may even seek death by suicide.

The religious views and practices of the Eskimo while, on the whole, alike in their fundamental traits, show a considerable amount of differentiation in the extreme east and in the extreme west. It would seem that the characteristic traits of shamanism are common to all the Eskimo tribes. The shaman is called by the Eskimo angakok. The art of the angakok is acquired by the acquisition of guardian spirits. In some regions the belief prevails that the ability to acquire a guardian spirit must be transmitted by the teaching or by the direct influence of a shaman. Thus, the Greenland Eskimo believe that a child that is kept on the knees of a shaman will itself in course of time become a powerful shaman. In the region of Hudson Bay and Baffin's Land, no such transmission of power seems to be believed in, but it is stated that the shaman suddenly feels a supernatural light surrounding his body. His eyes acquire the power to see supernatural objects that are invisible to ordinary mortals, and by the help of his guardian spirits he acquires the power to cure diseases and to visit the world in which the supernatural beings reside.

The statements made by various authorities in regard to this subject are not quite consistent, and it seems probable that the ideas held by the Eskimo show a considerable degree of variation. It might seem that in some cases the initiation of the shaman consists only in his subjective feeling of the acquisition of supernatural power without the revelation of an individual guardian spirit; while in other cases it would appear that supernatural power is acquired by an encounter with such a spirit. Many different kinds of beings may become the guardian spirits of men, but prominent among these are polar bears and other animals.

Besides the spirits which may become guardian spirits of men, the Eskimo believe in a great many others which are hostile and whose visits bring disaster and death. These hostile spirits are not animals or human beings, but have fantastic forms, believed to be endowed with life.

Powerful shamans are believed to be able to change their sex, to take off the skin from their face in order to frighten to death their enemies. Their souls are believed to be able to leave the body. They can see the spirits that haunt the villages and can discover the transgressions of taboos, which are the cause of misfortune and starvation.

Before describing their practices it is necessary to describe briefly the beliefs of the Eskimo regarding taboos and transgressions of taboos. Restrictions in regard to food and in regard to work are very numerous. It is forbidden to bring sea-animals, particularly seals, ground-seals, and whales, into contact with caribou. It is forbidden to do certain kinds of work after a seal has been killed and after a death has occurred. A person who has touched a dead body must not touch any kind of game. No work on deer-skin is allowed until sea-ice has formed, etc. Restrictions like these are found among all primitive tribes, but the interpretation of these customs among the Eskimo is peculiar. It is believed, for instance, that a person who has touched a dead body or anything that has been in contact with a dead body, is surrounded by a black halo, which is distasteful to the game-animals, and that if a person thus affected goes hunting the animals will keep away. Furthermore, if an animal should be killed by a person who has transgressed one of the taboos, the transgression of the taboo, which is considered a material object, is believed to become attached to the soul of the animal, which takes the transgression of the taboo along to the deity that has control over the animals. It is believed that the transgression of the taboo hurts the deity, and for that reason she visits the tribe with misfortune.

Since it is thus necessary to avoid all contact with the transgressor of a taboo, for the reason that by contact with him the material transgression of the taboo may be transmitted to another person, the Eskimo requires that every transgression of a taboo be publicly confessed, in order to enable others to keep away from the transgressor, and for this reason the transgression of the taboo is not so much considered a sin as the concealment of such a transgression. From this point of view the idea has developed that confession is sufficient to atone for the transgression of the taboo, and this confession, although it may often be compelled through relatives of the offender, is generally secured through the shaman.*

*Compare, pp. 200 and 201.

It is therefore one of the important functions of the shaman to discover the offences which give rise to misfortune and starvation. Two principal methods are used for this purpose: the lifting of stones, or of the head of a patient by means of attached thongs, the theory being that when a question is asked and the shaman is able to lift the stone or the head, the reply is negative, while when he is unable to lift them the reply is positive. The second method is the visit of the shaman to the deity that has control over the destinies of mankind, and which controls the supply of game. It is supposed that on these visits the shaman sees the transgressions that have caused the misfortune. The shaman may also discover the material transgressions which are attached to the body of a sick person, and he may cure him by cutting off these transgressions.

Different from the art of shamanism is witchcraft, which consists in the use of parts of corpses or of other objects for purposes of sympathetic magic.

These peculiar forms of belief are most fully developed among the central Eskimo, but an analysis of the traditions and customs of Greenland suggests that similar ideas were originally held among all the Eskimo tribes.

The ritualistic development of Eskimo religion is very slight. There are only a very few instances where members of the village join in religious rituals. In former times each village had an assembly house, which was devoted to the celebration of festivals, most of which had a semi-religious character without, however, being sufficiently formal to deserve the term of religious performances. In these assembly houses, singing contests were held and many of the shamanistic practices were performed there. The central Eskimo tribes, however, have at least one important annual festival, which has a direct relation to their belief in a deity protecting the sea-mammals. It is believed that every fall, when the ice forms, this deity visits the villages. Then a ritual is performed, the essential object of which seems to be the home sending of the deity and the attempt of the shaman to rid her of all the transgressions that are attached to her body and that give her pain. The forms in which his celebration is performed are not the same everywhere, but in many cases the ritual is characterized by a definite series of rites and by the appearance of certain masked figures, who represent assistants of the deity or other spirits. One of the features of this rite is the temporary exchange of wives, which is believed to be one of the means of appeasing the wrath of the deity.

West of the Mackenzie River the series of the rituals is very much more complex, and in the more southern regions the number of masks used is quite considerable. Judging from the types of the masks and the description of the festivals it seems, however, likely that these are to a great extent influenced by Indian customs.

Some older accounts of the central Eskimo suggest that other rituals were performed after the capture of whales. The people assembled in open stone enclosures, built for this purpose and performed a ceremonial of thanksgiving.

The mythological concepts of the Eskimo are remarkably meagre and unsystematic. They seem to be most fully developed in the central regions, where the most important myths centre around the deity who is the mistress of sea-mammals. According to tradition, she is a girl who was given in marriage to a bird. When the bird

maltreated her she tried to escape with her father, who had come to visit her. The birds raised a storm, which threatened to swamp the boat in which she was fleeing. Then her father cast her overboard, and when she clung to the gunwale, he cut off the joints of her fingers one after the other. The first joints were transformed into whales, the second joints into seals, the third into ground seals. She became the mistress of the under-world and controls the animals which originated from her fingers. It is believed that the souls of those who die a natural death go to her abode.

There is a considerable variety of beliefs in relation to the fate of the soul after death. The soul of those who die a violent death go to heaven, where they play ball with a walrus head, thus causing the northern lights. But other places are believed in, and in some regions a number of upper worlds and a number of lower worlds are believed to exist, each of which is the home of a particular group of souls.

Sun and moon are believed to be sister and brother, the brother being constantly in pursuit of his sister; although in other traditions, sun and moon are described as residing in one house in heaven.

Setting aside these traditions and a few animal tales, the Eskimo have practically no creation legends. According to their ideas the world has always been what it is now. Rain, thunder and lightning are believed to be produced by a few women, who escaped from human society and to live by themselves. It is believed that in the beginning of the world, children were found in the snow, but that through the action of two girls, the present state of affairs was introduced. The narwal is believed to be a transformed Eskimo woman, whose braid became the narwal's tusk. The walrus and the caribou were created from parts of a woman's clothing, which she had cast away. A woman running along the beach and bewailing the loss of her grandson was transformed into a bird. The transformations enumerated here and a few others are told in trifling stories, or are merely incidents in elaborate tales. They do not stand out primarily and prominently as myths accounting for the creation of these animals. In fact, it might seem that these animals are believed to have existed even before the event told in the tradition and that the creation is that of a particular individual of the species rather than that of the whole species.

The rest of the very rich folklore of the Eskimo is essentially human, and deals with the exploits of heroes, with the deeds of shamans, and with incidents that might happen at the present time in any Eskimo village. The belief in the supernatural, which is characteristic of the present Eskimo, enters, of course, almost into everyone of these traditions; but, nevertheless, they reflect essentially the Eskimo life of the present day and do not belong to a mythological period, a feature which is characteristic of almost all Indian mythologies.

A comparison of the traditions of various Eskimo tribes is of great interest, because it proves the great conservatism of the people. Tales which are apparently so trifling that we might be inclined to consider them as having happened a short time ago and by chance retained in the memory of the people, are told in the same way in Labrador, in Baffin's Land, and in Greenland—regions, the inhabitants of which have not been in contact for hundreds of years. This proves that many traditions must have retained the same form for a considerable

period, and the phenomenon is quite in accord with the permanence of customs and of language referred to before.

In view of this fact, it is interesting to note that the few animal tales referred to above are not the exclusive property of the Eskimo, but belong to both Eskimo and Indian. Thus, the story of the origin of the narwal begins with an incident of a blind boy who is maltreated by his mother. In the course of events, he shoots a bear, his mother directing the aim of his arrow. Later on, his eyesight is restored by a goose, who dives with him in a pond. This portion of the tale is found among the British Columbia Indians, in the Mackenzie Basin, and among many eastern Eskimo tribes. The tale of a monster which steals bodies from graves and which finally is induced to carry away a person who pretends to be dead, is found spread over the same area. This distribution of the animal tales suggests that they are probably not part of the original Eskimo folklore, but were borrowed from the Indians, and later on became the common property of many of the Eskimo tribes. The area of distribution of these animal tales may be defined as extending from the mouth of the Columbia River on the Pacific coast, across the continent to the southern part of Hudson Bay; thus occupying the whole of Artic America and the northwestern part of our continent.

The folklore of the Eskimo, west of the Mackenzie River, differs in many essential traits from that of the esatern Eskimo. It is much more complex, many of the elements of the folklore of the North Pacific coast being embodied in it. In this respect the folklore of the western Eskimo bears evidence of the mixture with Indian elements, which is suggested as well by the physical type of the people as by the peculiar foreign traits of their culture, all of which point to an extended influence of the Indian tribes located south of the Alaskan Eskimo.

While the traditions mentioned indicate a certain amount of borrowing from Indian sources, other traits suggest a diffusion of cultural elements across Behring Strait to northeastern Asia. Common to the Eskimo and to the Chuckchee is the human character of mythology. Among the Chuckchee hero tales are even more strongly developed than among the Eskimo. Many of the shamanistic practices of the Chuckchee and other tribes of Eastern Asia are remarkably similar to those of the Eskimo; thus, the custom of divination by means of head lifting and stone lifting is the common property of the Eskimo and of the Chuckchee and other tribes as far south as the Amur River region. Most of the traits in the material culture of the maritime Chuckchee are so much like the corresponding traits of Eskimo culture that both must evidently be considered as originating from the same sources. On the whole, it seems more likely that the Chuckchee have adopted Eskimo customs than that the reverse has taken place.*

*H. Rink. Tales and Traditions of the Eskimo. London, 1875.
F. Boas. The Central Eskimo. Sixth Annual Report, Bureau of Ethnology, pp. 399-669. Washington, 1888.
——— The Eskimo of Baffin Land and Hudson Bay. Bull. American Museum of Natural History. Vol. XV., 1901, 1906.
W. J. Hoffman. The Graphic Art of the Eskimo. Report U. S. National Museum for 1895, pp. 739-968. Washington, 1897.
A. L. Kroeber. The Eskimo of Smith Land. Bull. American Museum of Natural History, Vol. XII.

2. THE BEOTHUKS OF NEWFOUNDLAND.

By Alexander F. Chamberlain.

Habitat, name, etc. The Beothuks, or "Red Indians," of Newfoundland, are now extinct, their last representative, Shanandithit, one of three women taken by the whites in 1823, having died at St. John's in 1829. The suggestion has been made that a few individuals may, at various times, have escaped to the Labrador coast, where they mingled with the Algonquian Indians of that region (Nascapies, Montagnais, etc.,) but no evidence of this is forthcoming. Whether they ever inhabited the whole island is doubtful; their characteristic area, after the intrusion of the whites, was the country inland from the Bay of Exploits along the river of the same name, and about Red Indian Lake, which received its appellation from them. In summer they moved around among the islands and on the coast from Cape Freels to Cape John (formerly much further). Among the localities where remains of the Beothuks, or traces of their former presence, have been discovered are Red Indian Lake, Pilley's Island (in an arm of Notre Dame Bay), Rencontre Island of the lower Burgeo group, Bonavista Bay, Birchy Lake, Long Island in Placentia Bay, Fox Island, Trinity Bay, Funk Island, Twillingate Island, White Bay, Hare Bay, Bonne Bay, Flat Bay, St. George's Bay, Codroy River. This embraces the greater part of the coast-line of the island and leads to the belief, that these Indians were acquainted with, or dwelt upon, most of the sea-coast, while a considerable portion of the interior was at one time or another occupied by them.

Of the name Beothuk, Beothik, or Bœothick, no satisfactory explanation has been given,—it is probably a word for "Indian, man," or some tribal designation. The appellation "Red Indians" is said to have been given to them by the Europeans on account of their custom of "painting" their faces and other parts of their bodies with red ochre, which they also applied to some of their utensils. According to Patterson, however, this name antedates the coming of the whites, and is simply a translation of the Micmac *Maquajik*, "red people." Rand, in his Micmac dictionary gives *Megwajijik* as the name of "the Red Indians of Newfoundland."

Relations with other peoples. Whether the Micmacs (whom the Beothuks called *Shawnak*) had relations with the Beothuks in "prehistoric" times is uncertain, but by the beginning of the eighteenth century they had their colonies in the western part of Newfoundland and began a war of extermination against the Beothuks, in which they were aided and abetted by the French, who, from 1660 onwards, had established themselves at Placentia and elsewhere on the southern coast, and afterwards by the English fishermen and colonists. The possession of firearms by the Micmacs gave them a decided advantage over the Beothuks, who were soon driven away from the Micmac portion of the country with severe losses. They continued

L. M. Turner. Ethnology of the Ungava District. Eleventh Annual Report, Bureau of Ethnology, pp 159-350. Washington, 1894

John Murdoch. Ethnological Results of the Point Barrow Expedition. Ninth Annual Report, Bureau of Ethnology, pp. 1-441. Washington, 1892.

E. W. Nelson. The Eskimo about Bering Strait. Eighteenth Annual Report Bureau of Ethnology, pp. 1-518. Washington, 1899.

mortal enemies to the last. With the Eskimo, who visited Newfoundland by way of the straits of Belle Isle, the Beothuks are said to have been on hostile terms. They called them "dirty." The Beothuks seem not to have been the equals of the Eskimo in conflicts on the water. The Indians (Algonquian) of the coast of Labrador, known to the Beothuks as *Shanwomunk* were friendly, and carried on trade and barter with them, and *vice versa*, such visits being attended with quite friendly relations.

The extermination of the Beothuks by the Micmacs and the whites is a dark chapter in the history of Newfoundland, and a blot upon European civilization. They were shot like deer or partridges, the hunters boasting how many "head of Indian" they had killed. Men, women and children all suffered. Of those captured many were, according to Cartwright, "exposed as curiosities to the rabble at the fairs of the western towns of Christian England at two pence a piece." Several Beothuks were brought to England by Cabot in 1497, and quite a number were sent as slaves to Lisbon, as a result of the expedition of Cortereal in 1501. During the sixteenth century brief notices of the Beothuks (though not by this name) are given by Cartier (1534), Hore (1536), Frobisher (1574), and Hayes (1583), the last reporting that there were no natives on the south coast, "but in the north are savages, altogether harmless." The attempts at colonization by the English under Guy in 1610, at Mosquito Harbor (Conception Bay), seem not to have led to disturbances with the Beothuks, whose intercourse with the whites was quite friendly. Whitbourne, in 1615, represents them as "living altogether in the north and west part of the country, which is seldom frequented by the English," and having a good reputation with the French and Biscayan whalemen. Baron de Lahontan (at one time governor of Placentia, when held by the French) knew so little about the Beothuks, that he could say in 1690, "there are no settled savages on the island,"—so far into the interior had they retreated even at this time (probably into the country about the River of Exploits). Cartwright, in 1768, says that the conduct of the English fishers towards the Beothuks is "an inhumanity that sinks them far below the level of savages." In 1760 the Government, under Capt Palliser, issued the first official document in favor of the natives, and during the next few years several expeditions (including that of Cartwright in 1768) were sent out to discover and treat with the Indians, which were more successful in obtaining ethnological information than in inducing the Beothuks to trust the English settlers. A few individuals were captured, but that was about all. The efforts of Govs. Gambier in 1802, Holloway in 1807-1809, Duckworth in 1810-1811 (the Buchan Expedition) were hardly more successful. After this the relations between the settlers and fishermen of the north of the island and the Beothuks continued to be hostile. A few natives were occasionally carried off to the white settlements, as was the case with Demasduit, or "Mary March," in 1819, Shanandithit in 1823, etc. In 1827 there was organized in St. John's the "Boothic Institute," which sent out, under Mr. Cormack, an expedition into the Beothuk country, but neither they nor any subsequent explorers ever found a living representative of the tribe.

Physical characters. Dr. Brinton, in his *American Race* (p. 67) describes the Beothuks as of "medium stature," but the tradition of

the English in Newfoundland is that they were tall. De Laet, indeed, does speak of them as "of medium stature,"; but Howley says that "they were of middle stature, say five feet, ten inches," a height which would bring them into Deniker's "high statures." The husband of "Mary March" is said to have been 6 ft., 7½ in. tall, and the woman Shanandithit is described by Rev. Mr. Wilson as "a tall, fine figure, nearly six feet high." The Micmacs and whites, doubtless, exaggerated the stature of the Beothuks, but the latter may be considered to have been a "rather tall people." The individual brought to England by Cabot, when properly apparreled, "looked like Englishmen," according to the chronicler of the time; and all narrators agree that they were not ill-formed physically.—Howley, indeed, says: "The Beothuks were a much finer and handsomer race than the Micmacs, having more regular features and aquiline noses, nor were they so dark in the skin." Reference is frequently made to their black and piercing eyes, very black hair, fine teeth, etc. All observers distinguish them in physical features from the Eskimo more even than from the Micmacs. The few skulls of Beothuks that have been examined show a good development of the frontal region with prominent nasal spine and absence of depression at the root of the nose. The cheek-bones of "Mary March" were rather high. Her hands and feet were "very small" and limbs "small and very delicate," particularly her arms, and she was very proud of this. Her complexion became lighter after washing, and freedom from the smoke of the wigwam. The Beothuks are said to have been "active and athletic."

Temperament, etc. The earlier accounts speak of the Beothuks as harmless savages," "ingenious and tractable people," of a certain mild and gentle disposition, except, of course, when imposed upon, deceived or attacked. Such acts of reprisal as are attributed to them after experience with the whites were but natural under the circumstances, and do not indicate particular savagery or cruelty of a notable sort. Those who had to do with "Mary March" were impressed by "her modesty and propriety of behavior, her gentleness and kindness, her gratitude for favors and her affection for her kindred." A woman captured in 1803 "showed a passionate fondness for children." Shanandithit was "bland, affable and affectionate." Several instances of the child-like character of these aborigines are on record.

Intellect, senses, etc. Father Pasqualigo, who saw in Lisbon the Beothuks brought over by the Cortereal expedition of 1501, wrote of them as "admirably calculated for labor, and the best slaves I have ever seen." Whitbourne (1615) reports them as ready to assist the French and Biscayan whalers, "with great labor and patience." Their quickness of intelligence is noted by many observers, both as to particular individuals resident among the whites, and as a general fact for the tribe. Of a Beothuk boy, living with the whites in the time of Cartwright, we are told that "he became expert in all the branches of the Newfoundland business." Demasduit, or "Mary March," possessed "quickness of observation, reading of character and power of imitation." Shanandithit had considerable talent in drawing with paper and pencil,—of her it is related that, "in one flourish she drew a deer perfectly, and, what is more surprising, she began at the tip of the tail." She also made some sketches indicating the events of the Buchan expedition (1810), which are said to be "quite accurate" in many particulars.

Occupations, industries, arts, etc. The Beothuks were notably hunters and fishers. Their country in Newfoundland abounded in deer, and they hunted also the bear, the fox, the otter, the hare, the seal, etc., besides land and sea fowl. They also took many salmon for food. Their bows had arrows sometimes three feet long, and they are said to have been excellent archers. Spears eight feet in length have been found in the Beothuk settlements. Flint and bone arrow and spear heads, and other stone implements were common,—some of the arrow-heads are very beautifully formed. In the kitchen-middens on the coast (e.g., at Long Island, Placentia Bay) arrows and spears heads and a considerable variety of stone implements (axes, chisels, gouges, scrapers, sinkers, rubbing and sharpening stones, etc.) have been found. Some also in graves antedating the coming of the whites. The Beothuks had a long-shafted retrieving spear or harpoon for killing seals, etc. But their most remarkable hunting invention was the "deer-fence." The extent of these "fences" and "pounds" indicates a considerable degree of co-operation among these Indians, and accounts for the large amount of meat found in their deserted storehouses by the whites. They appear also to have made a sort of pemmican.

The houses of the Beothuks were generally lodges of poles, of peculiar construction. They had v-shaped hulls, high prows, and a marked central rise. They are said to have been skilful boatmen, exceeding the Micmacs in running rapids, etc. The Beothuk snow-shoe was also peculiar, being rather like a tennis-racket in shape, longer and narrowing behind more than those of other tribes.

The houses of the Beothuks were generally lodges of poles, covered with skins or birch-bark, large enough to accommodate from six to twenty persons, each of whom had a hole (lined with moss or fir-boughs) around a central fire. They seem to have had both summer and winter "wigwams." They also had square houses, which may have been imitated from the English; also large store-houses, "said to have been from 30 to 50 feet long, and nearly as wide."

The art of pottery seems to have been unknown to the Beothuks, although suitable material was not absent; they made, however, pots and lamps of steatite worked *in situ*. Birch-bark vessels and utensils of various shapes and sizes were much used.

Among the ornaments known from the wearers or found in graves, etc., are bone, hair and dress ornaments figured in varied fashion, strings of small pieces of bone and ivory, pendants of ivory, shells strung together, small forked and pronged bone amulets intricately and ingeniously figured, etc. Many objects and implements were stained with red ochre,—this seems to have been a custom with some special significance. The skin dresses of the Beothuks were often well ornamented and there were special "dancing dresses" for the shamans.

Health, disease. It is recorded that all the Beothuk women who lived among the whites died of consumption, but how far this extended to their fellow tribesmen is not known. The Beothuks had the "sweat-bath" of the well-known Indian type, the sweat-house being constructed in the usual manner, and steam produced by pouring water on heated stones.

Social and political organization. Of the structure of Beothuk society very little is known. Something may be inferred from the

number of persons occupying a single lodge, but they were in all probability not communistic, nor polygamists, as a rule. Certain actions of "Mary March" suggested to some that she may have been the daughter of a chief,—the chief among the Beothuks was probably a man of considerable authority,—or perhaps herself a chief. Family affection and love for children is accorded them by all authorities, and it was marked in the case of captured women. The absence of such a domesticated animal as the dog (some observers say that they had half-tamed wolves) among the Beothuks may be of social importance. Likewise the fact that no agricultural processes were found among them (the climate was against this). They were probably quite a sociable people and had dances and like amusements. Culin, from consideration of some of the bone disks, thinks that the Beothuks "may have used gambling disks resembling those of the Micmac."

Mythology, religion, etc. Few of the religious and mythological ideas of the Beothuks have been recorded, although the vocabularies extant contain some words belonging in this category. Their term for "God" is given as *mandee*, which seems identical with Micmac *mundoo*, now signifying "devil." One of their names for "devil" was *ashmudyim*, which Shanandithit described as "an ugly black man," who was "short and stout, having long whiskers, dressed in beaver-skins, and sometimes seen at the east end of the lake." Some of these ideas are probably post-European, but the Beothuks probably had a manitou-idea similar to that of the Algonkians from whom the *mandee* may have been borrowed. One authority reports that these Indians believed that "they sprang from arrows stuck in the ground by the Good Spirit." Certain objects had perhaps some religious or symbolic meaning attached to them, e.g., some of the bone and ivory ornaments, or "amulets," the sticks with semi-circular head-pieces, the wooden images and dolls placed in the graves, etc.

The Beothuks had several modes of burial ("hut," scaffold, box, cairn), and deposited with the dead, food, utensils and implements, ornaments, etc. In one burial-place, e.g., were found small wooden images of a man and a woman, a doll (for a child), toy canoes, weapons, culinary utensils, etc. The grave of a boy contained, among other things, some smoked salmon in a bark-basket and several packages of dried trout. The burial-place of what was supposed to have been a "medicine man," yielded a medicine-bag and contents, several bird skulls, etc. The bodies of the dead were encased in the birch-bark, and, for some reason or other, became largely mummified, somewhat after the Alaskan fashion. The careful treatment of their dead may have had some religious import. Broken arrows were sometimes found in the graves.

Language. The linguistic material of the Beothuk consists of brief vocabularies obtained at various periods from captured women of the tribe, Owbeg, Demasduit, Shanandathit, the last recorded by Mr. Cormack in 1828, being thought the most reliable, although the woman had then been living some five years among the whites. The total number of words known is about 500. Dr. A. S. Gatschet, an expert linguist, who studied this material very carefully, concludes that the language of the Beothuks is "a separate linguistic family," altogether distinct from Eskimo and Algonkian in particular. There are phonetic, grammatical, and lexical reasons for this position. The Beothukan stock is included in the Powellian classification of

independent linguistic families of North America. Brinton thinks that in Beothuk may be detected "some words borrowed from the Algonkin, and slight coincidences with the Eskimo." He also ventures the opinion that "derivation was principally, if not exclusively by suffixes, and the general morphology seems somewhat more akin to Eskimo than Algonkian examples." The numerals, especially are un-Algonkian, also the names for parts of the body, etc., two test-series of words of great significance. It has been remarked that the words of these Beothuk vocabularies often seem to present a "disordered look," which is not unnatural considering the time and circumstances of their origin. It deserves notice also that they were all obtained from female members of the tribe, and it may just be possible that the language of the women differed in some way from that of the men (captured or foreign wives, e.g.), and we may have here something else than the real language of the Beothuks, or Shawantharot, as they are said to have called themselves.[6]

3. INDIANS OF THE EASTERN PROVINCES OF CANADA.

By Alexander F. Chamberlain.

Habitat, names, etc. With the exception of the "Iroquois" (Mohawks) of the Lake of the Two Mountains, those (Mohawks) at Caughnawaga and St. Régis, and the "Hurons" of Lorette, near the city of Quebec, the Indians of the Eastern Provinces all belong to the Algonkian stock. These include, at present, the *Abenakis* of St. Francis and Bécancour, Que., numbering some 390; the *Amalecites*, *Miliciles*, or *Malisects*, of Témiscouata and Viger, Que., and Madawaska, etc., N.B., some 800; the *Micmacs* of Restigouche, Maria, and Gaspé, Que., some 700; *Micmacs* of New Brunswick, some 850; *Micmacs* of Nova Scotia and Cape Breton, some 2,000 (also a few in Newfoundland); *Micmacs* of Prince Edward Island, 290; *Montagnais* of the north shore of the upper St. Lawrence (Seven Islands), Betsiamits, etc.) and the region about the Saguenay and Lake St. John, in all about 1,800; *Nascapies*, or *Naskapi*, beyond the Montagnais and in the interior of Labrador, some 2,000, of which a considerable number are within the limits of the province of Quebec. Besides these there are the few *Nipissings*, or "Algonquins" of the Lake of the Two Mountains.

The Montagnais (*i.e.*, "Mountaineers"), so called from the fact that when first coming into contact with the whites, they occupied the rocky shores of the upper St. Lawrence and the region of the Laurentides, between the Gulf and Lake Mistassini, have roved over this country, contracting their range with the pressure of the whites, for centuries. Champlain met them on the St. Lawrence, between Quebec and the Saguenay, in 1607. With them belong the *Skoffies*, *Sheshatapoosh* (etymology?), "Shore Indians," etc. Behind them, roving between Lake Mistassini and the Atlantic and over a considerable

[6] Geo. Patterson. Transactions of the Royal Society of Canada, 1891, II. Sect. II., pp. 123-171.
Geo. Patterson. Ibid., 1892, Sect. II., pp. 19-32.
A. S. Gatschet. See before, p. 91.

portion of the interior of Labrador, have been the Naskapi, or Nenenot (*i.e.*, "true, real men"), as they call themselves. According to Turner (1883) the term Naskapi is one of reproach conferred on them by their neighbors, the Montagnais. In part of the north region of the Lower St. Lawrence lived also the Skoffies, now extinct, who were very closely related in speech to the Montagnais. About the region of the St. Lawrence there formerly existed in large numbers (now reduced to very few) the so-called *Tête-de-Boule*, apparently closely affiliated with the Montagnais. The chief divisions of the Montagnais-Naskapi group at present are: Naskapi, Montagnais of Mistassini (the R.C. Mission is at Oka, on the shores of this lake), Montagnais of Lake St. John (the mission and Indian rendez-vous is at Pointe-Bleue—the Montagnais begin to go there at the end of June), Montagnais of the Saguenay (their earliest great rendez-vous was at Tadousac), Montagnais of Betsiamits (region about the river of this name, which enters the St. Lawrence below the Saguenay), Montagnais of the Seven Islands, etc. (near the mouth of the Moisie). The country over which the Montagnais and Naskapi still roam is a vast one, although the hunters and the seekers after game fish among the white men are more and more intruding upon it and narrowing the Indian limits. The Abenakis of St. Francis, etc., are, according to Professor Prince (1902) "the direct descendants (of course with some admixture of French and other blood) of the majority of the savages who escaped from the great battle of the Kennebec in Maine, where the English commander, Bradford, overthrew their tribe Dec. 2, 1679." Many of the survivors fled to Canada, settling at St. Francis, near Pierreville, Que., in 1680, whither others subsequently migrated. The Penobscot Indians of to-day "are the descendants of those of the early Abenakis, who, instead of fleeing to French dominions, eventually submitted themselves to the victorious English." The name *Abenaki* is a French corruption of the eastern Algonkian *Wonhbanaki*, *Wabanaki*, *Wapanakhi*, "Easterner," in reference, some hold, to the legendary origin of these tribes in the east. The Micmacs seem to have occupied at the period of their greatest extension the eastern half of New Brunswick (and part of north eastern Quebec, south of the St. Lawrence), all of Prince Edward Island, Nova Scotia and Cape Breton, and, more recently, part of Newfoundland. The Maliseet territory embraced (according to Ganong) all of the St. John's valley (except, perhaps, the mouth) and the valley of the St. Croix. There were two divisions, the "St. John's River Indians" (or Woolahstukwik), and the Passamaquoddies of the St. Croix basin—to the west lay the Penobscots about the river of that name. According to Rand (1875), the country of the Micmacs (Megumaage) was "divided into seven districts, each having its own chief, but the chief of Cape Breton was looked upon as head of the whole." These districts were Cape Breton, "at the head" of the wampum belt; Pictou, Memramcook, Restigouche, Eskegawaage (Canso to Halifax); Shubenacadie, Annapolis (to Yarmouth). Beyond these areas the Micmacs roved, of course, in their canoes, reaching the coast of Newfoundland, and proceeding at times for long distances up the river St. Lawrence, where they came into contact with the Montagnais, etc. The origin of the name *Micmac* is not known . The word *Maliseet* is said to mean "broken language,"—*Etchemins*, according to Gatschet (1897) is their Micmac name.

Relations with other peoples. As the vocabulary obtained by Jacques Cartier in 1534, and his further discoveries of 1535-1536 indicated, the banks of the St. Lawrence from Hochelaga (Montreal) to Stadacona (Quebec) were, at the beginning of the sixteenth century, occupied by peoples belonging to the Iroquoian stock, while the country about the Saguenay was held by Algonkian Indians, who also possessed the most of what is now the Maritime Provinces of Canada, and probably, likewise, some of the region to the south of the St. Lawrence in the eastern portion of the modern Province of Quebec. Between the advent of Cartier in 1534-5 and that of Champlain in 1608 (the specimen given by Massé in Champlain's *Voyages* (1632), is Montagnais), the "towns" of Stadacona and Hochelaga, together with all evidence of Iroquoian power in this region, had entirely disappeared. The country was roved over by a few Algonkian tribes, who made no very great impression on the European explorers. The Iroquoian peoples were found massed about the country to the south of the upper St. Lawrence and Lake Ontario, while a state of constant warfare existed between them and the neighboring Algonkian peoples in alliance with whom were the Hurons, a tribe of Iroquoian lineage, as evidenced by their language. The conflicts of the Micmacs and other allied tribes of Acadia with the Iroquois (Mohawks in particular) were very sanguinary, and the former often advanced far into the territory of the latter, as several place-names, besides traditions, demonstrate. In the harbor of Bic, on the south shore of the St. Lawrence, beyond the mouth of the Saguenay, lies an island called "L'Islet au Massacre," in memory, it is said, of the slaughter by the pursuing Iroquois of 300 Micmacs (men, women and children) in the time of the French-English wars, in which the Micmacs fought against the English (until 1760). This tale is, however, equalled by the tradition of the treacherous destruction of a party of Mohawks by the Abenakis on one of the islands below the mouth of the Keswick river, not far from Fredericton, N.B. The Mohawks, who are called in Micmac *Kwedech*, figure considerably under that name in Rand's *Legends of the Micmacs*, and other like works. The Mohawks made many raids in the St. John country, where the sites of battles are still pointed out by the Indians. In 1808 a council of whites and Indians (including Mohawks) was held at St. Andrews, N.B. Not infrequently the Micmacs and allied tribes made incursions into the country of the Iroquois. The Micmacs from Cape Breton and Nova Scotia, in alliance first with the French and then with the English, helped exterminate the Beothuks of Newfoundland, if, indeed, they had not begun the work before the arrival of the whites. The Micmacs had also some contact with the Algonkian Indians of the north shore of the St. Lawrence, and with the Eskimo in the Gulf. They have had feuds with the related tribes of Acadia in earlier days. Rand reports several traditions of wars with the Maliseets (Milicites), called *Kuhhusooük* ("muskrats") by the Micmac; they had also many disputes with the Passamaquoddies, including a "great war," which was finally ended by a permanent treaty of peace. Feuds were formerly numerous between the Maliseets and the Penobscots.

The Algonkian tribes of the north shore of the upper St. Lawrence and the adjacent interior Montagnais, Nascapies, etc., have had, as those nearest them have to-day, encounters with the Eskimo. Those of the past were very sanguinary. But the relations between

the Indians of the interior of Labrador and the Eskimo are (according to Turner in 1882-4) quite friendly, and some of the former are even parasitic on the latter, chiefly old men and women left behind in the hunting season. These impose on the good nature of the Eskimo. Considerable intermixture has taken place between the white settlers and the Indian tribes of the Eastern Provinces, some authorities going so far as to say that "among the Atlantic coast Algonkians no full bloods survive." The Montagnais, etc., have intermingled to some extent with the French Canadians, and Du Boscq de Beaumont (1902) noticed at Pointe-Bleue a number of halfbreeds, children of Montagnais mothers and Irish employees of the Hudson's Bay Company.

The intermixture of the Micmac and related tribes with the French, English and Scotch inhabitants of the Eastern Provinces has been of long continuance. In certain French parishes in New Brunswick, e.g., there is said to be hardly a pure-blooded white man or a pure-blooded Indian. The Indians of the Eastern Provinces found the French easier to get along with. According to Gabe Acquin, "Sachem of the Abenakis," who died in 1901: "The French lived among us, learned our language, and gave us religion; they were just like ourselves; that is why we thought so much of them." That there is justification for this belief is clear from the statement of Rand, who says that in 1846 "the power of caste and prejudice against the Indians was so strong in Nova Scotia that even such a good man as Isaac Chipman did not dare to allow me the use of an unfinished and unoccupied room in Acadia College, in which I could obtain lessons from one solitary Indian, for fear of affecting the prosperity of the college." Rand adds, with some exaggeration, that "of the present condition of the Indians of this province 80 per cent. of the improvement has taken place within the past 25 years."

The Abenakis of St. Francis have, of course, during their residence of more than two and a quarter centuries in Canada, absorbed a considerable amount of French blood, as have also the Hurons and Mohawks of the Province of Quebec.

Physical characters. The Naskapi, according to Turner (1883) are, both men and women, not quite so tall as the Indians of the southwest of Ungava. The Montagnais, according to Boas (1895) are considerably shorter than the Micmacs. They are also more brachycephalic (the average cephalic index of 79 individuals was 81.5; of these 16.5 per cent. were below 79 and 21.7 per cent. over 84). Of 220 Micmacs and Abenakis the average cephalic index was 79.8; below 79 there were 44.3 per cent., and over 84 only 7 per cent. The Micmacs and related tribes (the Eastern Algonkians generally) are rather tall. The average stature of 79 Micmacs and Abenakis (Boas) was 1717 mm. (5 ft. 7 in.), with 7.6 per cent. below 1660 mm. (5 ft. $4\frac{3}{8}$ in.), and 45.7 per cent. above 1730 mm. (5 ft. $7\frac{1}{8}$ in.). The average stature of the Micmac and Abenaki women was 1579 mm. for full-bloods, and 1577 mm. (5 ft. $1\frac{1}{8}$ in.) for half-bloods. The male half-bloods averaged 1727 mm. (5 ft. $7\frac{3}{8}$ in., somewhat taller than the full-bloods. The half-bloods seem more variable than the full-bloods. In their earlier years the Indians are taller than the *métis*, but near puberty the latter catch up.

The tall stature and lower indices of the Micmacs and related tribes (taken in connection with the same phenomenon in the more ancient skulls from this area of North America), seem to justify, ac-

cording to Dr. Boas, belief in an admixture in times past of Eskimo (dolichocephalic) blood in the Indian tribes of New England and the Maritime Provinces, parts of Quebec, and even Ontario, a view supported by archæological evidence.

Temperament, character, etc. The general reputation of the Montagnais is stated by Turner (1883) to be "quiet and peaceable." The Naskapi seem to be "more demonstrative." They are said to ridicule men who allow their women to rule them, etc. "Either sex can endure being beaten, but not being laughed at; they rarely forgive a white man who laughs at their discomfiture." Of these Indians in general Chambers (1896) says: "So far as morality and respect for law and order are concerned, these Montagnais and Nascapees of Labrador will now, as a rule, compare favorably with those boasting a loftier Christianity and a higher plane of civilization." Although they fondly cling to many of their old beliefs and superstitions "Christianity and the northerly advance of civilization have done much for these poor people." In 1808 Mackenzie declared that in the Montagnais he found "concentrated all the vices of the whites and Nascapees, without one of their virtues." They were "neither Nascapees nor whites, but a spurious breed between both."

The songs and dances known to have existed among the Micmacs indicate that, although their environment was not always one of plenty and abundance, they could at times be merry of heart and soul. The sense of humor in their myths and folk-lore is also notable. Maclean (1896) describes the Micmacs of Quebec, New Brunswick, Prince Edward Island and Nova Scotia as to a large extent "honest and industrious," but often much given to drunkenness and parasitism upon the whites of the towns. Those of Nova Scotia seem to have the best reputation, being "generally self-supporting, and reputed an honest, industrious and law-abiding people." Poverty and drunkenness appear to be the chief troubles of the Micmacs. The Abenakis are credited by the older chronicles with being of a gentler and more docile disposition than the Algonkians further west. The "Abenakis" of the river St. John were described in 1881 by Mr. Edward Jack as "a civil, harmless people, not nearly so much addicted to strong drink as they once were." Before being affected by contact with the whites the condition of these "Abenakis" is stated thus by Mr. Montague Chamberlain (1895): "They were honest, truthful and just; hospitable to a fault and unswerving in their fidelity to their friends. They are still hospitable, and the best of them are honest and faithful." While possessing marked reserve, bashfulness in the presence of strangers and keen sensitivity to ridicule, "when among intimates they converse with ease and volubility; repartee is much enjoyed, and their conversation is spirited, and not infrequently very mirthful."

Intellect, senses, etc. Before the arrival of the missionaries and the commencement of their work among them, the Montagnais, etc., are described, but with some exaggeration, as Algonkians of the lowest type, suffering from malnutrition and all its effects. Their ability as canoe-men, their skill in hunting to-day are, however, praised by the whites. Chambers (1902) says: "In the waters that are the highways through their northern hunting grounds they are the most skilful canoe-men and best of guides. Ashore, in the practically trackless forest, they are the most polite and obliging of servants. No domestic was ever more particular about the comfort of her mistress

than these Montagnais are in promoting that of their patrons in camp or canoe." According to Turner (1883) the Naskapi Indian is "not the physical superior of the Eskimo," and he has less ability to endure fatigue, but is, perhaps, as able to bear the effects of cold. Enmity and hatred among them chiefly arise through the sexual passion. Men exhibit jealousy less than women. According to Turner, among the Naskapi, women are less demonstrative than men, who, "after a protracted absence from each other, often embrace and shed tears of joy." The Naskapi, although not such good marksmen as the Eskimo, excel the latter in rapid firing. The feeling for cruelty now vents itself on the wolverine, which the Naskapi is said to take delight in torturing. In wrestling, of which they are fond, they fail to defeat the Eskimo, who are physically stronger. They do not readily swim; and have invented a kind of "swimming board" for use in the hand. That the intellect of the Micmacs and allied tribes is of a higher order than has generally been attributed to them is shown by the contents and motifs of many of their myths and legends, songs, etc., some of the last exhibiting a remarkable purity of thought and diction. Of the Passamaquoddy song telling of the attack of the squirrels on the Lappilatwan-bird, Professor Prince says that he can find "no parallel in any other literature." The summer-song, and the song of the loves of the leaf and the fire-bird are, likewise, noteworthy. Professor Prince (1902) says of the Micmacs that "their grade of intelligence is much lower than that of the other members of the same (Abenaki-Wabanaki) family, but they still have a vast store of folk-lore, legends, and poems." Rand gives a higher position, apparently, to the Micmacs than does Prince, and ascribes to them great knowledge of plants and animals, topographical lore and memory, etc. Many Micmacs and individuals from closely related tribes have been expert guides, canoemen, etc., for the whites. They are also exceedingly skilful with the spear as fishers, and with the gun and rifle as hunters. The moose-calls of the Micmacs and the wild-goose call of the Naskapi and several other hunting devices of these Indians are worth recording.

Health and disease. The Montagnais and related tribes, even in the early days, when the missionaries first met them, were subject to such diseases as resulted from lack of nutritious food. They had been driven from more satisfactory habitats by the Iroquois, and often felt the effects of famine. They had also to compete with the Eskimo, to whom Turner (1883) ascribes "greater endurance and perseverance." The prevailing diseases among the Naskapi are those of the lungs and the bowels, due to exposure to extremes of wet and cold, and the inhaling of the smoke and foul air of the wigwam. Half the illnesses that afflict them "are due to gluttony." Turner also reports that "indolent ulcers and scrofulous complications are frequent." For remedies they resort to the shaman, with his drum and incantations, and to "potions compounded by the white trader, in which they have unlimited faith. They are fond of the steam bath and possess the characteristic Indian "sweat-house." Some of the Montagnais (e.g., the Attikamegs, of the St. Maurice basin, in 1670) have been practically exterminated by the smallpox.

In the legends of the Passamaquoddies and related tribes, *K'seenoka*, "Disease," is represented as being the poohegan, or "guardian spirit" of a witch, named Kwagsis ("Fox"), who was sent by a great

chief to afflict the "Giant Witch" with sores and boils, and aches and pains. The "Giant Witch," however, was cured of all his diseases, by Kwiliphoit, the god of medicine who sent him, by the humming-bird, the healing plant *keekayween' bisoon*. The extra-individual and "magic" origin of disease is typified in other incidents in the tales of these Indians. Resort to cure by the devices of the shaman was widespread among the Indians of the Eastern Provinces. Drunkenness and diseases, due to immoral relations with the whites, together with the troubles from malnutrition, are their chief afflictions in modern times. Where they are at all in favorable circumstances, these Indians are not dying out rapidly, but rather holding their own. Turner (1883) reports of the Naskapi that during the two years he was with them the mortality appeared to be low, and births exceeded deaths. The Dominion statistics for 1904 indicate that in each of the Provinces of Quebec, New Brunswick, Nova Scotia and Prince Edward Island the number of births among the Indian population exceeded the deaths. There appears also to have been an actual increase in the total number of Indians in Quebec and Nova Scotia, and a small decrease in those in New Brunswick and Prince Edward Island.

Occupations, industries, arts. The Naskapi are and have been chiefly hunters and fishers, the former more characteristically. The deer, the bear, the wolf, the beaver, the wolverine, and other small game are killed for their skins or for food purposes (the caribou "provides them with the greater part of their food and the skins afford them clothing"). The bow and arrow, formerly much in use among the Naskapi and Montagnais, has been practically driven out (except the blunt arrow for killing ptarmigan, rabbits, and those used by boys in shooting at board images of animals, etc.) by the white man's gun. Small cross-bows (imitated from the whites) are also used by children, along with their own bows and arrows, to shoot birds. Among the characteristic weapons and implements of the Naskapi, as described by Turner (1883) are the lance or spear (used particularly for deer) the caribou-snare, the beaver-net, etc. Snaring methods of taking game were formerly much more in vogue. Other implements and tools in use among the Naskapi are the 'crooked knife," skin-scrapers, awls, ice-picks, ice scoops and shovels, etc. For purposes of travel and transportation these Indians have the snow-shoe (in four styles) the toboggan and the birch-bark canoe (two sorts). The Naskapi seem to be much less interested in or expert at fishing than hunting. According to Chambers, "the Nascapees cared little for fish or fishing, so long as game was plentiful." Nevertheless, the Montagnais have furnished to the world in *ouananiche*, the name of an important game fish.

The Micmac and related tribes were also essentially hunters and fishers, their situation enabling them to pursue both occupations, which are, consequently referred to in tales and legends. As spearers of salmon, takers of cod and pollock, killers of moose, etc., they have long been famous. In their hunting and fishing they have been more influenced by long contact with the whites than the Naskapi and Montagnais, but have also given more to the whites, particularly the Canadian French, as is proved by the entrance into the European languages of America of such words as *caribou, killhag, nigog, pokeloken, pung* and *toboggan, sagamore, togue, touladi*, etc. It was

from the old Micmacs that the whites borrowed the toboggan. Some of these Indians, like the Naskapi and Montagnais (here, however, the environment was less favorable) showed no marked tendency towards agriculture, although in parts of the Micmac area corn, beans and squashes were cultivated. What Gatschet (1897) says of the Passamaquoddies applies, or did apply, to some other tribes. "Fishing is one of their chief industries, but in this they now follow entirely the example set by the white man; they care nothing for agriculture, and their village at Pleasant Point is built upon the rockiest and most unproductive ground that could be selected." The agriculturally-disposed section of the Montagnais at present consists of those of mixed blood. Root-grubbing, peeling of the inner bark of trees, gathering and drying berries, etc., were the commonest provender-occupations, outside of hunting and fishing. The Indians of the Eastern Provinces manufactured considerable bark and woodenware (the French-Canadian word for a large wooden spoon, *micoucenne* is of Micmac origin).

The artistic sense of the Naskapi expresses itself in the ornamentation of their skin clothing, etc. (paint, beadwork), the buckskin garments are decorated by means of paints (native and obtained from the trader) applied with bits of bone or horn of a peculiar shape, quite complicated patterns being sometimes laid on.

The highest limit of art among the Micmacs and closely related tribes is reached in the pictography on birch-bark, in quill and beadwork, basketry, etc. Some of the tribes had also a sort of mnemonic wampum record (strings of shells). These things made easier the acquisition of the Micmac hieroglyphs of Kauder (1866) in which quite an amount of religious literature has been published. Body-painting and personal adornment with shells and feathers were in vogue in earlier days. Though these Indians have been much influenced by the introduction of ideas and materials from the whites, their manufactures of to-day (canoes, vessels of bark of all sorts, baskets, various souvenirs and knicknacks for the tourist and summer-visitor) show that they have not altogether forgotten their ancient arts and industries.

Games and amusements. The Naskapi, according to Turner (1883), are very fond of a sort of game of draughts or checkers which they play day and night,—"some of the men are so expert that they would rank as skilful players in any part of the world." They have also a "cup-and-ball" game. They had a number of dances and festivals. Their only musical instrument is the drum. The children have rattles, dolls and other toys.

The Micmacs and closely related tribes had a sort of dice-game (pre-Columbian) known as *wolteskomkwon* or *woltestakun*, the invention of which is attributed to Glooskap, also another called *wabunamunk*, said to have been invented by the turtle. Bone disks and counting-sticks were in use with these games, which were played with a wooden bowl (or, later, the "dice" were thrown on a blanket), etc. These Indians had also a sort of football game called *tooadijik*, and one lacrosse known as *madijik*. It is said during the four days after weddings games were played, among them the dice-game, football and lacrosse. The Micmacs, etc., had also numerous dances and festivals of a more or less social or entertaining nature. References to games and gambling occur often in the myths and legends. Like

many other Indians, some of the eastern Algonkians have taken readily to the playing cards of the whites.

Social and political organization. The Montagnais and Naskapi seem to have been polygamous in the early days, with very loose sexual morality, ability to maintain them being the limit of the number of wives taken. Turner (1883) says of the Naskapi that "their sexual relation are very loose among themselves, but their immorality is confined to themselves." Polygamy is still common (marriage takes place early), divorce is easy, and, as with the Montagnais, women are decidedly social inferiors. Among the Micmacs and closely related tribes the position of woman seems not to have been very high (although female chiefs are occasionally mentioned). The marriage ceremony among the eastern Algonkians was simple, the feast or festival in connection therewith being the principal thing (they lasted sometimes for a whole week). With some of the Abenaki tribes more detailed marriage ceremonies (influenced by white customs possibly) came into use. The children of the Eastern Algonkians were well-behaved and chastisement was very rare or absent,—so also disputes between children and among youths.

The Naskapi and Montagnais seem to have had special family rights in hunting-grounds (inviolable by others). These rights were vested in the woman, the men acquiring them only by marriage. Descent in the so-called "Abnaki tribes" appears to have been reckoned in the female line. Their animal totems seem to have been numerous (bear, beaver, otter, partridge, etc.).

Among the Naskapi and the Montagnais, and probably also among some of the more southern Eastern Algonkians the custom of killing the old people prevailed and they are said also to have been sometimes eaten by their friends (the hearts of warriors were also devoured to inspire courage).

To-day the chiefs of the Eastern Algonkians are elective (under the influence of the missionaries and the government to some extent). According to Rand, the Micmac council now has in it representatives of ten different tribes. The characteristic council of the old men (among some of the New Brunswick Indians appointed by the chief) was presided over by the *sakem* (our *sachem* and *sagamore* are both loan-words from Micmac, etc.), or chiefs, elected by the people at large, and limited in power by actions of the council. The death of a chief was marked by appropriate ceremonies and likewise the installation of the new one. According to Prince, "the members of one tribe alone could not elect its chief · according to the common laws of the allied nations, he had to be chosen by a 'general wigwam' "—the Micmacs, Penobscots, and Malisects thus helped choose a chief for the Passamaquoddies, and so on. This was in the days of the "confederacy." The largest developed social center of the individual tribes appears to have been the stockaded village of the Micmacs. Gatherings of several of the tribes at fixed places for various purposes were quite common,—islands often served for such meetings. Their summer camps were really often stockaded "villages" with a dance-ground in the center.

Religion, superstition, etc. According to recent authorities, the Montagnais Indians, especially those toward the interior, still continue many of their old heathen practices. They originally had the common Algonkian belief in manitous, spirits or mysterious beings.

both good and evil, but now, somewhat influenced by the teachings of the whites, they have a "bad spirit" and a "good spirit," the latter being so good that he is neither feared nor worshiped, although to him is often attributed the creation of the earth and the making of man, the other a busy being, spending time and labor in seeking to frustrate and undo the good works of the other. Mackenzie (1808) reported the Montagnais and Naskapi as believing in a deity who created the animals and allotted them to the Indians, who invoke him in time of need,—this god was "no longer than their little finger, dressed in white, and called *Kawabapishit* (or the White Spirit)." They held in special regard the bear and the moose, the former being the object of peculiar rites both among the Montagnais and the Naskapi. When the first bear of the season had been killed a great festival was held in honor of Kawabapishit,—in the centre was placed the skin of the animal, "stuffed with hay, and the head and paws decorated with beads, quills and vermillion." The bones were subsequently ceremoniously suspended from a pole. The skulls of bears were placed one above another on poles with pieces of tobacco in the jaws. The heads of some other animals (also of the pike) were sometimes suspended in similar fashion. With the Naskapi, according to Chambers, "the painted skin of a bear forms an essential part of the outfit of their conjurers or medicine men." The animals all have their own spirits, which live on after death, clothed in other material forms, so that the number of the species is not diminished by the Indian slaughter of beasts of the chase. Although the Indians revere the bear so much, he is, nevertheless, the one they most desire to kill (hand-to-hand contests are even reported). From a wish not to offend the spirit of any animal they may kill, the Indians never throw its bones to the dogs, but bury them in the ground, sink them in deep water, or reduce them to ashes in the fire.

The Montagnais and Naskapi have always been noted for their "jugglery," or shamanism, still flourishing among the pagan Indians and not unknown among the Christian at the present day. The medicine-man practices his *ikanze*, or "sorcery," in a special "lodge" of small dimension, in which he invokes the spirits of all sorts, who visit him there,—even Kawabapishit is seen and conversed with. The processes and implements employed include bodily contortions (till exhaustion is induced), drum and rattle, groaning and chanting "magic formulae," etc. Some of these shamans have impressed the whites by their "spiritualistic" performances, prophecies and the like. The prayer of the shaman for a good hunting-season is stated by Mackenzie (in Chambers) thus: "Great master of animals among the clouds, bless us, and let us continue to make as good a hunt as usual."

The Montagnais and Naskápi, since the arrival of the whites and the missionaries, have adopted interment for the disposal of their dead to a large extent,—in earlier days scaffold burial and suspension from trees were in vogue. According to Turner (1883) the Naskapi have no such dread of a corpse as have the Eskimo, but will often rifle the graves of the latter, or even strip the clothing from an individual recently deceased.

Upon the Abenakis, Micmacs and closely related tribes the teachings of the whites with whom they have been so long in contact have exerted considerable influence, particularly in the matter of religious

ideas, even where the Indians have not been converted to Christianity. Of the "Abenakis" (properly Maliseets) of the River St. John, near Fredericton, Mr. Edward Jack (1892) says that they called the "Great Spirit" *Ketsi Niouaskoo*, and the "Evil Spirit" *Matsi Niouaskoo*,—adding that "one of my Indian friends said to me he had read about the latter in his catechism, and that he is the devil." In Micmac *mundoo* (the Algonquian general term for "spirit," mysterious being) now signifies "devil," and several words for "God" have arisen,—*Nizkam*, "Our Father;" *Nesulk*, "Our Maker;" *Ukchesakamou*, "Great Chief." The older Etchemin and Sheshatapoosh vocabularies give for "God" *saisos* and *shayshoursh*, respectively, which are evidently corruptions of the *Jésus* of the French missionaries. The so-called "evil spirit" is said to have been the one chiefly "worshiped" by the Indians of Acadia. The Mjemacs and related tribes were profound believers in the powers of the "wizard" or "sorcerer," of whom the earlier chroniclers had so much to say. Tales of his power of transformation, ability to "curse" and cast spells, sink into the earth, communicate at a distance, fly through the air, remain under water, etc., abound. These "medicine men" were formidable opponents of the Christian priests, as the tale recorded by Prince and Leland, of "the wizard and the Christian priest" indicates. Rand, in 1850, said "the present generation appears to be as firmly rooted in the belief of supernatural powers exercised by men as ever their fathers were," and Prince, in 1902, notes that this belief still survives among these Indians to a large extent, "though subordinate of course to the Catholic doctrine, which nearly all of them (Passamoquoddies) profess." The Abenakis of St. Francis, Que., are very closely related to the Penobscot Indians of Maine, and the older religious beliefs and superstitions, now abandoned, correspond to those of that people.

In their adoption of Christianity, the Indians of the Eastern Provinces have practically all accepted Catholicism, very few Protestants being found among them.

Mythology and folklore. The mythology and folklore of the Montagnais and Naskapi Indians, like their language, are closely related to that of the Cree and cognate tribes of the Hudson's Bay region. Turner (1883) reports that the Naskapi "older men have a great stock of stories, and many of the women are noted for their ability in entertaining the children, who sit, with staring eyes and open mouth, in the arms of their parents or elders." Among the creatures figuring in their animal-stories are the wolverine (the embodiment of cunning and mischief), the reindeer, the squirrel, the otter, the wolf, the bear, the rabbit, the frog, the muskrat, the beaver, the martin, etc. In one legend the beaver and the muskrat are represented as creating the white man, the Indian, the Eskimo, the Iroquois and the negro,—the muskrat was the mother, the wolverine the father of all. After these children grew up they separated and scattered over the country as they are found now. The prominence of "starvation" in the stories of the Montagnais and Naskapi is accompanied by the persistence among them of anthropohagous practices, in most cases "hunger-cannibalism." Belief in the *witiku* (the *wendigo* of western Algonkians), or man-eating demon is strong with the heathen, and in many cases also, with the Christian Indians. Many instances are cited where Indians are said to have gone mad

suddenly, and turned into *witikus*, with an insatiable desire for human flesh. One can see in these beliefs a reflection of the environment of these Indians, who time and again must have been subject to famine and liable to extinction for lack of food, particularly when the game animals migrated to long distances from their usual habitat, or were themselves stricken by some disease or other. Lunatics and epileptics, people who suddenly lose their reason for a time, are still regarded by some of the Indians of the interior as wendigos, and are killed by stealth. Chambers informs us that these man-eating monsters, called by the Naskapi *atshem*, are believed to appear in the forms of sorcerers, man-eating moose, or as creatures rivaling the classic Cyclops and the Homeric Polyphemus. *Windigo* river has received its name from the fact that the Indians avoid it, believing that it is the "hunting ground" of a monster of this sort. The most notable figure in the mythology and folklore of the Micmacs, and related tribes is *Glooskap* (in Passamaqoddy *Kulóskap*, Penobscot *Klûskûbé*), corresponding to the Ojibwa *Manabush*, or *Naniboju*, the Cree *Wisaketchak*, etc., and like these, appearing sometimes in the light of a trickster, deceiver, or even buffoon. His name really signifies "the liar," some say because he promised to return, and has never done; but others, with Prince, hold that he is so termed, "not because he deceives or injures man, but because he is clever enough to lead his enemies astray, the highest possible virtue to the early American mind." The "epic of Glooskap," as it has been styled, tells how he created man and became his friend, did many great things for him, made and named the animals (afterwards conquering and transforming some of them) victoriously fought and destroyed giants, sorcerers, monsters of all kinds ("cleaned up the world"), found the summer, etc., and afterward, angered at the ways of men and animals, left the world, sailing over sea in his canoe, promising to return some day. The departure of the culture-hero caused the inhabitants of the world to lose much that was common to them in habits, languages, ideas, and resulted in the separation of man from the animals and the differences now existing in the habits of the beasts, birds, fishes, etc. Another prominent figure in Micmac mythology is *Lox* (Abenaki *Alaskan*), the wolverine, a great mischief-maker, and deceiver. Others of importance are the rabbit (who is often very cunning), the serpent (who cohabits with women), the partridge (a "great hero"), the martin (servant of Glooskap), the bear, the badger, the woodchuck, the whale, the beaver, the tortoise, the loon (magician and friend and messenger of Glooskap), the owl (counsellor and friend of Glooskap), the flying-squirrel, the fish-hawk, etc. Figures of a somewhat different sort are the thunder-bird; *Wuchowsen*, the "wind-bird;" the giant-bird, *Kulloo; Kewok*, formless and icy-hearted; the *Chenoo*, or northern giant; *Kulpujot*, a shameless being, whose turning over (his name signifies "rolled over with handspikes") twice a year produces flowers. Many of the characters in the legends of the Micmac and related tribes are of a very curious nature. There are many stories of dwarfs and giants. In some cases a close approach is made to the European folk-tale. As may be seen from the examples in Leland and Prince, as well as in the collection of Rand, witchcraft lore is abundant. The story of how the baby conquered Gluskap deserves a place in the world's best literature of childhood. "Fairies," tree-spirits, water-spirits and monsters, etc., are the subject of many stories.

In some of the tales cannibalism (especially by wizards) is referred to, and even cannibalistic feasts are mentioned, but there is no particular reason to believe that anthropophagy was ever common among them,—hunger and ritual account probably for most cases occurring.

Language. The speech of the Montagnais and Naskapi (and of the practically extinct Skoffie) is closely related to that of the Crees, with which branch of the Algonquian stock it belongs. Turner (1883) attributes the differences between these tribes, in the matter of language, "wholly to environment." The oldest specimen we possess of an Algonkian text is one of the "Montagnards," as they were known to Champlain, who met them at their great trading-place (Tadousac) at the mouth of the Saguenay. The changes in the language since his day are not nearly so great as some writers have imagined (this is shown by reference to the vocabularies dating from 1808, published by the Massachusetts Historical Society). Chambers (1896) describes the Montagnais as "an exceedingly expressive language, and very rich in varieties of inflection." The verbal forms, like those of some other Algonkian languages are exhaustive. The dialect of these Montagnais Indians once extended, apparently, high up the St. Lawrence (perhaps as far as Montreal), and Father Le Jeune, in 1636, states that "whoever should know perfectly the language of the Quebec Indians would, I think, be understood by all the nations from Newfoundland to the Hurons,"—this is probably somewhat exaggerated. Father Le Jeune reported likewise that between the language of the Montagnards and that of the Nipissiriniens (the so-called "true Algonquins") "there is no greater difference than between dialects spoken in different provinces of France." The Montagnais is, with certain varieties of Cree, the only Algonkian language in which the letter *r* is in normal and extensive use.

The language of the Canadian Abenakis of St. Francis has been recently investigated by Professor J. Dyneley Prince, who finds it very closely akin to that of the Penobscots of Maine, indeed, "we have to deal with a dialectical differentiation which must have taken place within a period of 222 years, *i.e.*, from 1679 to 1901, during which time practically no communication has taken place between the Maine Indians and their Canadian cousins, except the visits of a few wandering hunters." The main differences are of a phonetic nature, the Penobscot being more archaic. Penobscot has also preserved the obviative *l*, and kept intact to a greater extent the "original pure polysynthesis." The vocabularies have not deviated widely. The Abenaki, however, has retained the ancient nasal sound, which seems to have practically disappeared in Penobscot. The Abenaki has also changed the system of intonation, which the Penobscot, and the Passamaquoddy, have retained with greater purity. The voice *timbre* of the Abenakis is also lower. Abenaki contact with the French may account for some of these changes. Abenaki, like Penobscot (and Passamaquoddy) lacks "the so-called sur-obviative or third person of Cree and Ojibwa." The following sentences from Prince will indicate how close is the relationship between Abenaki, Penobscot and Passamaquoddy:

1. *English*: My brother told me long ago there quarreled certain wizards.

2. *Abenaki*: Nijia ndonhdokaokw nauwat kizgat nozigad'n awodowak m'deaulinwak.

3. *Penobscot*: Nijia ndonhdonhkeukw nauwat kizgong'sigad'n awodohid'wak mdeaulin'wak.

4. *Passamaquoddy*: Nziwes ntulag'nod'mak piche kiskakesigd'n madndoltitit mteaulinwuk.

The Micmac language, as compared with such a standard Algonkian tongue as *e.g.*, the Cree of Ojibwa, shows marked divergence in vocabulary and certain grammatic and phonetic peculiarities, which suggest (the same may be said of the Blackfoot at the other extreme of the Algonkian area) a disturbance due to the former presence, perhaps, of some non-Algonkian form of speech in the Micmac country. Concerning the relation of the Micmac to those of the cognate tribes Professor Prince says (1902): "Their language differs so greatly from the dialects of the Penobscots, Abenakis, and Passamaquoddies that the members of these clans always use English or French when communicating with their Micmac neighbors, while an intelligent Passamaquoddy can without difficulty understand a Penobscot or Abenaki, if the dialect is pronounced slowly." The Abenaki (and Penobscot) the Maliseet (Etchemin, Passamaquoddy), and the Micmac—with closely related dialects now or formerly existing in what was called Acadia and part of the region to the west and north—constitute a branch of the Algonkian stock; and also a confederacy, in former times, said to have included also the Delawares or Lenape. To this confederacy the name *Wabanaki (Abenaki)*, now retained as a tribal appellation by the Canadian Abenakis, was applied as a generic term, though there is some dispute as to its exact significance. Gatschet in 1897, applies the name *Abnaki* to the Penobscots of Oldtown, Me., the St. Francis Indians of Quebec, the Passamaquoddies of Maine, the Milicites (or Etchemins) of the St. John's River, N.B., and the Micmacs of Nova Scotia and eastern New Brunswick, etc. These are "the surviving Abnaki peoples."

As a specimen of the Micmac language the following translation of the first verses of the Gospel of John may serve:

1. Tan umskwes poktumkeaak Kulooswokun ahkup, ak Kulooskwokun tegwaooobunul Nikskamul, ak Kulooswookun Niskamawip.

2. Na Negun tan umskwes poktumkeaak, tegwaooobunul Niskamul.

3. 'Msit cogooaal weje-kesedasiksubunigul Negun ootenink, ak tan cogooa Negum moo kesedooksup, na moo kesedasenooksup.

4. Memajoookun ootenink ahkup, ak na memajooenook oowosogwegumooowna.

5. Ak wosogwek wosadek bogunitpaak iktook ak bogunitpaak moo weswadoogoop.

Within the Micmac area there appear to have some slight dialectic variations at least; but, according to Rand, the diversity includes only the use and pronunciation of a few words. The Micmacs of Cape Breton pride themselves on the purity of their language at the expense of the Micmacs of Nova Scotia, and vice-versa; so too those of Prince Edward's Island and Mirimichi.

For further information concerning the Indians of the eastern Province of Canada reference may be had to the works cited under

the various tribal names in Pilling's "Bibliography of the Algonquian Languages" (1891) and to the following others: Montagnais, Chambers, "The Ounaniche" (1896), and the list of authorities therein. Naskapi: Turner, Rep. Bur. Ethnol., 1889-90. Micmac, etc.: "Leland, Algonquian Legends of New England" (1885); Leland and Prince, "Kulóskap, the Master" (1902); Prince, various articles in the proceedings of the American Philosophical Society (1897, 1900), American Journal of Philology (1888, 1901), American Anthropologist (1902), etc.; Hagar, various articles in American Anthropologist (1895), and Journal of American Folklore (1896); Montague Chamberlain, "The Abenaki Indians" (1895); and Jack, "The Abenaquis of the St. John's River," in Transactions of the Canadian Institute, Toronto (1891-92), and other writings of the last two authorities.

4. CENTRAL ALGONKIN.

By William Jones.

Introduction.

This paper is nothing more than a general sketch. It deals in brief outline with some of the larger aspects that made up the social, material, and religious life of the Ojibwas. The basis of the paper throughout rests on the results obtained during a period of about ten months of work in the field. Some of the statements are based on observation, some on the verbal information given by the Ojibwas themselves, and some on the references told of in myth and tradition. The references of myth and tradition are valuable in that they deal with events and conditions of an ancient life; with former customs which may survive only in a small remote group of silent hunters; and with the explanation of the work of nature and the origin of things, thus betraying the character of the old philosophy of the Ojibwas. It seems best in so short a description to avoid as far as possible the use of Ojibwa terms.

Society.

The social life of the Ojibwas was in many ways the same as that which prevailed among other Algonkin tribes who lived in the territory southward. There was a large number of clans, and some of them seemed to have been grouped under a feeble form of phratry.

Marriage was between a man and woman of different clans, and was usually attended with an exchange of presents between the families of the bride and groom. It was usual for a man to marry the widow of his brother, and a widower might marry the sister of his dead wife. Children followed the clan of the father. There is reason to believe that the giving of a name once had an intimate relation with the clan. But at present there is little or no connection between the name and the clan. Now-a-days a child obtains its name from an old man or an aged woman who has been chosen by the parents to act the role of a sponsor. And the name given the child generally though not always bears some reference to the manitou especially revered by the sponsor. For instance, had the man in his youth and during a fast dreamed of the s and had thereby experienced an

emotional thrill which conveyed a deep sense of mystery, and if afterwards he had had occasion to believe that the sky was the source of his life and the cause of bountiful gifts, then was it likely that the name he gave would have some particular connection with the sky; for it would be his aim to place the child under the same power which he had found so benevolent to him. Such, for example, is the origin of a name like Mica'kigijik (Misha'kigijik), which means *Flood-of-Light-pouring-from-the-Sky*."

Government.

The political organization of the Ojibwas was loose, even at the time of the first coming of the French. There was a general council with vague and limited powers, and it was possible for every man, if he liked, to become a member of the council. In this body, which was controlled by social customs and religious practices, was vested the government such as it was. It was by the council supported by public assent that a chief was selected. His power was even vaguer than that of the council, and he was less able to work his will against an existing custom. Some chiefs were able men politically and had also been successful leaders of war parties. It was common, on the death of the chief, to hand the office over to his son, particularly if the son had displayed courage, was of pleasing personality, and had given evidence of political capacity. Some chiefs have had much homage paid them by their people.

Such a council and such a chief were limited to a group. By a group is meant a body of Ojibwa that held sway over a given district and who went under a common name; as for example, Bawi'tigowiniwag, *men* or *people of the rapids* was the name of the Ojibwas at Sault Ste. Marie; they were called Saulteurs by the French. There was neither a general council nor a head chief for the whole people. Some clans like the Crane and Bullhead have sometimes been regarded by their members as the leading clans of the tribe; and chiefs of the Crane clan, more especially those at the Sault, have considered themselves the head chiefs of all the Ojibwas. But it is doubtful if either assumption was ever recognized by the other groups of the tribe.

The question of justice was bound up with the social customs that regulated the clan. The individual was lost in the clan, and a man could not avenge a personal injury without running counter to the bond that linked individuals together in a clan. An injury to an individual was an injury to the clan, and a satisfaction given for the injury was a satisfaction rather to the clan than to the individual.

Property.

Property rights were vaguely defined. There were some things which could come under one's sole possession. Such were: personal belongings, like wearing apparel and objects of decoration; weapons, and the various contrivances used in the quest of food; snow shoes, canoes, toboggan and dogs, all of which were both a means of travel and of getting food; meat of every kind of game killed by the hunter, and maple sugar, cereals, and all foods obtained and prepared by women; a cache where any of these things were stored, and the pack containing them which had been left on a portage; and finally the

lodge where one lived. Every one had a common right to use any part of the land not already in use by another; the ultimate title to the land rested in the tribal group. An exclusive right to the use of the land was recognized; for example, one could hold without interference, and for an indefinite period the spot on which the lodge stood, and the plot of ground under cultivation. An exclusive right to the use of a portion of a rice bed was allowed, but it was temporary. A woman might select a patch of rice before it was time to harvest, and bind the tops of the stalks standing near together. The patch might be hers until she had harvested the rice, and then her exclusive right to its use came to an end. For the time being, the patch of rice stood in much the same relation as the place of a trap or a net rather than in that of a plot of ground under cultivation.

Possession had an intimate connection with occupation. For instance, the implements used in the chase, the canoe, the toboggan, and dogs were generally the peculiar property of the man; and on the other hand, the lodge with its house-hold effects, maple sugar, cereals, and skins belonged to the woman. In the event of separation of man from his wife, the child went with the mother.

Dwellings.

There were two characteristic forms of the Ojibwa dwelling, the bark house and oval lodge. The inside structure of the bark house was a frame of upright posts set in the ground; a post generally forked at the top, stood at each corner, and a higher post stood at the centre of each end; in between the posts stood poles; a large pole connected the two end posts and formed the ridge while smaller poles joined one corner post with another; smaller poles served for the rafters. All the poles, big and small, were held in place by cords made from the fibre of the bass and linn, and from the root of the spruce; sometimes use was made of pegs. The bark covering the frame was from elm or cedar; it was stripped in sheets, and was laid on horizontally, and overlapped from the bottom up; the bark was held in place by cord and by another frame on the outside. There were two forms of the roof, oval and gabled; the gabled roof was more common. There was usually but a single door, and it opened at one of the ends, and out in the direction away from the prevailing storms; a skin or a blanket hung like a flap over the entrance; the door was boarded up with bark when the occupants went away to be gone for a long time. Near the centre and towards the door was the fire; the smoke lifted through an opening at the top. The space between the fire and the wall was the living place; sometimes it was covered with mats spread on a bed of balsam boughs; and again a raised platform ran around the two sides and the end. The size of the houses varied with the number of people dwelling in them; they were probably never so large as the communal houses found among other Algonkin tribes who dwelt southward.

The oval lodge was built on a frame of two sets of poles. The poles of one set were placed upright in the ground; they generally went in pairs and stood at opposite sides of the frame; their tops were bent over to meet and when bound together formed an arch; the arches forward and rear were lower than those in the centre; additional poles arched toward the centre from the front and rear. The

other set of poles was laid horizontal to the arches and helped to brace the frame; the fastening of pole to pole was done with native cord. The covering of the oval lodge varied. The Ojibwas of the south made use of flag-reed mats, and those of the north used sheets of birch bark stitched end on end. Both kinds of covering were used in the districts where the materials of both could be had. The cover of reed or bark overlapped and was held down by cord and leaning poles. Strips of elm and cedar bark often formed the covering of the wall; they generally stood on end and overlapped at the sides; and they usually required an external set of arches to hold them in place. The fire-place, the arrangement of the space between the fire and the wall, and the appearance of the interior were much the same as in the bark house.

The bark house was characteristic of the village and of a settled abode; it was the home in the milder seasons of the year. The oval lodge might be seen at all times in the village, but its special use was as a home in cold weather.

Other forms of the Ojibwa dwelling were the conical lodge and a long lean-to with gable roof. The conical lodge was like that of the plains, and was built on a frame of upright poles meeting at the top. The architecture of the lean-to resembled that of the bark house; but the lean-to was low, long, and generally with a door at each end. The covering of both kinds of dwelling was usually of birchbark, but where flag-reed was obtained, mats were used with the sheets of birch bark. Such dwellings were more common with the Ojibwas of the north shore of Lake Superior.

Food.

The Ojibwas have always been a typical people of the woods. Those of the north shore of Lake Superior had few settlements, for they led a hunting life. One or more families disappeared in the bush, and did not emerge except to dispose of furs or to attend a general gathering. Many of these wandering fragments penetrated the district of Hudson's Bay and came into lively contact with the Crees. Some got round to the farther shores of the Lake and strayed off towards the Lake-of-the-Woods, and the country west and north. The voyageurs followed in their wake, and the trading posts they established often formed the nucleus of a community of these wandering hunters. The Fort William Band was one of the largest of the offshoots from the Ojibwas of the Sault.

The Ojibaws south of the Straits of Mackinaw, round about the Sault, and off the south shore of Lake Superior led part of the time a sort of sedentary life. They had villages, and cultivated the ground for maize, pumpkins, and beans. Most of them were probably acquainted with wild rice.

At the same time much of the food and the greater part of the clothing of all were obtained by hunting and fishing. Among the animals that made up the source of most of their clothing and a good deal of their food were the moose, elk, deer, bear, beaver, muskrat and rabbit. Some of the Ojibwas hunted the buffalo and caribou. The principal fish for food were whitefish, trout, pike, pickerel, and sturgeon; and of birds preference was given the goose, raven-duck, mallard, wood-duck, and fall-duck. The fall-duck was especially desired because late in the fall a great deal of grease was obtained

from it. Great quantities of sugar were obtained from maple and birch in the season when the sap was running and stored away in birch bark boxes. Strawberries, raspberries, and blackberries were a food only so long as the season lasted, but huckleberries and blueberries could be dried in the sun and preserved for future use.

Modes of Killing Game.

Game was obtained in a variety of ways. Bear, beaver, otter, mink, muskrat, and the like were caught by a wooden trap sprung by trigger and catch in combination with a weight. Moose, caribou, elk, and deer were slain with the bow and arrow; they could be overtaken by canoe when swimming, and killed by cutting the throat; a woman could kill a moose or a deer by punching an opening between the ribs with a paddle; the hole let in the water which caused the animal to weaken and drown. Buffaloes were driven into enclosures and shot to death with the bow and arrow. Rabbits and partridges were caught with the snare. Fish were caught part of the time in weirs and all the year with hook, spear, and net; fish were also shot with the arrow. Ducks were often taken in the same nets set for fish; in the rice fields late in the fall they were easily approached by canoe and slain in great numbers with the bow and arrow or simply with the paddle used as a club; they were then heavy with fat and were slow to rise. Eagles were clubbed; bait was set for them in a thicket where it was made hard for the bird to escape before the arrival of the hunter.

Cooking.

Most of the food was cooked. Meat was boiled, or roasted. Birds were boiled, or roasted, or baked in a bed of ashes and live coals; a common way of baking was to enclose the bird in a ball of clay, and then lay the ball in the bed of hot ashes. Gull eggs were boiled, or baked in ashes. Cereals were boiled, or roasted, or parched; the parching was done in a vessel, or near or in a bed of hot coals; corn might be roasted on the ear.

Tradition tells that boiling was done in earthen, wooden, and bark vessels; that the water was heated by the fire beneath or by hot stones put into the vessel; and that the bark vessel was generally of birch and would not flame if put over the fire with the water already in and if the fire was a bed of live coals.

It was considered best not to let the food become well or overdone; for it was believed that food lost strength in the cooking, and that the longer it cooked the less nourishing it became.

A favorite kind of food for a long journey was made from meat that had been roasted on a frame over a slow fire, and finished drying in the sun or in the smoke of the fire of the lodge. It was more to be relished if mixed with tallow, especially with that of a bear; it was even more choice if maple sugar and pounded rice or pounded corn were added to the mixture.

Fire.

The Ojibwas knew of two methods of making fire. One way was to spin the end of a dry stick, usually of cedar, in the socket of a dry block of the same wood; the stick was twirled by means of a bow, the cord of which went once round the stick; the top of the stick fitted into

the socket of another block; the top block was gripped with one hand and against the back of the hand was braced the chest, while with the other hand the bow was sawed parallel to the blocks, causing the stick to twirl; the live embers dropped into a lower trough where they ignited with the punk. The other method of making fire, and the one more common, was to strike one piece of flint against another; the tinder was preferably the punk of birch.

Clothing.

Men and women wore much the same style of moccasin. The sole and upper of the ancient moccasin was of one piece. The seam at the back and down in front was gathered, and from this fact an attempt has been made to derive the meaning of the term Ojibwa. If the definition be true, the modern Ojibwa are not conscious of it; and it is only the older heads who can see a connection, but usually not till it is pointed out to them. The old moccasin had a top which fell down at the side and parted at the heel and instep; each flap was appropriately called an ear, and was usually decorated with porcupine quills, and later with beads; the "ear" was longer pointed in front. A thong through the top of the instep passed under the "ears" and went round the ankle.

In the instep of the modern moccasin is a tongue which runs half way down the foot, the lower part of which is generally decorated with beads. The top of the moccasin is usually double. One part of the top is like the "ears" of the old moccasin, and almost always is decorated with beads; and the other part is a gaiter which may extend half way up the knee, and is wrapped by a thong that passes through at the instep.

Leggins were worn by men and women. Those of men reached nearly up to the hip. They hung by a thong which passed from the top of the outside and went over the hip to the belt. The leggins of women reached barely up to the knee. They were held up by a garter at the top.

Men wore loose shirts. The sleeves of some extended as far as the wrist. There were three styles of breechclout: a cover between the legs with flap overhanging before and behind; a cover with no flap overhanging either in front or back; and a flap hanging down in front, but with no cover between the legs.

Women wore two general styles of dress. One was a loose single garment that opened at the neck and arms, and reached below the knees; it was worn with a belt. The other was a skirt with a short loose jacket. Often both styles were combined and multiplied according to the severity of the weather.

The women did their hair up at the back into a stiff slender knot. They covered it with a wrap which in turn was coiled tight with ribbon. The knot was round and often a foot long. From near the bottom hung loose ends of the ribbon which nearly touched the heels. The ribbon was of various materials; the most beautiful was of woven beadwork.

Robes for both men and women were of skins with the hair left on. By far the greater part of the clothing was made from the dressed skins of moose, deer, elk and caribou. To dress a skin it was first soaked in water alone, or in a preparation of brain boiled in water; it

was then stretched on a rectangular frame of four poles fastened at the corners with thongs. The frame was leaned against a solid support, and the hair was then scraped off by means of a short, round, thick-handled tool with a short blade lashed to the bent neck of the handle; it was worked like a hoe. The skins of small animals were frequently stretched over the smoothed surface near the end of a log. To give color the skin was smoked in a smudge, that of sumache was accounted among the best.

Weaving.

The heddle loom was used in the making of belts and garters. The loom was carved from a solid piece of wood, or made from birch bark; the edge of the bark was braced between splints, usually of pine, to keep it from coiling. The shuttle was the finger or hand. In beaded work the needle became the shuttle.

A bag was woven with cord made from the inner bark of bass and cedar, and from the fibre of wild hemp. The work was done on a frame of two sticks set upright in the ground; the warp hung down and the woof moved from left to right around the sticks. Excellent bags with beautiful designs in geometric figures were made.

There were two general types of mat, one made of flag reed and another of the inner bark of cedar. Both kinds were made in the same way; they were woven from an upright frame of two poles with an horizontal pole connecting them at the top. The warp hung down from the pole, and the woof was worked from the top, moving from left to right. The mats were often colored with vegetable dye.

Basket work of a simple character was done by the Ojibwas of the south. The weave was generally of the plain checker work with the warp and woof of the same dimension. Common materials were the splints of ash and the osiers of willow and dogwood. The making of baskets was probably never very extensive among the Ojibwas. It was much easier and more convenient to fashion pails, boxes, and the larger vesels from the bark of the birch. And for the reason that it was possible to make a durable vessel from birch bark, the carving of wooden bowls was perhaps not on so large a scale as among the more southern Algonkins. But it was necessary to carve spoons, and this was done from various kinds of wood.

Transportation.

Transportation on land was mainly by pack carried on the back. The tumpline of the skin of a moose or caribou passed over the arms and across the chest when the burden was light, but when it was heavy the line went over the forehead. The contents of a pack were in a bag, bundle, or in a wooden carrying frame, and the pack rested on the small of the back. The carrier rose with the pack on hands and knees.

The toboggan made transportation easier when the snow was on the ground and the lakes and rivers were frozen over. There was a saving of labor and time when dogs were used with the toboggan.

The snowshoe made travelling easier in winter. There were two general styles of snowshoe: one was long with the end transverse, or sometimes pointed and often raised; another was short and rounded.

and was called bearfoot because of the track it left in the snow. Both kinds were usually netted with sinew and buckskin. Sometimes the "bearfoot" snowshoe was netted with bark.

Transportation by water was done with birch bark canoe and paddle. A canoe sixteen feet long was regarded a big canoe. It was built on a cedar frame of long horizontal slats between the ribs and birch bark. The ribs were of a single piece, and went up under the gunwale. The bark was stitched with spruce root and gummed with pitch. It was usual for a canoe to have five thwarts: one near each end, two towards the middle, and one at the centre. The gunwale was wrapped tight with spruce root.

The Ojibwas south of the Straits of Mackinaw used a dugout canoe made from the single trunk of a tree.

Games.

The Ojibwas found amusement in a great variety of games. The men played a rough, strenuous game of ball which has since been borrowed by the white man and developed into the sport now called lacrosse. The ball was a wrapping of cord, and was covered with buckskin gathered at one point. Frequently the ball was wooden and had a hole at opposite sides to make it whistle when going through the air. The ball was picked up from the ground, caught on the fly, carried on the run, and thrown by the use of a stick with a small net pocket at the end. The handle and the pear-shaped frame of the pocket were of the same piece. The pocket was of buckskin netting. The game was played between two opposing sides, and a score was made when the ball passed through a wicker goal from the field. There were two goals, one at each opposite end of the field. A less frequent kind of goal was a pole standing in the centre of the field. To score it was necessary to hit the pole with the ball.

A noisy variation of the game was played by women. In place of the stick with a net pocket was a plain, straight stick; and instead of the ball was a small, double sand-bag of buckskin.

There were several forms of the throwing stick, and the object sought for in them all was distance. Bets were won and lost on a throw, not only among the players, but among the people who followed looking on.

And then there were many games where the element of chance prevailed, such as in the various forms of the moccasin game, and in the different ways of playing with dice.

Just as everywhere children played they were big. The girls fondled dolls and copied the activities of their mothers and big sisters; and the boys acted in play the parts of men and early fell into the ways they were to pursue in later life.

Weapons.

The Ojibwas were hard fighters. They beat back the raids of the Iroquois on the east and the Foxes on the south, and drove the Sioux before them. The plain bow and feathered arrow was one of their most effective weapons. Hickory and ash were common materials for the bow, and a wrist guard of buckskin kept the rawhide cord from cutting. Arrows were generally of dogwood, but they were also

made from other kinds of wood. For the right-handed, the arrow rested on top of the left hand and on the left side of the bow; for the left-handed the arrow was on the other side of the bow. The release was generally from the thumb and forefinger, and the cord was pulled back by the next two fingers.

The smashing weapon at close quarters was a war club with a knob drooping over at the end. Frequently a blade with two edges projected from the knob, turning the weapon into a kind of pickax. The flat "rabbit hind leg" club was mainly a ceremonial object.

Picture Writing.

The Ojibwas made use of rude pictures drawn on birch bark to express thought. The pictures in most instances were realistic representations, and they were sometimes symbols of an object, an idea or a group of ideas. Their essential function was to help the memory, for by a single sign one was able to recall the words and the air of one or more songs. And by arranging the signs in a consecutive order one could recall the incidents of a hunt, or remember the episodes of a myth. They also served as a means of intercommunication, but this was a less frequent function. It was possible only when the signs conveyed the same meaning for more than one individual, and this was not always the case. The pictures were regarded with a sincere feeling of reverence, and it was believed that they were endued with magic power. Hence it was common to use them as charms to ward off danger and disease.

Religion.

There was a firm belief in a cosmic mystery present throughout all nature; it was called manitou. It was natural to identify the manitou with both animate and inanimate objects, and the impulse was strong to enter into personal relation with the mystic power. It was easy for an Ojibwa to associate the manitou with all forms of transcendent agencies, some of which assumed definite characters and played the rôle of deities.

There was one personification of the cosmic mystery, it was into an animate being called the Great Manitou. There was no tangible description of the divinity, but it was gathered from implied statement that the being was human and had the mental and physical attributes of a masculine character. It is possible that the influence of Christian missionaries may have had a good deal to do with the creation of the personification; for in the Ojibwa mind there is no difference between the Great Manitou and the God of the Christian missionaries; furthermore, it is common to associate ethical ideas with the personification. In the records of the old Ojibwa life ethical ideas were not necessarily connected with the cosmic mystery. For instance, a man married a woman from another clan not because he felt a conscious desire to act in accord with the manitou, but because it was the custom; the test of his morality was the care he took to conform with the custom.

The mythology of the Ojibwas is rich in characters, and a list of the deities is by no means short; a few of them may be mentioned:

The great character of Ojibwa mythology was Nänabuco (Nänabushuo), who was of miraculous birth. While yet a youth he became

the creator of the world and everything it contained. He became the author of all the great institutions in Ojibwa society and was the founder of the leading ceremonies. Another divinity was the lord of the spirit world. Among some Ojibwa he was an elder brother of Nänabuco; among others he was a nephew that had been a wolf before his death at the hands of the water manitous. The giant Macos (Mashos) was lord of the Great Lakes. He had only to tap his canoe and in an instant he was half way across the water of Lake Superior, which the Ojibwas of the north shore are fond of calling the Ojibwa sea. Another giant, Windigo by name, was a malicious monster who found delight in roaming about in search of men to devour them. Four great deities dwelt at the four ends of the earth, and each had his own peculiar power and office.

There were other transcendent agencies ranging all the way from definite personifications to forces that shade off into inarticulate spirits. In the less definable group are classed the forces of the material and spiritual worlds, whether animate or inanimate, whether human or non-human. But whether or not the forces expressed, or lack articulate description, they are all alike in that they were endowed with the common mystic property; they are unlike in so far as they possessed the property in varying degrees, and it is this difference of possession that make them manitous of a high or low degree.

Religious Practices.

There were four kinds of practices which wrought a deep influence upon Ojibwa life by reason of their intimate association with the religious beliefs of the people. The practices were that of healing the sick, the *wâbanôwiwin*, the *tcisa'kiwin*, and the *midewiwin*.

In the first office one sought to heal the sick by means of medicine and by the exercise of magic. The medicine consisted mainly of roots and herbs and was often administered after the chanting of sacred songs. In another way the healer sought to accomplish his purpose by the use of a rattle and with some short, round, slender bones. He put the bones one by one into his mouth, and, so it is said, swallowed them to find the cause of the disease. He worked the rattle about over the patient, and after a time spat out the bones into the palm of his hand. A great deal of faith was placed in the successful healer. It was believed that the disease was due to the malignant effect of some mysterious force, and that it was possible to get rid of the effect of the force by the use of magic. The herbs, roots, bones, rattle and songs were held to be endued with the mystery, and so were the means of driving out the cause of the disease.

In the *wâbanôwiwin* a person showed how deft he was in sleight of hand performances, how good he was at handling fire without being burned, and how skilful he was in all sorts of tricks. It is said that this same person dealt in witchcraft and was therefore to be feared. Songs went with the *wâbanôwiwin*, and they were sung to the beat of the hand-drum. The singing was done at night, the time when the strange performances took place. Anyone could go into the lodge to hear and to see after paying a small fee like a handful of tobacco.

A person who practiced the *tcisa'kiwin* claimed to have the power of prophecy. He foretold if the sick would recover; if a journey would be prosperous; if a raid would end with successful issue; where

game could be found in abundance. He told whether distant friends or relatives were yet living; what was going on among a far-off people; if a witch was in the community or far away. This oracular speech was given from a cylindrical lodge open at the top. The sway of the lodge to and fro as if beaten by violent wind was taken as a propitious sign by the faithful who stood outside. The mingling of strange voices heard above the lodge was regarded as the utterances of manitous. It is said that the great turtle was the leading manitou of this office. Nobody had so much influence as one who did the *tcisakiwin*.

There were two general forms of the *midêwiwin*. One form was individual and without public ceremony and was concerned with divination and with the use of magic applied particularly to the getting of food. The other form was social, with a society of men and women who were bound together by vows of secrecy. It had formal ceremonies that were conducted with an elaborate ritual. Entrance into the society was by initiation after a period of instruction in the knowledge of mysteries. The payment of a fee went with the initiation; it was in the form of tobacco, food, and clothing; and the size of the fee depended much upon the wealth and social standing of the individual and upon his personal relationship with the tutor. The social side of the *midêwiwin* was by no means free from the practice of magic, but its special function was concerned with life after death. It was believed that the soul followed a path to go to the spirit world, and that the path was beset with dangers to oppose the passage of the soul; but that it was possible to overcome the obstacles by the use of formulas which could be learned only in the *midêwiwin*.

It was believed that man went through life with more than one personal soul, and that one of them remained with him after death. It was thought that every living creature possessed a soul, and that to get control of the soul made it possible to get control of the possessor of the soul. It was on such a theory that the Ojibwas hunted for game.

5. THE IROQUOIS.

By David Boyle.

Although much has been *written* regarding the origin of the Iroquois as a people, we *know* absolutely nothing. It has been claimed that they came from west of the Mississippi; from the southwest—perhaps Kentucky or Tennessee—is meant; and it is asserted that their ancient seat was on the north side of the St. Lawrence, somewhere below or north of the city of Quebec. It will be observed that in each case, the crossing of a large river is involved, but it is tolerably safe to say that we shall never be absolutely certain what river that was. When there is no literature, tradition is utterly unreliable concerning matters of this kind, and often in others.*

*"Our Indians of the Northern Department have no chronicles, no annals, no written monuments, nor record of any kind whatever. They do not know even their own or their children's ages, or did not, until our arrival amongst them." Sketch of the Northwest of America by Mgr. Tache, p. 119, 1868.

The Indians referred to here as being of the "Northern Department," were those of what we now call our North West, and it is quite safe to regard the statement as of general application.

tion may, and often does, contain statements based on fact, but the fact is generally unascertainable, unless we have similar information from other quarters with which to make comparisons. In process of time the statements become distorted, and there is seldom any method, or any means by which it is possible to straighten them. The Indians themselves, in such a case as the special one under discussion, can do nothing to assist. Philology has failed to afford any satisfactory clue, notwithstanding a recent claim that some kinship has been discovered between the language of the Iroquois and that of that Dakota.* This, if substantiated, would lend color to the western origin theory, unless it could be shown that the Dakotas had left the main stock in the east, but the weight of opinion is in favor of the theory that the Iroquois came south-west from the north shore of the lower St. Lawrence.† The principal authority for the story of the Lawrencean origin is David Cusick, a Tuscarora, of whom Horatio Hale said "His confused and imperfect style, the English of

*Dr. Brinton refers to the now extinct tribes of Virginia as "a fragment" of the Sioux or Dakotas.

When in Washington four years ago, I was introduced to a well educated Dakota, who was, I think, connected with the Smithsonian Institution, as an interpreter. I mentioned the matter to him just as I had read about it, but he ridiculed the idea. This, however, does not prove anything, except that there would not seem to be even a tradition among his people that they had ever come from the Iroquois, and I know of no tradition among the Iroquois that the Dakotas ever separated from them. Even tradition would not be proof in matters of detail, but might mean something in a general way.

†Mr. James Mooney, an unusually careful and authoritative ethnologist, very concisely sums up the case as it has hitherto presented itself, and met with general acceptance.

"Tradition and history alike point to the St. Lawrence region as the early home of this stock. Upon this point all authorities concur. Says Hale, in his paper on Indian Migrations: 'The constant tradition of the Iroquois represents their ancestors as emigrants from the region north of the Great Lakes, where they dwelt in early times with their Huron brethren. This tradition is recorded with much particularity by Cadwallader Colden, Surveyor-General of New York, who, in the early part of the last century, composed his well known "History of the Five Nations." It is told in a somewhat different form by David Cusick, the Tuscarora historian, in his Sketches of Ancient History of the Six Nations, and it is repeated by Mr. L. H. Morgan in his now classical work, The League of the Iroquois, for which he procured his information chiefly among the Senecas. Finally, as we learn from the narrative of the Wyandot Indian, Peter Clarke, in his book entitled 'Origin and Traditional History of the Wyandots," the belief of the Hurons accords in this respect with that of the Iroquois. Both point alike to the country immediately north of the St. Lawrence, and especially to that portion of it lying east of Lake Ontario, as the early home of the Huron-Iroquois nations.' Nothing is known of the traditions of the Conestoga or the Nottoway, but the tradition of the Tuscarora, as given by Cusick and other authorities, makes them a direct offshoot from the northern Iroquois, with whom they afterwards reunited. The traditions of the Cherokee also, as we have seen, bring them from the north, thus completing the cycle. 'The striking fact has become evident that the course of migration of the Huron-Cherokee family has been from the northeast to the southwest—that is, from eastern Canada, on the Lower St. Lawrence, to the mountains of northern Alabama.'—Hale, Indian Migrations.

"The retirement of the northern Iroquoian tribes from the St. Lawrence region was due to the hostility of their Algonkian neighbors, by whom the Hurons and their allies were forced to take refuge about Georgian Bay and the head of Lake Simcoe, while the Iroquois proper retreated to Central New York. In 1535 Cartier found the shores of the river from Quebec to Montreal occupied by an Iroquoian people, but on the settlement of the country seventy years later the same region was found in possession of Algonkian tribes. The confederation of the five Iroquois nations, probably about the year 1540, enabled them to check the Algonkian invasion an dto assume the offensive. Lin-

a half-educated foreigner, his simple faith in the wildest legends, and his absurd chronology, have caused the real worth of the book, as a chronicle of native traditions, to be overlooked."* Notwithstanding this opinion, Dr. Hale saw fit to credit Cusick with general truthfulness respecting the movements of the Iroquois until they reached what is now northern New York State, at the beginning of the 17th century. It was not long after this that they came into contact with the French, since which time the doings, of not only of the "Five Nations," but of their congeners the Hurons, the Attiwandarons or Neutrals, the Eries or Cats, the Tuscaroras, and the Andastes or Conestogas, have become historic, so that little need be said here regarding them, after this occurred.

But it may be worth while to revert to the traditional origin of the people, according to Cusick (1826). There is absolutely not a word of proof, nor can there be, in the very nature of things, confirmatory of his statements.[‡]

It is almost certain that a people removed from its ancestral seat will, for many centuries, betray evidences in language, as well as in customs, of its former long-continued existence under different conditions, yet nothing of the kind has ever been noted among the Huron-Iroquois to show a former, long continued residence away down near the Gulf of St. Lawrence, or even between the river and Hudson Bay. Not a single superstition or example of their folklore shows that any association ever existed between them and the Eskimo, who must have been their neighbors, either occasionally or permanently, at such a time. Their tales contain no references to the moose, or to fauna of the sea such as the whale† and porpoise which frequent the gulf; yet one would suppose that all these animals, on account of their size, if for no other, reason, would have found place in the mythology of people who originated on the north shore of the river, below Quebec. On the contrary, we do find among the Huron-Iroquois almost affectionate mention of the "three supporters," or the three sisters—maize, beans and squashes, none of which grows successfully, if at all, so far to the north-east, and reference, to which, points rather either to the present places of abode, or to some more western or southern region. In confirmation of this, we have the additional facts that the pagan Iroquois yet maintain the "Green Corn Dance,"‡ the "Husk Mask Dance" and a secret society known as the Husk Mask Society."‖

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guistic and other evidence shows that the separation of the Cherokee from the parent stock must have far antedated this period."

As a summary of the bare assertions made by various "authorities," to propagate, and establish the Lawrencean fabrication, the foregoing is excellent. Mr. Mooney does not express his own belief in it otherwise than as any of us might do in a general way, without personal investigation, and simply depending on the accuracy of those who professed to have given some attention to the matter.

*For an analysis of his story, see p. 150.

‡Although it is extremely absurd to mention the names of George Buchanan and David Cusick in any connection, one cannot but be reminded here of what a critic has said respecting the introductory portion of Buchanan's History of Scotland. "It is nothing but a tissue of fable, without dates or authorities, as, indeed, there were none to produce." Cusick made his own dates.

†Frequent references to whales, moose, caribou and even smaller animals are found in the myths of our Atlantic Coast Indians; *e.g.*, "He put his bow against the whale" . . . Legends of the Micmacs, by Dr. Rand, p. 285.

‖Ontario Archæological Report for 1898, pp. 124-6.

‡The same Report, pp. 163-4.

It may be asserted that there is nothing at all improbable in the belief that such ceremonial associations have originated since the removal of the people to a corn (maize)—growing part of the country, but associations of this kind, connected as they always are with religious usages—being, in fact, the chief outward manifestations of primitive forms of religion—why, it may be asked, is there not even a hint remaining among the Iroquoian people, of the dances indulged in by them when they lived in a higher latitude and under altogether different conditions? Ceremonies of this kind occur at least annually, sometimes oftener, so that the performance of them is less likely to have become forgotten than that of a migration, but according to Cusick and those who accept his statements, whether wholly or in part, we have a circumstantial and highly improbable story of one of a series of movements without a vestige of corroborative evidence. It may be added that even if such a movement ever took place, it was not by any means a flight, but must have occupied many years, and was therefore less likely to impress itself on the aboriginal mind as an *event*.

But where tradition has to be reckoned with, it is sometimes possible, and nearly always profitable to compare stories that have originated in different quarters; and experience has taught us that when the origin, or even the early history of a people is concerned, that people is not, itself, necessarily, the best authority, and a similar affirmation may be made regarding even the most intelligent representative of any people. This is notorious.

Besides the doubt that must ever attach to the lower, north-side-of-the-St. Lawrence theory, we must consider what is of quite as good authority, namely, the stories of those who were the neighbors of the Huron-Iroquois; stories compelling us to conclude that, wherever the latter came from, they had been on the south side of the St. Lawrence for many years before the date usually assigned to their appearance there, if we may trust the frequent mention of the "Mohawks" or Meg'weks or Kwedecks in a merely incidental way, and not at all for the purpose of proving any statement to this effect.

Mr. Charles Godfrey Leland, and Prof. John Dyneley Prince give the weight of their authority to the statement of a correspondent,* that "In former days the Wabanaki (Abenaki) nation, the Indians called Meg'wek, or Mohawks, and other members of the Iroquoian six nations were wont to wage bloody and unceasing warfare with one another. The bitterest foes of the Wabanaki were undoubtedly the Meg'wek or Mohawks, who on the slightest provocation would send bands to harry them and destroy their crops."

Elsewhere the same scholarly writers say the Mohawks also made raids on the Passamaquoddies and on the Penobscots,† and this must have been when as we are told elsewhere, "The Mohawks and Micmacs both once inhabited these lower Provinces," and "When they quarreled and fought" until "ultimately the latter drove out the former,‡ the first statement being seemingly confirmed in another legend,

*Kuloskap The Master, by Charles Godfrey Leland, and John Dyneley Prince; introduction by Professor Prince (p. 24), quoting from manuscript of Louis Mitchell relating to conditions previous to the coming of the Europeans. †P. 27 and p. 28 respectively, in the Introduction of Micmac Indian Legends.

‡Andrew Paul, in Dr. Rand's Micmac Indian Legends, p. 139.

where it is stated that, "On the two opposite banks of the Restigouche, near its mouth, were two towns, one inhabited by Micmacs, and the other by Kwedeches. They were at peace with each other, and frequently attended each other's festivals."*

It was not in the nature of things that these two peoples could live very long on neighborly terms, and the legend in all probability is an enlargement of some ancient statement respecting a time during which the "Nations" were on good terms for a short period; possibly, indeed, when each was feigning friendship, for future vengeful purposes, a belief we are warranted in holding in connection with such an opening as the following sentence to Rand's Legend XV: "This is a tale of the wars between the Micmacs and a tribe of Canadian Indians, called by the former Kwedechk."†

So far there is not a word said as to the time when the Mohawks made themselves "at home," in the Maritime Provinces, either permanently, or temporarily. If in the former way, they probably occupied the interior of the country, because, as far as we know them, the Huron-Iroquois were rather a land-loving than a water-frequenting body of people. We have no such records of their canoeing skill as we have respecting that of the Ojibwas and of other branches of the Algonkin stock. But they were expert archers, and, as such, are often mentioned in the legends. The bow and arrow, however, they gave up very soon after the arrival of white men in the country. A few references to these weapons, therefore, would lead us to suppose that, at the very latest, the traditional events must have happened shortly after the date of European settlement, but the general tenor of the tales indicates a time long antecedent to any knowledge of the white man, even by hearsay.

It would be easy to quote numerous incidental references in these legends to the Iroquois, under the names of Mohawks, Meg'weks, Kwedeches and Kwedechks, but this seems unnecessary, until we come to the stories of the great war, which led to the expulsion of those people from Acadia. The account of this event is given in Legend LI, thus: "In ancient times and during these wars, a celebrated chief arose among the Micmacs, whose name was Ulgimoo, of whom many strange tales are related. He drove the Kwedeches out of the region on the south side of the Bay of Fundy, they having been compelled to cross the bay in their flight from the enemy, and he urged them on farther and farther towards the north, finally driving them up to Montreal."‡ Here, "Montreal" means where Montreal now is. Similarly, another legend says the Mohawks found shelter at the lake of Two Mountains. The use of both names must be based on recently acquired knowledge. We are not obliged to assent to the expulsory part of the story, but what do demand attention are the frequent incidental, or circumstantial references to the presence of the Iroquois in the Abenaki country, among not only the Micmacs, but among the Malisets, the Penobscots and the Passamaquoddies, for the common enemy is mentioned in their traditions also. But we

*Rand's Legends of the Micmacs.

†Same volume, p. 126.

‡When the members of any Indian tribe or "nation" recount the deeds that occurred in the old-time wars, the reciters almost invariably accord the victory to their own people. We are not without similar examples among historical writers everywhere.

have something which, comparatively, at least, may be of a little value.

In Professor J. Dyneley Prince's translation of "The Passamaquoddy Wampum Records,"* we read "Many bloody fights had been fought, many men, women and children had been tortured by constant and cruel wars, until some of the wise men among the Iroquois Indians began to think that something must be done, and that whatever was to be done must be done quickly. They accordingly sent messengers to all parts of the country, some going to the south, others to the east, and others to the west and northwest. Some even went as far as the Wabanaki. It was many months before the messengers reached the farthest tribes. When they arrived at each nation, they notified the people that the great Indian nations of the Iroquois, (Mohawk and others) had sent them to announce the tidings of a great Lagootwagon or general council for a treaty of peace. Every Indian who heard the news rejoiced, because they were all tired of the never-ending wars. Every tribe, therefore, sent two or more of their cleverest men as representatives to the great council."

Now, this either refers to the Hiawathan invitation, or it does not. If it does, it is remarkable (subject to correction) that in no tradition of Iroquoian origin, is there any reference to other than the five nations being concerned; as far as I know, it is not even hinted that others were invited,† and it is somewhat curious that *the* great chief who had made such a hitherto unheard-of proposal, was not mentioned, but this may not count for much.

If this peace proposition was other than that usually credited to Hiawatha, and if it preceded his, then he does not deserve so much praise as is lavished upon him by most writers.

Although, as Hale says,‡ that "In the mere plan of a confederation there was nothing new," and that "there are probably few, if any, Indian tribes which have not, at one time or another, been members of a league or confederacy," it would seem as if the event referred to was that of the formation of the Great League, the K'chi Sagem (Big Chief) of which lived at Kanawak (Caughnawaga, according to Cusick.§

Now, the remarkable thing about all this is the total want of allusion in Huron-Iroquois myth, or folk-lore, or historic tradition, to the Wabanaki peoples on the one hand, and the frequent references to the Iroquois as Kwedeches, Meg'wek, and Mohawks by the Wabanakis on the other. The former suggests a "conspiracy of silence."

What proof can be offered that before the publication of the Cusick story, a single person of the Huron-Iroquois stock ever asserted, or even hinted that the "priscan home" of his ancestors was

*Appendix to Kuloskap the Master, New York and London, 1902.

†In course of time, the Tuscaroras, who were of the same kin, did come into the league, and so did fragments of some other tribes, as, for example, of the Tuteloes, and Saponies of Dakota lineage, and the Mississagas, Delawares, Nanticokes and Mohegans of Algonkin stock, but there is not a word about the Wabanaki, as represented by the Penobscots, Maliseets, Passamaquoddies or Micmacs. The most easterly mentioned were the Mohegans, whose ground was on the lower reaches of the Hudson River.

‡Book of Rites, p. 21.

§Professor Prince's translation of the Passamaquoddy Wampum Records, Kuloskap the Master, p. 345. The mention of Caughnawaga is probably a recent interpolation.

some here on the St. Lawrence below Quebec or between it and Hudson Bay?* This ascribed seat of origin has always appeared to some of us as an absurdity, based wholly on the historic statement, that the French under Cartier met one band of Iroquois at Stadaconé (Quebec), and another at Hochelaga (Montreal). What even honest and intelligent members of the Six Nations, or of their congeners, may have affirmed at any time since Cusick's "tale" was published, is utterly valueless. The Jesuit missionaries, if they ever heard about the ancestral home of the Hurons and Iroquois having been so far north and east, or anywhere else, do not say very much about it, and such a situation is one of the last on the continent that scarcely anyone, even a wild and unreasoning theorist, would suggest, however it may have answered the purposes of a temporary home.

It has already been noticed that we do not find among the myths of the Huron-Iroquois even incidental or circumstantial references to the flora or fauna of a latitude so high as that of "between Quebec and Hudson Bay," while, on the contrary, we meet with just such allusions regarding other places far away to the south.

There are perhaps few white men living who are better able to enter into the spirit of the ancient Wyandots than Mr. Wm. Elsey Connelley of Topeka, Kansas. He has saturated himself with the folk-lore of those people, as it has percolated through their living representative "refugees" in his state, and he has such a thorough knowledge of the old tongue as now spoken, that he is not likely to be led astray in his interpretations. In his volume, Wyandot Folk-lore† containing an Historical Review, and twenty-five folk-tales, there is much of interest, and not a little to confirm the belief that this, one of the very oldest (it is said) of Huron-Iroquois tribes had its "prisean home" not on, or near the St. Lawrence, although the author of the book holds a different opinion.

But Mr. Connelley's belief in the generally accepted theories is not held by him unreservedly, for he says: "It has been the opinion of writers upon the subject, that the Wyandots migrated from the St. Lawrence directly to the point (north of Toronto) where they were found by the French. Whatever the fact may be, *their traditions tell a different story.*" It is the purpose of what follows to re-enforce what has already been gathered from Micmac folk-lore by a few gleanings from Wyandot myth. A belief common to the Iroquois was that there were "Little People" whose Indian name, Yagodinenyoyak,

*Since this was written, Dr. W. M. Beauchamp's very excellent History of the New York Iroquois has appeared, and on page 133 he refers to the statement of Nicholas Perrot, an old time French interpreter, that "The country of the Iroquois was formerly Montreal and Three Rivers. Their removal was in consequence of a quarrel . . . between them and the Algonkins. . . This explains why these [the Algonkins] also claim the island of Montreal as the land of their ancestors."

It explains more, for it indicates that which is most likely, considering all the circumstances, viz., that the Iroquois were aftercomers. In any event, it does not set up a claim that the locality was what Dr. Brinton called the "prisean home" of the Iroquois. It was the last home they remembered.

Much more to the point is the tradition mentioned by Lafitau, and quoted by Dr. Beauchamp, that "The Mohawks assert that they wandered a long time under the conduct of a woman named Gaihonariosk; this woman led them about through the north of America, and made them pass to a place where the town of Quebec is now situated."

Omitting the woman, a story of this kind might indicate some hazy reminiscences of the wanderings referred to in this paper, and of the expulsion of the Iroquois from Acadia by the Micmacs.

†Crane & Co., Publishers, Topeka, 1899

means Stone-Throwers,* who delighted in playing pranks, many of which were played with a good object in view. Two of these pygmies (they were always born as twins) killed the Witch Buffaloes in charge of the salt springs at what is now Big Bone Licks, Boone County, Kentucky, when the Wyandots lived there.†

In a case of this sort the reference to a particular locality differs from those of a similar kind that have already been criticised, because the point of the story lies in the fact that taking all the other circumstances into account, the event could not have happened anywhere else; for example, in a preceding tale‡ we have, "The Wyandots destroyed the caves of the giants. They then crossed the river and continued their journey. They came to the point where Montreal now stands." Montreal, according to my view, being mentioned simply because it fitted in with the now prevalent belief acquired, perhaps, even by an old but comparatively recent Wyandot, and based on the Cusick fabrication, perhaps, too, because Montreal may possess some charm as a large city in a foreign country, and we know that "Far away fowls have fine feathers," even to an Indian's eye. That this is an interpolation seems plain from the fact that near the beginning of the story, p. 84, we are told that "Ages and ages ago the Wyandots were migrating from a distant country. They were moving all the villages. In the course of their migration they came to a large river with exceedingly steep and rocky shores. This river belonged to some giants, and these opposed the crossing of the Wyandots." This description of the river corresponds rather with that of the Niagara than of the St. Lawrence. When the author says the Wyandots were making their way by Niagara Falls and Toronto to the Blue Mountains on the shores of the Nottawasaga Bay, they would not necessarily come near the Falls, and would not see any "steep and rocky shores" nearer than Queenston and Lewiston, nine miles from the lake shore trail, while by the southern trail they might very naturally be alarmed by the appearance of the river banks—precipitous walls from 100 to 150 ft. in height. The proof here is plain that the Wyandots, when passing the falls, were travelling northwards.

As another evidence of how the nature of a narrative may be modified quite unconsciously by lapse of time and consequent change of circumstances, the introductory story informs us that when the first people, who were Wyandots, as a matter of course, lived in heaven, the daughter of the Big Chief became ill, and the advice of the medicine man was, "Dig up the wild apple tree; [why wild?] what will cure her she can pluck from among its roots." The tree may have been of the kind mentioned, but it is just as likely that the reference to it arose from the narrator's own experience, or from that of some former story teller, gained in a more southerly clime. We may dismiss anachronistic and other slips of this kind, by merely referring to a remark made one morning very early to Mr. Connelley, by a Wyandot named Matthias Splitlog, who, on seeing a comet, said, "There is the chariot [!] of our Grandmother, The Little Turtle."

Story XVIII. "The Lazy Hunter," referring to one who wished to get married, has every appearance of unadulterated aboriginality, and in it are several references to the opossum which point clearly to a residence not between Quebec and Hudson Bay, yet in Story XXII the statement is made that the first knowledge of medicine was com-

*Ontario Archaeological Report for 1898, pp. 164-5.
†Wyandot Folk-Lore, p. 89. ‡The Flying Heads, p. 85.

municated to the Wyandots by some bears that carried a man and his wife off to the Red Mountains in the north, wherever they may be. Still, it is not asserted that the Red Mountains were north of the St. Lawrence.

We have the authority of Dr. S. P. Rand for the statement that "the tradition among the Micmacs is that their fathers came from the southwest," and that "the old people up to a very late date spoke of their home in the southwest,"* and this appears to me as a much more likely event than their coming from any section north of the St. Lawrence, where it is said they and the Iroquois had become bitter enemies, because of the common cause usually assigned in such cases, namely, a quarrel between two boys, one of whom was shot, hence, and so on. The southwest origin was claimed by all the Abenaki tribes, and a similar origin is here asserted for the Iroquois, partly because of the anomalous conditions associated with the Cusickan literary monstrosity, and partly because what I regard as evidence points altogether this way.

If we had never heard of the apocryphal origin, it would appear as if from what we now know, our theory might have taken some such form as this:

"The priscan home" of the Huron-Iroquois, as well as that of some other peoples who subsequently found their way northwards, was probably in Kentucky and Southern Ohio.†

For some reason it is quite clear that one great dispersal, or various minor dispersals of these people have taken place. The Huron form of the language being recognized by philologists as the oldest and, consequently, the purest, the Hurons may reasonably be supposed to have migrated first, or among the first, and to have isolated themselves in the Blue Mountain country, north of Toronto, where they found, or were afterwards joined by, the Ouendats (Wyandots), Petuns, Tionnontates, or Tobacco Nation, some of whose names naturally suggest a southern origin of the agricultural industry they carried with them, and established in their new abode.

Other migrations brought the Attiwandarons and Eries, respectively, to the north and south shores of Lake Erie, while what was then, perhaps, or afterwards became the main body, set out to the northeast, following, in all probability, the course of the Ohio as far as possible (either leaving behind them, or dropping by the way, bands subsequently known as the Cherokees,‡ Tuscaroras, Andastes, and, perhaps, some others now extinct), then striking more easterly until they reached Acadia, now New Brunswick and Nova Scotia, finding their way eventually to the north shore of the St. Lawrence river, or gulf—the latter, most likely, whence they eventually spread westwards to Stadaconé (Quebec) and Hochelaga (Montreal). From the latter point it would be but a short step to northern New York.

*Micmac Indian Legends, Foot-note p. 110.

†The word Ohio itself lends color to our supposition. Horatio Hale in The Book of Rites, p. 176, discussing its meaning says, "It is derived from the word wiyo (or wiio) which signifies in the Seneca dialect *good*, but in the Tuscarora, *great*. It is certain that the Tuscaroras have preserved the primitive meaning of the word, which the Hurons and the proper Iroquois have lost." Otherwise, it would seem difficult to account for this name being given to the river—a name from the language of a people on the Gulf of St. Lawrence, or even in northern New York.

‡It is contended by some that the words Iroquois and Cherokee are mere variants.

Among other reasons for the conclusion that the Iroquois are most probably of southern origin, it should be mentioned that the Attiwandaron country, on the north of Lake Erie is, par excellence, the mound and other earthwork district of this province, and that next to it, but a long way behind it, in this respect, ranks the old abiding place of the Hurons near the Georgian Bay.* In the whole double range of counties in southern Ontario, from the St. Clair and Detroit rivers on the west to Lake Ontario and the Niagara on the east, examples of such works are found. If this fact has any significance it is surely in the line of connecting those who made the earthworks with the people who formed similar structures farther south. Had the Iroquois come to this part of the country from the northeast directly, or indirectly, they would scarcely have brought with them this custom. It is surely, therefore, much more reasonable to suppose that they reached the district in question by entering it either from the eastern or western extremity of the lake after a northerly course, than to claim that subsequent to their wanderings with the main body of the "nation" or "nations" from the lower St. Lawrence, or from between Quebec and Hudson Bay, they took to the performance of what must have been to them a totally new kind of work; and on the assumption that the Attiwandarons formed part of the great migration by way of Acadia, this would be still more absurd. The conditions rather point to an independent movement before or after the northeast march took place up the Ohio Valley, unless, indeed, the separation happened on the way. In any event, the peoples were long enough apart to account for the north Erie branch being known to the Hurons as "those who speak not quite the way we do."

One might even be tempted to theorise a little in detail respecting the comparative periods when these migrations occurred, e.g., that the Hurons seceded first, taking shelter on the southern end of the Georgian Bay, Lake Huron; followed, perhaps, after a considerable interval, by the Wyandots; that those who settled on both Erian shores also set out before the main body, and that they who took possession of the northern shore preceded their congeners on the other side. Neither would it seem very wild to suppose that the enmity existing between the Micmacs and the Iroquois (if they were ever neighbors in their southern or southwestern homes) was the main cause of the northern migrations on the part of both—one party pursuing the other; indeed, it was probably for some such reason that all the secessions took place. But speculations of this kind are merely amusements. In the whole history of the Huron-Iroquois there are only a few—a very few—explainable statements worthy of recognition as facts, and it was an attempt to enlarge on these that led to the clumsy, stupid, and almost wholly incredible story from the pen of the Tuscarora, David Cusick, in 1826.

To record the movements and the doings of these people after the period when they came successively into contact with the French, the Dutch and the British, would be to write a very large portion of the history of Canada and the United States.

Fortunately for the British, the Iroquois as they were represented by those in the province of New York became our allies, not because

*The hilly nature of what is now in the county of Simcoe, did not, perhaps encourage the construction of mounds, or render embankments necessary.

they loved us more, but that they loved the French and the Dutch less. They dearly loved a scrimmage, and for scouting purposes they were unsurpassed. Lithe, sinewy and enduring, habituated to hardship, and at home in the forest, they were able to perform tasks for the accomplishment of which white men, especially European white men, were quite unfitted, and it is somewhat doubtful whether they have ever received all the credit they deserved for the part they took in our military engagements.

Most of the present-day Iroquois reside on three reserves, viz.: in Tuscarora township, Brant county; at Deseronto, Tyendenaga township, Hastings county; at Caughnawaga, Laprairie county, opposite Montreal; and there is a large band of Oneidas at Delaware, near London, Ontario.*

Many of these people farm in a simple way, a few somewhat extensively, but some of them act as guides to tourists and travellers "doing" the lake country.

Schools on all the reservations afford means of education, and a considerable number of the people can read and write. Some of the more intelligent natives are themselves teachers, and others act in various official capacities either privately or in the civil service.

Of the three thousand or so on the Tuscarora reserve, about two thousand profess christianity—Episcopalian, Methodist, Baptist and Seventh-day Adventist (!). The rest are pagans. At Deseronto they are Methodists; at Caughnawaga all are Roman Catholics; and the Kent county Oneidas are Protestants.

Those who desire to learn particulars respecting the history of the Canadian Iroquois cannot do better than consult the recently issued and very excellent volume by the Rev. Dr. W. M. Beauchamp, and published as Bulletin 78, by the University of the State of New York.

As a matter of course the doctor's book relates especially to the New York Iroquois, but the history of our own Iroquois who, indeed, form the main body, is so indissolubly connected with that of the former, that the story of the one, until near the close of the eighteenth century, is the history of both.

Iroquoian Tribes: The Iroquoian stock, taking the name from the celebrated Iroquois confederacy, consisted formerly of from fifteen to twenty tribes, speaking nearly as many different dialects, and including, among others, the following:

Ontario, Canada: Wyandot, or Huron (see footnote, p. —; Tionnontati, or Tobacco nation; Attiwandaron, or Neutral nation; Tobotaenrat, Wenrorono. Iroquois, or Five Nations, New York: Mohawk, Oneida, Onondaga, Cayuga, Seneca. Northern Ohio, etc.: Erie. Southern Pennsylvania and Maryland: Conestoga, or Susquehanna. Nottoway, Meherrin?. Eastern North Carolina: Tuscarora. Western Carolina, Cherokee.

The Cusick Story.

The following synopsis by C. S. Rafinesque, of Cusick's so-called "Chronology of the Onguys or Iroquois Indians" will give readers

*The Oneidas here do not reside on a "reserve," as they have paid for the land, and exercise the full rights of citizenship.

some idea respecting the way in which the Tuscarora historian (!) handled his subject.

"Anterior to any date, the Eagwehoewe (pronounced Yaguy-hohuy) meaning real people, dwelt north of the lakes, and formed only one nation. After many years, a body of them settled on the River Kanawag, now the St. Lawrence,* and after a long time a foreign people came by sea, and settled south of the lake.

"1st date. Towards 2500 winters before Columbus' discovery of America, or 1008 years before our era, total overthrow of the Towancas,† nations of giants come from the north, by the king of the Onguys‡ Donhtonha, and the hero Yatatan.

"2nd. Three hundred winters after, or 708 before our era, the northern nations form a confederacy, appoint a king, who goes to visit the great emperor of the Golden City, south of the lakes, but afterwards quarrels arise, long civil wars in the north, etc. A body of people escaped into the mountains of Oswego, etc.

3rd. 1500 years before Columbus, or in the year eight of our era, Tarenyawagon, the first legislator, leads his people out of the mountains to the River Yenonatateh, (now Mohawk) where six tribes form an alliance called the Long-house, Agoneaseah—afterwards reduced to five, the sixth spreading west and south. The Kautanoh, since Tuscarora, came from this. Some went as far as the Onauweyoka, now Mississippi.¶

"4th. In 108, the Koncarawyeneh, or Flying Heads, invade the Five Nations.

"5th. In 242, the Shakanahih, or Stone Giants, a branch of the western tribe, become cannibals, return and desolate the country; but they are overthrown and driven north by Tarenyawagon II.

"6th. Towards 350, Tarenyawagon III defeats other foes, called Snakes.

"7th. In 492, Atotarho I, king of the Onondagas, quells civil wars, begins a dynasty ruling over all the Five Nations, till Atotarho IX, who rules yet in 1142. Events are since referred to their reigns.

"8th. Under Atotarho II, a Tarenyawagon IV appears to help him to destroy Oyalk-guhoer, or the Big Bear.

"9th. Under Atotarho III, a tyrant, Sohanrowah, arises on the Kaunaseh, now Susquehannah River, which makes war on Sahwanug.

"10th. In 602, under Atotarho IV, the Towancas, now Missisaugers, cede to the Senecas the lands east of the River Niagara, who settle on it.

"11th. Under Atotarho V, war between the Senecas and Otawahs of Sandusky.

"12th. Towards 852, under Atotarho VI, the Senecas reach the Ohio River,‖ compel the Otawahs to sue for peace.

*If they came from the south, according to what I regard as evidence, this river was more probably the Kenawha or Kanawha, which empties into the Ohio from West Virginia, opposite the city of Gallipolis.

†Cusick, elsewhere, says these were the Mississagers,—Mississagas?

‡Iroquois, Onguys means people.

¶Algonkin tribes lying on or near the Ohio called it the Mississippi, as they regarded it the chief river in connection with the portion south of its confluence with the main stream.

‖This, and the mention of Kentakeh (Kentucky) in the following sentence, show a glimmering of traditional knowledge respecting the south country.

"13th. Atotarho VII sent embassies to the west; the Kentakeh nation dwelt south of the Ohio, the Chipiwas on the Mississippi.

"14th. Towards 1042, under Atotarho VIII, war with the Nanticokes and Totalis (Tutelos).

"15th. In 1143, under Atotarho IX, first civil war between the Arians of Lake Erie, sprung from the Senecas, and the Five Nations. Here end these traditions."*

This curious book, printed only about nine or ten years after the issue of Cusick's "Ancient History of the Six Nations," was no doubt a welcome addition to Mr. Priest's melange attributing all sorts of remarkable connections with the American Indians, involving Chinese, Japanese, Scandinavians, Welsh, Irish, Scottish, Italians, Romans, Egyptians, Libyans, Tartars, and, as a matter of course, The Lost Ten Tribes of Israel.

Rafinesque, who condensed the Cusickisms, was a man of some note in his day, although he did not stand in high repute among men of science.

INDIAN MUSIC.

By A. T. Cringan, Mus.B.

During recent years a commendable interest has been manifested in the collection and preservation in tangible form of folk songs of many different nationalities of widely varied degrees of civilized development. In England the "Folk Song Society" is actively engaged in searching out aged country people who can sing the songs peculiar to their district. Many of these have been transcribed from the lips of the "oldest inhabitants" to the printed page, which it would have been impossible to secure had the attempt been longer delayed. The Government of the United States has recently taken practical steps towards the collection of Indian music by appointing a specialist whose time shall be devoted to this important object. The Vienna Academy of Sciences is engaged in a comprehensive search for phonogrants of languages and dialects to be employed in the study of comparative philology. "Already its collection includes popular songs of Gypsies and Arabians, favorite airs of Red Indian tribes, the idioms of Negroes and Malays, and so on. It is sending out voice-hunting expeditions every year, and its agents are now scouring Australasia, Roumania, Istria and other localities." In Canada a satisfactory start has been made along similar lines. Eight years go Mr. David Boyle represented to the Hon. G. W. Ross, then Minister of Education for Ontario, the desirability of securing a number of the songs peculiar to the Iroquois, and of publishing them in the annual "Archæological Report." As a result thirteen melodies of a most interesting nature were secured as the nucleus of a collection which now includes about one hundred typical Indian songs available in printed form. On the first experiment being made, the songs were sung by Ka-nis-han-don, who had been selected for this purpose, by the Indians of the Grand River Reserve, as the most competent exponent of their tribal songs. The attempt was made to note the melodies while being sung, but this was found to be a most laborious method alike for singer and writer. During subsequent meetings the songs were re-

*From "American Antiquities and Discoveries in the West." By Josiah Priest, Albany, 1835.

corded automatically by means of the graphophone and examined at leisure by the transcriber. By this means it was made possible to secure an absolutely correct transcription of a much larger number of songs than could have been secured by the method first employed. Had the collection been undertaken at a later date many of the most interesting melodies would have been forever lost, as Kah-nis-han-don, who alone was considered able to give them correctly, has since joined the great majority in the "Happy Hunting Grounds."

In a study of Indian songs it must be constantly kept in mind that their transmission through successive generations has been entirely oral. The Indian of the past has never even thought of musical notation in connection with his tribal melodies. With other peoples, whose music possesses many features in common with the Indians, the case is entirely different. The Chinese, for example, possess a musical literature dating from 1,100 B.C. In addition, "from time immemorial Chinese music has been under the direct supervision of the State in order that the introduction of any tones contrary to law might be prevented." The Indian has likewise jealously guarded his songs against the introduction of foreign innovations, but, it cannot reasonably be supposed that the form in which they are now used is that in which they first were heard. Even civilized peoples, aided by the printer's art, have been unable to retain their songs in their original purity. Take such well-known examples as "Old Hundred," "God Save the King," or "Home, Sweet Home." Of these many variations from the original are to be found in editions published during the life of the present generation. A striking example of the modification effected by time is afforded in the case of our Canadian national song, "The Maple Leaf." At the reception to the Duke and Duchess of York, in 1901, two widely different versions were sung by the adult and children's choruses respectively, on the same afternoon. The method of transmission of the melodies of the Indians from one to another is simple, but effective. Each tribe possesses its own characteristic songs, sometimes numbering several hundreds. Among their braves there are usually a few singers who pride themselves on the excellence of their singing and the correctness of their melodies. These are the music teachers who are entrusted with the important duty of imparting their musical treasures to the younger members of the tribe, who may be fired with the ambition to excel in song as in the more arduous activities of their national life. Many of these Indian musicians display a phenomenal capacity for memorization of speech and song. In company with Mr. Boyle I had, several years ago, an exceptional opportunity of witnessing a most remarkable illustration of the extent to which this power has been developed. At the ceremony of "Burning the White Dog," which we were permitted to attend, the headman (Kah-nis-han-don) had to recite a large number of set speeches and songs, peculiar to the ritual, occupying over two hours in delivery. During this time he was almost constantly engaged in singing or speaking, yet no noticeable halt for a word was ever made. Throughout the entire ceremony he was closely observed by the onlookers, many of whom were equally familiar with the ritual, still, we were informed that every note and word had been rendered with absolute correctness.

With the Indian, music is something more than a mere amusement. It is associated with every phase of his life and plays an im-

portant part in the ritual of each of his many ceremonies and feasts. He has songs associated with the conferring of a name upon his infant son, songs adapted to the various games in which he delights from infancy to old age, songs to aid him in wooing the dusky maiden of his choice, to cheer him on his long and arduous excursions when on the hunt, or to inspire him with courage when engaged in deadly conflict. Should he desire to intercede with the Great Spirit for bountiful corn harvests, or to return thanks for such blessings already received or for success in battle, he finds in song his most potent means of expression.

A careful analysis of the Iroquois songs already secured reveals many striking peculiarities of rhythm and tonality. As the trained musician can readily recognize the distinguishing characteristics of the representative masters of the German, French, Italian, English, Scottish, or Slavonic schools of composition, so, also, may he recognize the music of the Indians through certain rhythmic and tonal peculiarities of a clearly defined character. The music of the Indian, like himself, is decidedly unconventional. On listening to the songs which accompany any important ceremonial, one is apt to imagine that the music consists of a jumble of unconnected sounds, more harsh than musical, but this feeling is gradually dispelled as the ear becomes familiarized with the musical idioms, and the mind begins to realize their underlying sentiment. The manner in which the melodies are rendered has much to do with the confusion of mind inseparable from a first hearing. The Indian vocalist makes no pretension whatever to skill in the art of voice production as we understand it. His ideal of the quality most desirable in vocal excellence may be expressed in a single word, loudness. The environments associated with the performance of his melodies are such as to make this quality absolutely indispensable. Many of the ceremonials, of which the songs form an essential feature, are conducted in the open air, to the accompaniment of the howling of the wind combined with the vigorous beating of rattles and drums. To be heard the singer is compelled to shout with the utmost lung-power, and he who best succeeds in this respect is acclaimed the premier vocalist of his tribe. No human voice could withstand the strain consequent on this extreme exertion, sometimes continued through several hours, and retain its musical qualities unimpaired. The extreme upper notes of the melodies are frequently sung out of time as a result which sometimes leads the uninitiated to conclude that the Indian uses a scale comparing intervals not found in the music of civilization. That this is not the case is proven by a close examination of the melodies already secured and published. So far, no melody has been discovered containing any tones foreign to the major and minor scales common to the music of all civilized nations. The peculiar tonal effect produced by Indian music consists, not in the addition of tones to recognized scales, but in the omission of some of the tones of which these consist. On listening to a number of characteristic Indian melodies, one may be pardoned should he conclude that they are based on the Pentatonic, or five note scale common to the music of the Hindoos, Chinese, Negroes and Celts. Many of them are really so, but others are proved on closer observation to be even more primitive in construction. In discussing the tonality of the Indian melodies, comprising the first group, secured in 1898, with Dr. Hugh Clarke, Professor of Music in the University of Pennsylvania, he expressed the opinion that "The Indians, in common

with other primitive races, had employed the Pentatonic scale for the simple reason that it avoided the use of the interval of the semitone which they probably found rather difficult to sing." In a number of the songs already investigated it is found that in addition to the tones which necessitate the use of the semitone, or minor second, those which entail the interval of the major second are also absent. If Dr. Clarke's contention regarding the minor second, to which the writer agrees, be correct, the same primitive reasoning may have applied to the use of the major second. This is only slightly less difficult of intonation than the former, but neither is quite so easily produced as are the intervals of the major and minor third, which, with the perfect fifth, constitute the common chord. That this simple combination of the first, third, and fifth tones of the scale formed the germ from which the earlier Indian melodies were developed is a conviction that becomes more conclusive as investigation proceeds. In a number of the melodies, considered by the Indians themselves to be the most ancient, no other tones than three comprising the Tonic Chord are to be found. This is sometimes major, sometimes minor, both being freely employed. The interval of the major second was probably first employed on the introduction of the sixth degree of the scale, which occurs in many of the more ancient songs as the single addition to the tones of the Tonic Chord. The addition of the second degree would have served the purpose equally well, but this is not found in any melodies unless in combination with the sixth. The addition of the sixth and second degrees completed the Pentatonic scale in both major and minor forms and would tend to familiarize the ear with the closer interval of the major second. In common with many other nations the Indian may have found this simple five-toned scale a sufficient means of musical expression for centuries before venturing on the introduction of the interval of the minor second consequent on the employment of the fourth and seventh degrees which complete the major scale. These must have been introduced with caution and the fourth undoubtedly preceded the seventh as it is frequently met with in songs which do not contain the seventh, while the latter is found only in combination with the former. The seventh, or leading note, is used very sparingly in the major mode, and in the minor mode its use is confined to a very limited number of melodies, chiefly those used exclusively by the women.

The rhythm of Indian music is in many instances exceedingly complicated. The conventional rhythms and four-bar phrases of ordinary music are ignored. Phrases of five and seven bars in length are employed freely, and of regular music cadences there are few. The Indian has no consciousness of their need, therefore, why should he use them? His melodies are not set to words arranged in stanzas of nicely adjusted metrical proportions which entail a musical cadence at the conclusion of each line. On the contrary, he ends his song at any convenient point, whether at the end of a musical phrase, or the middle is of no consequence provided it is concurrent with the finale of the dance or ceremony which it accompanies. His method of emphasizing the conclusion is much more emphatic, to him at least, than any conventional musical cadence could possibly be. This consists of a loud whoop usually commencing high in pitch and gliding throughout the compass of a complete octave. Syncopated rhythms are much in evidence in the majority of Indian melodies, and grace notes are employed with the greatest freedom.

6. THE BLACKFOOT INDIANS.

By Clark Wissler.

The plains area of North America was inhabited by people dependent upon the buffalo. The flesh and by-products of this animal furnished them food, shelter and the common implements of life, thus characterizing a special culture known as that of the Plains Indians. In the Dominion of Canada the best representatives of this type are the Blackfoot, who formerly ranged from the Missouri to the Saskatchewan Rivers. In language they are Algonquin, and, presumably, came out of the wooded lake area to the east into the open country of the west, as did their kindred the Arapaho and Cheyenne, where they gradually adopted the culture of the Sioux tribes. At present they are confined to reservations in Montana and Alberta. One of the interesting problems in the ethnography of the Plains is the tracing out of the dissemination of culture among the various linguistic stocks that found their way into that region from time to time, and in this connection the Blackfoot are of special interest as one of the latest arrivals. My present purpose is, however, to give a brief description of this tribe that may serve as a characterization of Plains culture.

Food.

In former times the flesh of the buffalo and the deer were the chief food of the Blackfoot. Birds, fish, and other small game were eaten in times of necessity only. Frogs, reptiles and insects seem never to have been part of their diet. The habit of eating great quantities of meat seems to have survived, for though they can now obtain from the traders' stores flour, potatoes and other kinds of food, they prefer fresh beef, of which they consume a great deal. When one is travelling with these people he finds them always in discontent when there is no meat, even though there may be an abundance of other kinds of food at hand. The large game animals in this region beside the buffalo were the antelope which was found on the open plains, the elk and mountain sheep in the mountains and foot hills and occasionally in winter moose that wandered down from the north.

We have no information at hand as to the methods used in hunting these animals before the introduction of the horse. As they were obliged before this to hunt with spears and bows and pursue the buffalo on foot, it may be that the Blackfoot became a plains people after the introduction of the horse. We are not able to determine the time of the introduction of the horse, but know that they were well supplied with these animals before 1800, because Mackenzie, in speaking of the Blackfoot, says, "They are the people who deal in horses, and take them upon the war parties towards Mexico, from which they enter into the country to the south-east, which consists of plains."* There are other facts, however, which seem to indicate the presence of the Blackfoot in the buffalo country before the introduction of the horse. According to their own traditions the buffalo and the antelope were usually killed by driving them over a cliff or ledge. The buffalo drive was practiced by all of the tribes of the plains and has been described by various writers, among whom is Father De Smet.†

*Voyages from Montreal, etc., 1801, p. lxxi.
†West Missions and Missionaries. N.Y., 1859.

From all accounts it seems that the Indians of the plains usually erected an enclosure of brush and trunks of trees, into which the buffalo were driven and afterwards killed with arrows or spears, but the country in Montana and Canada between the Missouri and Red Deer Rivers is crossed by a number of streams running eastward from the mountains, along the courses of which are to be found steep, rocky ledges. Instead of making an enclosure in which to drive the buffalo the Blackfoot rushed the animals from the edge of one of these ledges, trusting to the rocks to kill a large part of the herd. However, they knew of the other method, and sometimes placed such an enclosure around the space below the ledge, but in every case they rushed the herd into the enclosure from the top of a cut-bank, or ledge. Several ledges on the Blackfoot reservation in Canada were pointed out to the writer as the locations of former buffalo drives. One of these is a ledge about 50 feet in height with rocks below. From the top, the prairie stretches away with an even surface so that one may approach the ledge without noticing it, until within 100 yards. Even then it looks like a small depression because the hills of the other side of the valley seem to be a continuation of the ground upon which one stands. From the edge of the cliff across the prairie extends a V-shaped row of stones. The Blackfoot claim that the leaders of the buffalo herd, when running, were always disposed to follow some line, mark or trail and that these rows of stones guided the herd toward the edge of the cliff. When buffalo were grazing within several miles of the drive, some young men would be sent out on foot to work quietly around the herd, causing them to move toward the drive. When they came near the lines of stones all the men of the camp came out and surrounded the herd, approaching them from the rear and side, rushed in whooping and shouting, causing the frightened animals to rush toward the cliff and to destruction. The writer made a superficial examination of the ground at the base of one of these drives and found the soil, to the depth of several inches, full of arrow points and other stone implements, from which it appears that these drives were used for a long time. Judging from the accounts of the old men, buffalo drives were seldom used after the introduction of horses and firearms.

The drive furnished the camp with a great deal more meat than was needed, consequently the bulk of it was dried and made into pemmican. The large muscles of the buffalo were cut up and hung upon poles to dry, after which they were taken down and pounded between stones until reduced to small particles. These were mixed with smashed choke-cherries, flavored by leaves and stems of the wild peppermint, and the whole packed in parfleches. Some buffalo tallow was melted in a spoon of sheep horn and poured over the pemmican in the parfleche, and as this cooled and hardened it sealed up the contents, protecting it from insects and moisture. During the butchering time after the buffalo drive the people ate the livers, the hearts and small intestines. The latter were cleaned, blown full of air, the ends tied, held over the fire until they burst, and then eaten. Pemmican was eaten from the parfleche without further preparation or used for making soup by boiling in water. The Blackfoot were also very fond of marrow and extracted it by breaking the bones with stone hammers.

Flesh of other animals, such as the antelope and elk, was usually eaten fresh and seldom made into pemmican. From statements of people now living, we infer that the antelope and the elk were hunted

for their skins rather than for their flesh. The mountain sheep was sought for its horns, which were used for spoons and dishes.

While the chief food of the people was the flesh of the buffalo, they ate at all times of the year, either alone or in combination with meat, various vegetable foods. The so-called sarvis berry (Amelanchier alnifolia) was the most plentiful in that region and was eaten fresh or dried and stored for winter use. There are several other varieties of berries that were used in the same manner, such as the buffalo berry (Shepherdia argentea), and the berry of a willow. The berries were usualy gathered by the women in small bags of raw hide and poured on a skin of the buffalo or spread upon the ground in the camp and smashed by beating with sticks or stones. The pulp thus produced was dried in the sun and stored in raw hide bags. Berries with large pits such as the choke-cherry (*Prunus Virginiana*) were smashed with stones and treated in the same way. This method of treatment reduces the bulk of the fruit so that a great quantity can be stored in a small bag, which is an adaptation to the necessity of rapid transportation.

It seems that edible roots formed a considerable part of the food of the Plains Indians, but the most important of the food plants did not grow in the Blackfoot area. The kamas root used by the tribes west of the Rocky Mountains was accessible to the Blackfoot on the eastern slope, consequently during the kamas season the Blackfoot moved to the foot hills of the mountains, where the women were engaged in root digging. For this purpose a digging stick was used, which was nothing more than a straight, sharpened stick. The method of preparing kamas is the same as employed elsewhere, namely, roasting in a pit for twenty-four hours or more, after which the roots are spread in the sun and dried for storage and transportation. The prairie turnip (*Psoralea esculenta*), according to the statements of the Piegans, is rarely found north of Saw River, but in former times the people made journeys to the south for the purposes of gathering these roots. They were dug with digging sticks, carried away in bags and stored without further preparation. A number of other roots seem to have been used occasionally and in times of famine. It should be borne in mind, however, that practically all of the vegetable food named above was never eaten alone, but as part of a stew or soup made of buffalo or deer meat.

There are no evidences that the Blackfoot ever practised agriculture as the means of increasing their food supply. While the climate of the region in which they lived was not favorable to agriculture, the presence of the buffalo and the ease of their capture made the practice undesirable. That the Blackfoot knew of agriculture and the methods of raising corn is certain, because their myths contain accounts of tribes who raised and stored this cereal and the narratives of the war-path mention the conquest of people who knew how to raise corn.

However, one plant was cultivated, a kind of tobacco used entirely for ceremonial purposes. This plant, according to Grinnell,* is, when mature, about ten inches high, with a long seed stalk growing from the centre. This writer gives a brief account of the ceremonies accompanying the annual sowing of the seed. His account agrees fairly well with the information secured by the writer. It is interesting to note that there was no tending or care of the crop after it was sown.

*Blackfoot Lodge Tales, 1903, p. 268.

for the whole tribe went on their annual migration and did not return until time for the harvest, when another ceremony took place. These ceremonies have been described by Maximilian,* Prince of Wied, and by Sims, as observed among the Crow Indians.†

The gathering of vegetable food determined to a considerable extent the annual migrations of the Blackfoot, for while they followed the buffalo from place to place they arranged their journeys so as to bring them around to the localities in which the various vegetable foods were abundant and in season.

There is no evidence that the Blackfoot were ever acquainted with the art of pottery. They may have known how to make cooking vessels since the memories of persons now living fall short of the time when pots of brass and iron were introduced by the Europeans. However, there are traditions among the people that meats were sometimes boiled in a fresh skin, supported by four sticks, in which meat, water and hot stones were placed. This was a common method among the Indians of the Plains before the introduction of kettles. The most common method of cooking the meat of the buffalo was by boiling and the custom was then, as now, to keep the kettle over the fire continuously, so that any member of the family might eat when he so desired and so that a guest could be provided for immediately upon his entrance into the lodge. As previously stated, dried vegetable food was boiled with the meat, forming a part of the stew or soup. Meat seems never to have been roasted, except by hunters or war parties, and then only when there was no time for boiling. Grinnell gives an account of a method of cooking the eggs of water fowl in a pit by means of water and hot stones,‡ which is somewhat similar to methods employed by tribes west of the mountains.¶

Clothing.

While at the present time all of the divisions of the Blackfoot wear the clothing of the whites they formerly dressed in skins of antelope, elk and buffalo. The ordinary man's costume when in-doors consisted of a belt, gee-string and breech cloth.

When out of doors a pair of long leggings, moccasins and a loose shirt were added and over these wrapped about the person was a robe of buffalo or elk skin. It was not uncommon, however, for a man to go about the camp with no other addition to his in-door costume than a robe. In athletic contests, in battle and in chasing buffalo, the costume usually consisted of moccasins and breech cloth. The women wore loose dresses of elk or buffalo-cow skin reaching about half way over the knees to the ankles. They wore moccasins similar to those of the men and leggings reaching to the thigh where they were held in place by strings, or garters, and sometimes supported by cords attached to the belt, or waist cord. Robes were also worn by the women, and both men and women wore broad strong belts outside of their garments to which were attached knives and other useful or ornamental objects. The dresses of the women were usually made of two elk skins, from which all the hair except that upon the tail had been removed. In making a garment, the two skins were brought

*Travels in North America. London, 1843.
†American Anthropologist, N.S., Vol. VI., pp. 331 *et seq.*
‡Blackfoot Lodge Tales, 1903, p. 207.
¶James G. Swan: Three Years at Shoal Water Bay.

together so that the extensions for the hind limbs overlapped each other, the tails coinciding. Leaving an opening between the tails long enough for the head to slip through, the two skins were sewed together along the upper edges of the leg pieces. At the bottom the two skins were sewed up at the sides to the point where the skin begins to come outward to the extensions of the hind limbs. Through these openings the arms were passed. When the completed garment is seen on a woman, the skin from the front limbs of the elks hangs down on each side almost to the ground while in front and behind the skirt scarcely reaches the ankles. Out from the shoulders and down from the arms to the elbows hangs a cape like extension, made by sewing together the skins of the hind limbs. The skirt, or that part of the garment below the belt is usually covered with strings of deer skin from four to ten inches in length, giving the whole a fringed appearance. The shirts of the men were made in the same way except that the tails of the animals were removed. The edges of the skin at the bottom and around the arm holes were often notched and fringed. While the dresses of the women did not have true sleeves, the shirts of the men were so arranged that the extension from the arm and in front of the shoulder could be held in place by bringing together at regular intervals the loose edges of the skin and tying them with strings, provided for that purpose, thus producing a kind of sleeve, open underneath. The leggings of the men were usually made of a single piece of skin with the seam at the outside of the leg. They were long and cut so as to fit the thigh and the hip, reaching almost to the belt at the sides of the body. The moccasins for both men and women were of the same general pattern. According to the information of the old people now living, moccasins were formerly made without soles and of a single piece of skin with the seam at the heel; the type of moccasins worn by the eastern Algonquin Tribes and the Athapascans. For a long time, however, they have used soles of raw hide with soft tanned skin for the uppers. Summer moccasins were made of skin from which the hair had been removed, while the winter moccasins were generally made of buffalo skin with the hair inside. The moccasins and clothing of children were modeled after those of adults; though as a rule children did not wear clothing until eight or ten years of age, at which time they were provided with small robes and moccasins, leggings, etc. Thread was made by drawing shreds from a piece of dried sinew, moistening it in the mouth, and twisting by rolling between the palms of the hands while one end of the thread was held by the teeth. The moistening of the sinew causes it to expand, and as the thread dries in the stitches it shrinks drawing them in tight.

The methods of putting together garments and sewing, described above, did not differ from those employed by other Indians of the plains, but each tribe practiced a few special forms of ornamentation so that it was possible to distinguish the work of one tribe from that of another. While at the present time the decorative art of the Blackfoot is decidedly inferior to that of the Dakota and the Crows, the writings of the first explorers of the North West give them the first rank. Catlin says that there was no tribe on the continent that dressed more gorgeously than the Blackfoot, unless it was the Crows. However, he saw no great difference between the costumes of the two.* Maximilian also states that the costumes of the Blackfoot were

*North American Indians. 7th Edition. p. 30.

highly pleasing in decoration.* The shirts of the men were decorated with a band of quill work extending from the shoulder down the top of the sleeve, and another extending some distance down the breast and back. A similar band extended along the seam of the legging. The quills for these bands were usually worked upon a separate piece of skin and when completed, sewed to the garment in the desired place and it was not uncommon for the quill work to be removed from one garment and placed upon another. The distinguished men wore large circular designs upon the breasts of their shirts and similar ones upon the back. At present they maintain that this was a very ancient and original ornamentation devised by them, and while Catlin has drawn a number of portraits of the Blackfoot on the Upper Missouri, in which he represents these ornamentations as now made, Maximilian states specifically that the Blackfoot borrowed them from the Assiniboine. He says further that the Assiniboine wore leather shirts with a large round rosette on the breast, which is made from porcupine quills of the most gorgeous colors, and they often wear another piece of similar ornamentation on their backs.† Later De Smet testifies to this as a characteristic of the Blackfoot.‡

Distinguished men also wore fringes of white weasel skin along the seams of their leggings, sleeves and over the breast and back. They also wore head dresses of raw hide covered with strips of the same material, and often provided with a pair of buffalo horns placed in the position they bear to each other on the head of the buffalo. The man's robe was sometimes decorated with bands of quill work extending lengthwise.

The dresses of the women were formerly worked in quills across the breast, back and arm pieces in broad bands following the outline of the garment. After the introduction of glass and porcelain beads these garments were beaded in the same manner. The moccasins of both sexes were ornamented on the toes and the instep, by two kinds of designs, a rosette, and a curved design. According to the old people the latter is the more ancient. At the present time ornamentation in porcupine quills is exceedingly rare, beads having almost displaced this original material.

Skin Dressing.

As the Blackfoot depended almost entirely upon the skin of the buffalo and deer for clothing, and made no attempts at weaving, the dressing of skins was a very important industry. When the skins were first removed from the animal they were stretched on the ground, hair side down and held in place by wooden pins. The surface was then moistened with water, and the flesh and connecting tissue scraped away by means of a fleshing tool, an instrument shaped like a chisel with a loop at the top to engage the wrist. The scrapings obtained at this time were rich in fat, and were usually saved for making soup. It is a common incident in the mythology of these people for a poor person to beg for these scrapings. The skin, now

*Travels in North America, p. 248.
†Travels in North America, p. 194.
‡Letters of Father De Smet, 1905, Vol. II., p. 523.

cleaned, is worked down to the desired thickness with an adz shaped tool made of elk horn, formerly tipped with stone but now with metal. By this process the hide is reduced to a uniform thickness throughout. When using this scraper the women stand upon the skin and stooping over hold it in both hands with the handle almost parallel to the surface of the skin. Shavings from an inch to two inches long are removed at each stroke. If the hair side of the skin is to be dressed also, it is turned over and the hair is scraped away with the same instrument. The next step in the process is to rub into the pores of the skin an oily substance made from the brains of animals, after which it is left to dry and the heat of the sun causes the oily matter to soak into the skin. After a time the skin is made wet with warm water and rolled up into a tight roll, after a while it is taken out and stretched to its original form by pulling with the hands and feet. If the skin is large, two or more women are required to perform this operation. The next and the last step is the drying process.

A rope of twisted thong is made into a loop and tied to a lodge pole. Then the skin is pushed through the loop and vigorously sawed back and forth in all directions. The friction causes sufficient heat to evaporate all the moisture and to evenly distribute the oil in the skin until it becomes soft and of a clean white color. It is then ready for use.

Shelter.

The lodges, or tipis, of the Blackfoot were precisely like those of the Sioux and other Plains Indians, consisting of poles and covers of buffalo skin. The number of poles varied according to the size of the lodge, usually ranging from thirteen to thirty-two.* As these people travelled a great deal in regions where suitable wood for lodge poles could not be found they had need of poles that could be easily transported, and cut them slender and straight, of pine or spruce varying in length from twelve to fourteen feet. In traveling the smaller ends were fastened to the pack saddle and the buts allowed to drag in the rear of the horse. The lodges were owned by the women, who always put them up, took them down and attended to their transportation. The erection of the lodge was begun by tying three poles together, standing them up in the form of a tripod, one leg of which formed the post of the door, then laying the other poles on in order, passing around in the direction of the sun, and tying them at the top by a turn or two of the long free end of the cord with which the first three were tied; the cover was then spread out on the ground, and one pole fastened to its middle, by which it was raised, put in place and pinned together over the door by seven or more slender sticks. The lodge was made symmetrical by drawing out or pushing in the bases of the poles until the whole assumed a true conical shape, when the edges of the lodge were staked down with pins about eighteen inches long. The lodges varied a great deal in size ranging from eight feet to twelve in diameter and from nine to twelve in height. While there was always an opening at the top where the poles cross, through which the smoke of the fire could escape, the true smoke-hole was between the crossing of the poles and the door and was protected by two ear-like flaps, each held in place by a pole standing on the outside of the lodge. By moving these poles about

*Hector and Vaux, Trans. of Eth. Society, London, Vol. I.

the smoke-hole could be opened and closed at pleasure, and the flaps so adjusted as to prevent the wind from blowing the smoke down into the lodges. While all these were characteristics common to the Indians of the plains, the Blackfoot had a few special ways of arranging and decorating their lodges.

The stakes were usually made of birch or choke-cherry wood and ornamented by cutting away the bark so as to leave four rows, or bands, near the top. The spaces between the bands were usually painted red. Inside of the lodge, opposite the door, extending half way around was a lining of buffalo or other skins, reaching upward to the height of four or five feet. This lining was usually decorated with long narrow designs running parallel to the poles of the lodge. The fire was usually a little forward of the centre of the lodge so as to bring it under the smoke-hole, and just back of the fire-place was a small altar made by scraping away the surface-soil to the depth of one or two inches, usually in the form of a rectangle, in the centre of which was a little mound upon the top of which incense was burned for religious purposes. Back of this, next to the wall and directly opposite the door was a space of two or three feet reserved entirely for ceremonial and religious objects and no one was permitted to stand on this spot or pass between it and the fire. The beds were arranged on the ground around the sides of the lodge, separated from the reserved space at the rear by back rests made of willows tied together with sinew and supported by tripods. While these back rests were used by other Plains Indians the ornamentation of the Blackfoot tripods was peculiar in that it was produced by cutting away the bark so as to leave designs in black and white. The intervening surfaces of the wood were sometimes painted.

The door of the lodge always faced the east, and the man of the family sat on the left, or the south side, nearest the back rest, next to him his wife and next to her the children or the younger members of the family. The other side of the lodge was reserved for guests or the unmarried adult sons of the family. The religious and ceremonial objects of the family, hung from the back wall or lay upon robes placed upon the ground in the space between the back rests, while personal property was tucked under the sloping sides of the lodge between the bed and the south side of the door. Among the Blackfoot it was regarded as very impolite to pass in front of a man when in the lodge and for anyone to pass between a distinguished man and the fire when he was smoking was a grave religious offence. For this reason male guests were given places near the back rest so that there need have been no occasion for anyone when leaving the lodge to step between the guests and the fire. Should there have been several guests they were usually given seats corresponding to their rank or the esteem in which they were held by the host. Should one of the guests have desired to leave the lodge he must either have passed behind those between himself and the door or else have taken the pipe from their hands and passed between it and the fire. If the guests were women unaccompanied by men they were given seats next to the wife of the family. As soon as a male guest entered the lodge, the host filled a pipe which he lighted and passed to him and he in turn after a few puffs passed it back to the host and so on.

Older people and especially widows lived in small lodges. This was apparently not from necessity but from choice, since it was regarded as a proper way of expressing their sorrow or condition in life.

Transportation.

Before the introduction of horses the Blackfoot travelled on foot, carrying burdens on their backs and making use of the dog-travois. The principal parts of the travois are two poles tied together near the small ends and held in position by a cross frame so that the whole resembles a letter A. The cross frame is made in two ways, as two parallel bars with a number of short cross pieces tied to them by thongs somewhat in the form of a ladder, or as an oval-shaped frame made by bending a flexible twig into a loop and netting across with thongs of skin, giving the whole the appearance of a netted wheel. Sometimes the two cross bars in the former type are joined by similar net work. The top of the frame rests on the dog's shoulders and is held in place by straps passing around his body in front of and behind his four legs, while the ends of the poles drag behind on the ground separated by the frame between them. When horses were introduced the travois were enlarged without change. At the present time the horse-travois is much used for hauling wood and supplies from the trader's stores. In former times the aged, the sick and young children were placed upon skins on the travois and protected from the sun or rain by a canopy of the same material. All the adults and the able-bodied members of the band rode horses on saddles of their own construction, made by stretching fresh skin over frames of elk horn or wood. According to Hector and Vaux the saddles and other riding gear of the Blackfoot were elaborately ornamented with quill work and beads.* Formerly the only bridle used for horses was a long rope consisting of a single strand of buffalo skin, or several strands of the same material plaited, one end of which was looped and passed around the lower jaw of the horse, the loose end being held in the hands of the rider. Quirts were used by both the men and women, those of the women usually having handles of elk horn with lashes of raw hide, while those of the men had heavy wooden handles often elaborately carved and decorated. These had loops at the ends of the handles to go over the wrists of the riders. The travois was the property of the woman and all transportation of baggage was under her care. She usually made all transportation appliances, including the saddles of the men.

The people have no traditions of transportation by water, though they knew of people who did use canoes, and they seem never to have used the bull-boat, a kind of tub made of skins used by the Sioux and other Plains Indians. When crossing rivers the skin covers of lodges were folded into large dish-shape bundles, supported by cross pieces of wood, forming a kind of raft, upon which children, old people and baggage were placed and ferried across by women swimming at the side. It it not certain that the Blackfoot ever wore snow shoes for winter travel. Some individuals claim to have heard their ancestors speak of their use, but their information is too vague to be given much credit.

From the time of earliest contact with the whites the Blackfoot were noted for their wealth in horses. MacKenzie says:

"They are the people who deal in horses and take them upon the war-parties towards Mexico; from which, it is evident that the country to the southeast of them, consists of plains, as these animals could

*Trans. of Eth. Society, London, 1861, Vol. I.

not well be conducted through an hilly and woody country, intersected by waters."*

Umfreville observes: "In their inroads into the enemies' country they frequently bring off a number of horses which is their principal inducement for going."†

That they were good travellers is evident from all accounts. We are told:

"They are real Bedouins of the prairies, having always parties on the move in every direction; making rapid journeys sometimes to the British, and sometimes to the American parts for the sake of gathering news concerning other Indians, or of the buffalo."‡

As a rule the horses were the property of the men. The woman owned her steed, pack horses, etc., which were usually females, but the herd belonged to the man. The best horses were brought in at night and picketed near the lodges of their owners. During the day the herd pastured at will near the camp. The bringing in of the herd seems to have been left to the women. No system of branding was used, but each person knew the individualities of his animals so that he could recognize them at sight. Some owners had a preference for horses of one color and prided themselves upon being the owners of many white horses, etc. We have no evidence that conscious selective breeding was practiced or that castration was known.

Warfare.

It is difficult to secure accurate information concerning the types of weapons used by these people before the introduction of fire-arms. From the examination of specimens of ancient and recent manufacture and information from the people themselves, the writer infers that there were two types of bow in use. One was cut out of a single piece of wood, straight in the middle for about two-thirds of its length, with ends curved. The other was a sinew backed bow, made of a single piece of wood backed with sinew and bent in a double curve. The arrows were made with a single shaft of willow, three-feathered and pointed with bone or stone. Some of the old men state that bone was more often used than stone. In the Blackfoot country two types of arrow points are found, one very small usually not more than a half-inch long, and the other long and slender, varying from one and a half to three inches in length. The Blackfoot claim that they never used these small arrow points, but that they were carried in by the Snakes and other tribes living beyond the mountains. Although the writer has no accurate data as to the relative number of the two types of arrow points that are now found in this region, his own observation indicates a great number of the smaller type and a great scarcity of the larger. A systematic examination of the ground around the old buffalo drives might settle this point satisfactorily.

War clubs with stone heads were used, but usually the stone was spherical instead of pointed like those of other tribes. The head was sewed up in a skin cover, an extension of which formed the sheath for a wooden handle two feet or more in length. The stone was not held rigidly to the handle, but hung loose, making it more effective when striking a blow. While the people made use of the

*Voyages from Montreal, etc., p. lxxi.

†Present State of Hudson's Bay, etc., 1790, p. 900.

metal tomahawk and tomahawk-pipe introduced by the traders it is not certain that this type of weapon was known to the Blackfoot in earlier times. The more common form of war-club was a riding whip with a strong heavy handle, which served both as whip and weapon as necessity demanded.

Lances were used at one time, but seem long ago to have become ceremonial and conventional objects rather than weapons. However, the knife was a special object of veneration. The traditions make constant mention of a white stone knife which seems to have been a large leaf-shaped flaked tool of white flint-like material hafted in wood, bone or wrapped with skin. For the last sixty years or more, large double edged, pointed knives of metal have been carried by both sexes. In many cases these have come to have ceremonial attributes with more or less elaborate rituals pertaining thereto.

Since the introduction of horses into the great plains the wars of the Blackfoot seem to have been occasioned by raids for the capture of horses. According to traditions, such expeditions were made against the Snakes, Flatheads, Crows and Assiniboines. These raids were common in the seventies, the last one of which we have certain information was made by several members of the Blood tribe who went to Ft. Belknap Reservation in Montana in 1887. They were discovered and killed by the Assiniboines and Gros Ventre.

In horse stealing it was customary for a few individuals to go out alone. They frequently set out on foot and travelled by night until they located a camp, then watching their opportunity they crept around the horses grazing near the camp or inside of the camp itself, cut loose the tied horses and drove or led away as many as possible. This usually led to pursuit and running fights with various results. It was not uncommon for a whole band to go in pursuit of the thieves and trail them to their own camp, which naturally led to a contest between the two bands. Of course, it is to be understood that wars for revenge were sometimes undertaken, but these were less frequent than is often assumed and such revenge was usually in retaliation for loss inflicted upon the members of a horse-stealing expedition. In this way the practice of horse-stealing kept the Indians of the Plains in constant petty warfare. So far as known the Blackfoot never carried on a systematic military campaign against other tribes.

The Blackfoot practiced scalping, counted coup on the enemy, held the victory dance, kept tally of the exploits by symbolic designs, etc., like the other Plains Indians. However, they seem to have given more attention to the capture of horses and more honor to the successful horse thief than any other tribe. Going on the war-path for the mere sake of securing scalps, or the man hunt, was not a common practice among the Blackfoot.

Social and Ceremonial Organization.

The social organization has changed greatly in the last forty years, and has, no doubt, undergone a gradual change from a rigid clan system to a loose band organization since these people left the woods to roam on the plains. As it now stands they are composed of three tribal divisions, viz.: Northern Blackfeet, Bloods and Piegans. There is a feeling among the Piegans, at least, that the first is the original main body from which the others separated a long time ago.

In conversation they usually designate to which of these three a person belongs. The general independence of the three tribes is evident from the practice of holding separate sun dances, etc., but they have no traditions of actual intertribal warfare. Each tribe is composed of bands each with a headman, or chief. The members of the band look upon themselves as blood relatives, but discriminate between adopted members and blood relatives. Marriage is forbidden between members of the band as blood relatives, but not between the members as such. The husband marries into a band, and so lives with his wife's people to whose band the children normally belong. Men and women each have their individual property, according to convention, and, as a rule, the daughter inherits the mother's property, and the son the father's. When there are no children the property of each goes back to the nearest relations. The father usually exercises the right of naming the child.

Each of the three tribes was directed by a council composed of the heads of the bands, and this body elected one of their own members to serve as tribal chief. When camping together a circle was formed, each band of the tribe having a fixed place in the circle.

While it was common for a man to have more than one wife, he looked upon one of them as the true wife, and spoke of her as the one who sits next to him, because her place in the lodge was next to the head of the family. As a rule, every man of distinction had at least two wives. Adultery was not common, and women were punished for this offence by cutting off their noses, so that they might bear the mark of their shame all their lives. Divorce was not common.

The social, political and religious activities of these people were so interwoven that one of these subjects can not be discussed without treating of the others. In the first place, there were a number of societies possessing rituals and regalia appropriate to their functions. The most important societies are the so-called Age Societies, or Military Societies, the membership of which comprises practically all males over eight years of age. These societies were known collectively as the All-Comrads, and from one point of view might be considered as separate ranks, or degrees, of the same organization. At the present time these societies are well preserved among the Bloods, and are as follows: Mosquito, All Brave Dogs, The Braves, Black Soldiers, Raven Bearers, The Dogs, The Horns and The Catchers. The members of the first named society are boys about eight years of age, who pass from one society to the other in the order named above, until the highest is reached. There seems to be no fixed time for a member to pass from one society to the other, but, as a rule, this transferring occurs every four years after the rank of the All Brave Dogs has been passed. In former times there seems to have been a greater number of societies for young men, and a higher rank for very old men, known as the Bulls. This highest society seems to have passed out of existence a long time ago, and among the Bloods its functions are performed by the Horns.

While the women can not become members of these societies there is an adjunct of the Horns among the Bloods known as the Matoki, that is strictly a woman's society. In most cases the members of the Matoki are the wives of the members of the Horns and the character of the ceremony is such that they both seem to have had a common origin.

The various societies of the All-Comrads have religious functions, and especially the Horns, but there exists among the Piegans a strictly religious society known as the Crow-has-Waters. The significance of the term is that the members of the society have rights and formulas conferred by powers residing in the water upon Crow Indians who in turn transferred these rites to a few Piegans living among them. Some thirty years ago one of these Piegans returned to his people and introduced this society among them. Both men and women may be members, but the men seem to be the active members. Each member has a small bundle containing a few skins of birds or mammals to which belong short rituals containing a few songs.

About forty years ago a society for young and middle aged men, known as the Hair-Parters was introduced from the Gros Ventres among whom the same society is generally known as the Grass Dancers. This seems to be a social organization without religious significance.

The Black Tail Deer Dance is a religious organization bearing traces of the Ghost Dance Religion, and was introduced from the Kootenay about 1890. Its rituals are supposed to give its members power in hunting, but the ceremonies are characterized by trance and hypnotic phenomena.

There seems to have been a number of societies in former times that have passed out of existence or have been displaced by those introduced from other tribes. Among these were two peculiar organizations known as the Ghost Dancers and the Brave Dogs. The former was in no way connected with the Ghost Dance religion recently practiced by the Plains Indians. The latter seems to have been limited to a membership of two, and was characterized by the fact that these individuals were never permitted to turn back from a danger of any sort.

One of the most striking characteristics of the Blackfoot Indians is the possession of a great number and variety of rituals and bundles. These bundles seem to be entirely secondary, while the rituals, and especially the songs which they contain, are looked upon as the real point of contact with religious power. It is their belief that all rituals and songs were given to individuals in dreams or states of trance by the power of the universe appearing in the form of animals, and sometimes in the form of heavenly bodies. It is important to note that practically in every case the ritual was transferred to a single human being who in turn had the power to transfer it to others. Sacred bundles were often duplicated, while their rituals remained about the same. The most important are the Beaver Bundles, Medicine Pipes, Painted Lodges, Buffalo Rock Bundles, Sacred Turnips, and the Sacred Spear.

In some respects the Beaver Bundles are the most elaborate, while they bear the least resemblance of any to Plains culture. They contain the skins of animals, chiefly the beaver, and are accompanied by a ritual containing seventy to one hundred and forty songs, the number of which is usually a secret because of a taboo against counting them. Each bundle is owned by a single individual, who is supposed to know the ritual and to be able to perform it at any time.

There are a great number of special lodges with bundles and rituals, generally known as the painted lodges. There are, at least, forty-three of these, all of which have characteristic differences in the

number and character of their songs. Some of them confer power to attain success in war, others success in healing the sick, and still others success in promoting the welfare of the people. The decorations on the outside of these lodges are usually symbolic, and represent some phases of the ritual.

In addition to this large number of special medicine bundles, almost every man possesses one or more individual bundles, most of which have rituals composed of at least four songs. These individual bundles may be considered as war-charms, because they were used for that purpose in the past. When a young man became old enough to engage in military expeditions, he went to some noted medicine man and made application for such a bundle. The medicine man then transferred to him a small bundle containing skins or feathers of animals from which he claimed to have received a ritual and songs which he in turn taught the applicant. Then if the young man should prove very successful his bundle would be a special prize, and would be handed down from one generation to the other, often with additions to its ritual until it became a very important medicine object.

One of the most interesting points in the elaborate development of the ritual among the Blackfoot is the idea that the chief power of the ritual is contained in songs. The objects in the medicine bundle are of minor importance. Bearing in mind the fact that there were several hundred different bundles, all of which had a great many songs, and that all of these songs were different, we have a condition requiring a great amount of study on the part of the medicine men since they were supposed to know all the songs belonging to the medicines and to be able to perform their rituals. Thus the important part of a man's education was the learning of songs and rituals.

All the Indians of the Plains maintained a religious festival known as the Sun Dance, and while there were various minor tribal differences the ceremony had everywhere the same general characteristics. Sun worship, or the worship of the power in the sun, may be regarded as the chief element of their religion. The Sun Dance among the Blackfoot was peculiar in that the chief personage in the ceremony was a woman especially noted for piety and marital virtue. The Sun Dance was also the only ceremony in which the whole tribe participated. They came together in the summer, usually during the berry month, camped in a circle and proceeded to erect in the centre of the camp a peculiar circular structure of poles, which they speak of as the lodge of the Sun. During the interval of preparation the medicine woman feasts in her tent, and on the evening of the fourth day proceeds to the place where the Sun lodge is to be erected, and just at sunset all the poles are raised into place and the structure completed with all the dispatch possible. For several days following the chief medicine men of the tribe are stationed within this structure, where they receive and bless all the people who come to them. During this time the various All-Comrad Societies perform their rituals, and individuals who have been successful in war recount their deeds. When the Sun lodge is erected, offerings of clothing and other objects are made to the Sun. There seems to be an idea among these people that gifts of old worn-out clothing are often more acceptable to the Sun than anything else, because the Sun usually appears to mankind as a poor, poverty-stricken, helpless old man begging for a little cast-off clothing.

The future land to which the spirits of the dead go is believed by the Blackfoot to exist somewhere in the vicinity of the Sand Hills. The idea of the condition of the dead differs somewhat from the ideas held by other tribes, since among the Blackfoot the future life is not one of happiness, but of indifference. The people of the spirit land are supposed to lead the life of ghosts, and to be always surrounded by illusions. For example, they are said to be always hunting buffalo which, pursued for a while, suddenly vanish and leave behind the skeletons of mice. This may be the reason why the constant prayer of the Blackfoot is that they may live long, but, on the other hand, they have some anxiety to reach the future land in order that they may meet their relatives who have gone before. It is not uncommon for a dying person to be given messages from the living to friends and relatives long since dead. Formerly the dead were placed in trees or upon high points of land, where, in many cases, a lodge was erected and fitted up with all the common utensils of daily life, and the body deposited in its bed as if in sleep.

Religious Ideas.

At present it is generally agreed that the American Indians did not have the conception of a single personal God, but abstracted the phenomenon of nature and expressed it by terms analgous to our word power. The Blackfoot seems to look upon this power as pervading the whole world of human experience, and as the cause of all that there is. Every object in the world, especially every living object, is regarded as possessing the means of manifesting this power in some way. As he looks about him he sees animals and men possessing kinds of power that would be very useful to him, and, in consequence, sets about making sacrifices and prayers that he may receive some of this power. For example, he has observed that the owl has great power over darkness, and he sometimes makes sacrifices and prayers directly to the spirit of the owl for some of this power to be transferred to himself. If an owl should appear to him in a dream and teach him some songs and rituals he would accept this as a real manifestation of power. It is sometimes said that the Indians of the Plains worship the sun, but this is not strictly true, for the Blackfoot at least look upon the Sun as simply one manifestation of the power of the universe. Another peculiarity of this belief is that the individual is given no credit for intelligence and ability, because anything that he may do is the result of the direct transference of power to him. For example, I was told that the white man who invented the phonograph was nothing more than a fortunate individual who prayed to the power of the universe for the ability, and that this power took pity on him and told him in a dream to take certain pieces of wood and metal, and put them together in a certain way. According to this view the individual counts for nothing and deserves no credit, except in so far as he is the fortunate individual to be favored. Consequently, the religious activity of a Blackfoot consists in putting himself into a position where the power will take pity upon him and give him something in return. At the time of the Sun Dance men sometimes practiced self torture to this end, because their great suffering was supposed to excite the compassion of the power.

Art.

The decorative art of the Blackfoot consists chiefly of quill worked and beaded designs, and of painted designs upon raw hide bags representing geometric forms peculiar to the Plains Indians. While several of the Plains Tribes have introduced into this art a special form of symbolism, the Blackfoot either never practiced such symbolism or else lost it before the subject was investigated by enthnologists. They look upon geometric designs as objects copied from other tribes. Even in the time of Maximilian* it was asserted that the circular designs upon a man's shirt were borrowed from the Assiniboine. A considerable number of designs are recognized by the Blackfoot as Gros Ventre in type. It seems probable that the Blackfoot copied the objective aspect of the decorative art of the Plains Indians, without appreciating its symbolism. However, the Blackfoot have symbolic designs expressing religious ideas, but the character of this art is realistic in contrast to the geometric character of decorative art. The best examples of these designs are the decorations on the "painted lodges," representing stars, trails, animals and men. In general, it appears that the Blackfoot represent plains decorative art in its objective aspect only.

Mythology.

As may be expected, the myths of these people show evidences of mixture of cultures. In the story of the Old Man we have the characteristics of the trickster of the Columbia River Region, and the Coyote of the Plains, but the Old Man is regarded by the Blackfoot as a trivial character. Some observers have confused this Old Man with a term used in praying to the sun, where the latter is addressed as old man in a different sense. The raven is a character often met with in their mythology, but seems to be confused with the Thunder Bird, a kind of an eagle being of the Plains Indians. However, the raven is not regarded as the creator of the world as is the case in other parts of Western Canada. The greater part of the mythology of the Blackfoot consists of mythical accounts of the beginings of medicine bundles and societies and these accounts are important parts of the rituals for the same. They are usually recounted in the ceremonies and the ceremony in turn is usually a kind of dramatic rendering of the incidents recounted in the myth. While these myths possess certain minor characteristics that may be recognized as Blackfoot, their plots are practically identical with myths found among the Arapaho and the various divisions of the Sioux. A comparative study of the mythology of the Arapaho, and the Blackfoot leads to the conclusion that the latter acquired the greater part of their ritualisic mythology from the Gros Ventre, with whom they lived in peace for many years. On the other hand the Blackfoot have been in contact with the Cree from whom they seem to have borrowed rituals and myths relating to the treatment of disease. However, it is impossible to come to any satisfactory conclusion as to the sources from which the Blackfoot mythology has been derived, because the Gros Ventre and the Cree are also of Algonquin stock from which it follows that the three tribes had a common origin, but there is rea-

*Travels in North America, p. 248.

son for believing that the Gros Ventre, as a part of the Arapaho, acquired the culture of the Plains first and then passed it on to the Blackfoot. It is interesting to note that in like manner the Sarcee, an Athapascan tribe, lived with the Blackfoot so long that they acquired the Plains culture.

7. THE KOOTENAY INDIANS.

By Alexander F. Chamberlain.

Habitat, tribal names, etc. The Kootenay or Kitonaqa Indians inhabit a pear-shaped region, having its apex at about 52° n. lat. in British Columbia, and extending at the base into northern Idaho and Montana, including the country about the Kootenay Lake and the head-waters of the rivers Kootenay and Columbia, lying between the Rockies and the Selkirk range. Their traditions suggest that they are comparatively modern intruders into this area from some quarter to the east of the Rockies, possibly around the head-waters of the Saskatchewan. The origin of the name Kootenay,—the Indians themselves use the form Kitonáqa or Kutonáqa,—is unknown It appears first as *Cattanahowes* on the map accompanying Mackenzie's *Voyages* (1801), and has been spelled since in a great variety of ways. Other former names of the Kootenay are Flatbows, Skalzi, Lake Indians, etc.

The Kootenay number about 550 in British Columbia and nearly as many in United States territory, the largest group being connected with the Mission of St. Eugène in the Upper Kootenay country The tribal or local divisions of the Kootenay are as follows:

I. Upper Kootenay tribes including: 1, *Aqkiskɛnukinik*, "people of the two lakes," settled about the upper Columbia lakes, chiefly at Windermere; 2, *Aqk'amnik*, "people of Aqk'am (Ft. Steele)," the Indians about Ft. Steele and the Mission of St. Eugène; 3, Yak'et aqkinuktleet aqkts'makinik, "people of the Tobacco Plains," called also Aqk'aneqonik, "Creek Indians," who live in Tobacco Plains to the south. II. Aqkotlatlqo, Indians of the Lower Kootenay, partly in British Columbia and partly in Idaho. III. Aqkiyenik, "people of the leggings," the Indians of Lake Pend d'Oreille.

Relations with other peoples. Of the Salishan tribes to the west, north and south, the Kootenay have had more or less close relations with the Shuswap, whom they call Tlitkatuwumtlast, "No shirts," because, when first met, they had no buckskin shirts like those of the Kootenay; the Okinagan, or Okinaken, also called Kokɛnuk'ke; the Colville Indians, called Kqoptlenik, "those dwelling at the Falls;" Kalispelm, called Kanuktlatlam, "those who compress the side of the head,"—in allusion to their head-flattening custom. Of the Shahaptian stock, the Kootenay know in particular the Nez Percé, whom they call Säptet, said to mean "grass-basket makers," and the Yakima, called Yaäkima, for which a folk-etymology, "foot bent towards the instep" is offered. Of the Siouan stock they are more or less acquainted with the Assiniboins, or Stonies, called by them Tlutlämaɛka, or "Cut-throats," and also Gutlúpuk, and the Sioux, known as Katskagítlsak, "Charcoal legs."

Of Algonkian peoples they know especially the Blackfeet or Sahantla, "Bad People," and the Crees, called Gûtskiâwe, "Liars." The Athaphaskan Sarcees, to them known as Tsuqo, or Tcoko, and also Saksíkwan, come likewise within the range of their acquaintance. At the Columbia Lakes a small colony of Shuswaps (Kinbaskets) has existed for a long time within Kootenay territory.

With the Blackfeet and some others of the plains tribes, the Kootenay used to hunt the buffalo and at various periods alliances of some importance must have existed between these Indians and the Kootenay. The Kootenay name of the Blackfeet hails from the time when these two peoples indulged in the fierce wars still remembered by some of the survivors of the days when these hereditary enemies so often took the war-path. Some intermarriages, however, have occurred between the Kootenay and the Blackfeet, besides alliances due to slavery, adoption, etc. Intermarriages have also taken place between the Kootenay and the Colville, Shuswap, Yakima, and even Cree. The Chinaman is known to the Kootenay as Gooktlam, "Tail-head," and the Indians share the feeling of the whites towards him. The negro, for whom the Kootenay have some dislike is simply Kâmkokokotl, "Black." For white man the Kootenay employ the term Suyâpi, which is identical with Nez Percé sueapo, and is probably a loan-word.

In the palmy days of the fur-trade the Kootenay country was visited by individuals belonging to many Indian tribes, other than those noted, and the name "Kanaka," borne by a Lower Kootenay, indicates that the Hawaiian employees may also have left traces of their presence among these Indians.

The Kootenay word for "Indian" is aqkts'makinik, the etymology of which is uncertain.

Physical characters. The Kootenay are among the tallest and best developed physically of the Indian tribes of British Columbia. Of the adult males measured in 1891 by the present writer, two-thirds had statures lying between 1660 mm. (5 ft. 5 in.) and 1779 mm. (5 ft. 10 in.) and one-fourth exceeded 1739 mm. (5 ft. 8½ in.), the average being 1690 mm. (5 ft. 6½ in.) One individual, a fine specimen of young manhood, son of an Upper Kootenay father and a Lower Kootenay mother, had a height of 1846 mm. (6 ft. ½ in.) The only three females measured (aged, respectively, 14, 18 and 40 years) had statures of 1557 mm. (5 ft. 1 in.), 1570 mm. (5 ft. 1 4/5 in.) and 1582 mm. (5 ft. 2¼ in.) According to Deniker's classification, the Kootenay males belong among the peoples of "more than average stature" and very nearly among the peoples of "high stature."

The cephalic indices of 70 males (five years of age and upward) ranged from 72 to 86; there were 21 cases above 80 and 8 below 75, while between 75 and 80 inclusive there were grouped 41 cases. The Kootenay thus tend to be mesaticephalic, with indications of the intermixture of a brachycephalic (short-headed) type. Of the indices of the 14 females measured, 12 were over 80, and 6 reached 85, while 2 were only 76,—this shows a decidedly brachycephalic type as compared with the males. The cephalic indices of the half-breeds (white-Kootenay), of whom 10 were measured, show for both sexes together a range from 70.5 to 84.9. The lowest cephalic index met with among the Kootenay was 70.5, in the case of the 14 year old daughter of a white father and a Lower Kootenay mother; the high-

est was 86.6, in the case of a nine year old girl from the Columbia Lakes tribe, whose seven year old sister had an index of 82.2.

The average weight of 13 adult males (in their very light summer clothing) was 151 pounds, the two heaviest (the tall young Indian just referred to and another) tipping the scales at 177½ and 177 pounds. The few young children weighed seemed below the average for similar ages among the whites. Between 10 to 20, however, the Indians kept up to the white average in weight, or rather somewhat exceeded it. The writer's guide, who was 22 years old, weighed 177 pounds and was 5 feet 7 inches tall. The limbs of the Kootenay appear to be in general well-shaped, but the hands are sometimes rather large and the legs in some cases bandy, the last possibly due to horse-riding, etc. The face is not infrequently spoiled by a disproportionally large mouth and thick lips, while the medium-sized ears are lengthened and distorted by the use of heavy earrings. The nose is often rather flat and the nostrils sometimes so large as to give rise to nick-names among the Indians themselves. The face gives the impression of being broader than it really is and the cheek-bones are often quite prominent. The forehead is generally broad and straight, and the chin well-formed in both sexes. The eyes are characteristically dark-brown, the hair straight and black (lighter in children and adults habitually bareheaded). A few cases of "wavy" hair were noted, and one Indian was nick-named "Curly-head."

In spite of the custom of removing hair from the face and the body prevalent among these Indians several individuals (generally old persons) were met with who possessed small beards and moustaches.

The skin-color of the Kootenay is the "brown" or "red" characteristic of the North American Indian and easily distinguishable from the "yellow" of the Chinese found in the country. From these also the Kootenay are marked off by their general appearance. The so-called "Mongolian eye" is not common among them.

In matters of physical endurance (e.g., walking, horse-riding, etc.), the Kootenay probably equal (or even surpass) the whites, but in wrestling, jumping and other tests of strength, where "knack" counts for a good deal, they appear to lag behind, more, perhaps through lack of knowledge and application than from absence of strength *per se*.

Temperament, character, etc. While the Kootenay furnish examples of outbreaks of anger, jealousy, etc., there are probably not more numerous than would occur in an equally large group of whites under like circumstances, though the absence of certain conventional restraints may seem to increase their magnitude and importance, and allow them fuller and more complete expression. The writer had personal experiences of several instances of Indian moroseness, resentment, anger and petulance. On the whole, however, the Kootenay (especially the young men) gave evidences of a gay and lively temperament and a capacity for heartily enjoying themselves. They possess a certain sense of humor, and their feeling for the ridiculous, leads them to laugh at and make fun of the mistakes and blunders, and even the mishaps and accidents, of their fellows and of such strangers as may be among them. They are also fond of playing tricks which make the victim anticipate great

danger, when only a "scare" is intended. They find much ground for amusement in the mistakes made by the whites in their efforts to learn the Indian language, especially when the mispronounced word suggests another, —a sort of unconscious pun. Their sense of humor appears also in their comments upon the whites and their actions, in the descriptions of the characters in myth and legend, etc. The well-known dignity attaching to chiefs and other prominent personages among the American Indians can also be observed among the Kootenay, as well as the expression of this dignity when "offended," although the most noteworthy example of this that came to the writer's knowledge was in the case of the leader of a small party of Blackfeet who were on a visit to the Kootenay.

The Kootenay possess real affection for children, and it is by no means uncommon to see a man carrying a little child, or allowing it to play with him in right childish fashion. It is only since contact with the whites that some of these Indians have taken to chastising severely their offspring. The embarrassments of love-making affect the young Kootenay much in the same way as they do the white youth, as the writer had occasion to note in the conduct of the young Indian who was his guide,—he happened to be courting a maiden of his people, which fact was revealed by his features and his actions as surely as it would have been in the case of one of our race. He blushed frequently, as an Indian can. The writer was much impressed by the fidelity and sense of personal attachment evidenced in his guide who was continually with him for several months.

At the moment of separation this young Indian was affected to the point of tears and the farewell was one to be long remembered.

The good-nature and rather high morality of the Kootenay were noted by the whites who came into contact with them in the first half of the nineteenth century, later on, the Lower Kootenay, who seem to have been less yielding to missionary influence, came to have not so good a reputation with the whites as had the Upper Kootenay. In 1888 the Indian authorities of the Dominion described (with some exaggeration) the latter as "a strictly moral, honest, and religious people." And in 1845, Father De Smet spoke equally well of the Kootenay among whom he labored as a missionary. The Upper Kootenay have resisted the temptation of strong drink better, perhaps, than almost any other Indian tribe of the country, and the morality of their women is distinctly higher than exists among many other tribes, for they have made special efforts to preserve them from the evil influence of lewd white men and the dissolute Indians of neighboring stocks.

Intellect, senses, etc. The Kootenay may be said to possess quick judgment, alert perception, good memory, and a rather high general intelligence, with a noticeable sense of curiosity, at least in regard to the actions and achievements of the whites. The Kootenay children at the Mission school of St. Eugène, near Ft. Steele, in the Upper Kootenay country, exhibited a marked capacity for learning to read and write the English language in a very brief period of time, and, even where no school influences have at all made themselves felt, there exists among these Indians considerable ability (the writer secured several hundred specimens made for him by various individuals) in drawing with pencil on paper. This fact is all the

more interesting since few picture-writings (if any) and other pictographic records are reported from the Kootenay. The writer believes, however, from stray observations of Indians and whites, that it is possible that these Indians may have had something like the "calendar records" known to the Plains Indians and described by Mooney and Russell as existing among the Kiowa, Pima, etc. The brief description given by one individual would perhaps justify such a statement. The Kootenay have a "map-sense," and can both understand and interpret the chief features of the maps of the whites, and draw crude ones themselves of their own country, its rivers, etc.

The Indians' knowledge of their environment, the fauna and flora of the region, etc., is quite extensive. The writer's Kootenay guide, a young man of 22, was able to give the native names of some 100 species of plants, many of which are, or were used for medicinal or industrial purposes. He also, at one sitting, gave the Indian names (with brief descriptions) of 13 varieties of fish, and 91 species and varieties of birds, besides the appellations and descriptions of the animals, etc., of the country. His descriptions of the various sections of the Kootenay region, of the rivers, lakes and mountains were always accurate enough, and his sense of locality was marked.

The senses of the Kootenay do not appear to exceed those of the whites except where practice and special "education" have made their influence felt. This is most noticeable in the case of sight and hearing. The taste of these Indians leads them to sometimes tolerate the "soap-berry," but not nearly so much as do their neighbors, the Shuswap; it is very unpalatable to the whites. The taste of whiskey is also considered "bad," and the "soap-berry" was sometimes described as "tasting like bad whiskey." The same term (kwistlâqane) is applied to "salt" and "vinegar." The writer's Indian guide developed a strong liking for orange marmalade, the taste of which appealed to him. For sugar, in any form, these Indians have a great desire. They have also taken to tea as a drink. Coffee and cocoa they likewise drink readily enough in addition to numerous "teas" and other herbal concoctions of a more or less medicinal nature in use among them from earlier times. The sense of smell plays a larger rôle among the Kootenay, perhaps, than with many of the other Indian tribes of the country. Several plants are admired for their scent or perfume. One they apply to their nostrils, or where it abounds, roll about on the ground, sniffing its fragrance with evident delight; another they put into bags to use as pillows; a third is thrown on the fire to make "a good smell."

The color-sense of the Kootenay, as revealed by their color-names, seems to be fairly well developed, and they have at least seven different color-names for describing horses. Color-names are also quite extensively used in the descriptions of birds, etc.

An interesting side of the Indian mind was the perception by many of the members of the tribe of the object and intentions of the writer in investigating their language, customs, etc., and the recognition of the value of placing these on record before the extinction of the race. The sympathetic cooperation of the writer's guide and a number of other Indians was very encouraging, although their insistence upon his "getting everything right" was sometimes embarrassing.

Occupations, industries, arts. In earlier days the Kootenay were famous hunters and joined the Blackfeet and other tribes in the great annual buffalo-hunt on the plains beyond the Rocky Mountains, memories of which still survive among them. They are still skilful in the hunting of bears, wolves, deer and smaller animals, whose flesh serves them for food, while the skins are disposed of largely to the white traders. Before entering upon the great winter hunt, the Upper Kootenay used to have a festival celebrated some time in December. This the Catholic missionaries have very aptly replaced with Christmas ceremonies, accomplishing the result by a not too sudden transition. The hospitality of the season was reenforced by the custom of the tribe by which the hunter distributed the produce of the chase among his relatives, friends, etc. Since the introduction of fire-arms, the old bow and arrow has practically disappeared (but some of the older men may still be seen with bow and quiver, and the children use small bows and blunt arrows to kill birds, etc.) It is said that in former times the "fool hen" was lassooed with nooses, and water-fowl, captured by means of a fibre net attached to a pole.

Fishing is still a chief occupation of the Lower Kootenay in particular, the Upper Kootenay, except during the salmon-season, being less devoted to it, probably on account of their present situation and their closer relation to the whites. Among the ways of fishing known to the Kootenay are the following: With hooks (formerly of bone or gooseberry spines), through the ice with hook and line, driving the fish into the shallows by pounding on the ice, gaffing (now much used with modern appliances borrowed from the whites). The Lower Kootenay, who make much use of dried fish as food, obtain fish in large quantities by means of basket-traps and dams or weirs of sticks and wicker-work. Spearing fish was also much practiced by the Kootenay and at least three sorts of fish-spears were in use among them.

The Lower Kootenay, who are less subject to the influence and control of the whites, are more given to river-life than the Upper Kootenay. Both now own many horses, but the former have become more sedentary and some of them, *e. g.*, Isidore (chief in 1891) even possess good ranches. Many of them make a living by acting as surveyors, transporters, guides, etc., for the white population, miners and others. A few "prospect" for gold.

The "lodges" of the Kootenay were of two sorts, the skin-covered tepee of poles, called aqkitlanam, and the tanatl, or tent of rush-mats. Communal dwellings were unknown.

Three names for canoes are current in Kootenay: teík'eno (canoe of pine or spruce bark), statlam (dug-out), a word borrowed from one of the neighboring Salishan tongues; yäktsometl (other than dug-out canoes). The typical canoe of the Kootenay, called yäktsometl, is of the so-called "Amur river variety," being pointed at both end under water. They are very skilfully navigated by the Indians.

The "axes" of the Kootenay were made in early days of flint, or of elkhorn; knives also of like materials; needles, awls of the small leg-bones of animals, etc. Hammers of stone have not yet disappeared altogether; for pounding a roundish stone wrapped in skin was often used. Tobacco-pipes of stone, little ornamented, were

formerly much more in use, the material being procured largely from the Lower Kootenay country.

The only general musical instrument of the Kootenay is the drum (made of skin stretched over a stick bent into a circle), now common only among the Lower Kootenay, and manufactured by the Aqkayegik tribe. Formerly the Kootenay are said to have possessed a sort of reed pipe and a bone flute. In their gambling songs sticks are beaten upon a log.

The art of basketry was formerly much more cultivated by the Kootenay, and is passing away altogether among the Upper Kootenay tribe. Water-tight baskets (of varied form, size, stain and ornamentation) of split roots are still made by the Lower Kootenay. Baskets, etc., are also made of birch bark.

From skins treated with deer's brains moccasins, shirts, etc., are made. The dress of the Lower Kootenay is more primitive than that of the Upper. Even when they assume the dress of the whites many Indians continue to wear the old breech-clout. Wolf-skin bands around the forehead were an ancient head-dress. Others were caps of skunk-fur, and of the feathers and skin of the loon. Hair-dressing in braids (now three, formerly two) is common. Among personal ornaments and charms were noticed the following: Ear-rings of shell, necklaces of bear's teeth and other amulets, feathers of the owl, chicken-hawk, etc.; strings and strips of cloth, silk, fur, ribbons, etc., the most prized being strips of weasel fur. At present personal ornamentation of this sort is rather profuse (finger-rings are now also much in vogue). In earlier times necklaces made from a certain shell found in the rivers of the Lower Kootenay region were much worn. Since contact with the whites bead and silk ornamentation of clothing, etc., has become wide-spread. Face-painting is still much in use among the Lower Kootenay. The Kootenay have the reputation of being enormous eaters, and have come to be fond of the flesh of horses, cattle, etc., even, in some cases, where no white man would touch it. They are also to be counted among the peoples of the globe who consider the louse infesting the human head a dainty morsel.

Of the plants of their environment they have made considerable use for food (service-berry, wild gooseberry, huckleberry, strawberry, soap-berry; wild onion, root of orange lily and several other plants; mushroom, lichens, tree-moss, gum and inside bark of larch; various tea-shrubs and tobacco herbs), economic (several plants, including "Indian hemp," for fibre, strings, etc.; lichens and roots for dyes), and medicinal purposes (for sore eyes birch bark, Oregon grape root, dogwood, etc.; for consumption, coughs, etc., various "tea-plants," etc.; for wounds, cuts, bruises, decoctions of several barks, leaves, etc.)

Health and disease. The hygienic institution of the "sweat-bath" was in full flourish among the Kootenay, the name of the "sweat-house" being wiseyatl. Among the Kootenay venereal diseases are not at all common. The most prevalent affections are consumption (and related diseases) and eye troubles, the latter due to the smoke of the lodges, etc.; scrofula, running sores on the face and neck, are also not uncommon. Goitre, warts, toothache (not frequent) were also noted. Two deaf and two blind Indians were met with and several "hermaphrodites" were said to exist among the various tribes. Tattooing for medical purposes has been introduced among the Kootenay by the Chinese "doctors," to whom they now often have re-

course. The nostrums of the white man also find vogue among these Indians. The "cure" practiced by their own shamans was of the characteristic "medicine man" sort—blowing and sucking, pinching and manipulating, etc.

Games and amusements. A favorite amusement of the Lower Kootenay on Sunday afternoons is "horse-running," *i.e.*, driving the horses to and fro on the great grassy plain for "the fun of it." In this even small boys take part. Breaking stubborn horses, a task of the young men, affords the onlookers abundant grounds for merriment and sarcasm. Both on land and in the water, the children play in imitation of their elders, who fashion for them toy canoes, weapons, implements, etc. The writer found a little Upper Kootenay boy playing hide-and-seek with a little white girl in the most approved style. A sort of round game with song and action was in use among the children. The word for "doll" in Kootenay, *tlinkoiyam*, seems to mean "plaything."

The Lower Kootenay are still much addicted to gambling, as were formerly also the Upper Kootenay, who have been largely weaned from it by missionary influences. It is among the former that the great gambling game survived in 1891. It is the widespread stick-guessing game, in the pursuit of which Indians have been known to pledge and lose everything they possessed, including even their clothes and their wives. The game often lasts for days at a time, and with it are connected many songs and dances.

Social and political organization. The Kootenay are remarkable for the simplicity of their social structure, which contrasts strikingly with the very complicated systems of some of the other tribes and peoples of British Columbia. There are, apparently, no evidences of the present or past existence among them of clan systems, totemic institutions, secret societies, etc. Each local or tribal community seems to have had a chief (the term in use, *nasoke*, or *nasukwen*, signifies, literally, "the good, or strong one"). This office (to be held only by males who had reached the age of 30) was hereditary, but the people had always the right to select some other of the family when the heir was incompetent or unworthy, or refused the chiefship. It would seem that the "medicine men" sometimes influenced the selection. The power of the chief was limited by the advice and action of his council. In former days there was also elected a "buffalo-chief," whose authority extended over the great hunting expeditions. In the old days slavery existed, the victims being chiefly women and children captured in wars with the Blackfeet, etc. They were not cruelly treated. The social position of woman among the Kootenay did not differ much from that accorded her by the surrounding tribes, and in the old days polygamy was in vogue. Girls were thought fit to marry at 15, boys at 20. The husband could send back his wife to her people within a year, if found bad or unsatisfactory. Adultery was not severely punished, the guilty woman being marked by the loss of one of the braids of her hair, which the offended husband cut off. Marriage of first cousins was forbidden. Divorced women and widows were allowed to re-marry.

Adoption by marriage and by residence was in use, and relatives took good care of orphans, brothers of sisters, etc. Women could hold property, and to the women and children went the lodge and its contents on the death of the father; horses, canoes, weapons, etc.,

went to the male children of age. In earlier days, if the deceased left no relatives, it is said, a "strong man" took possession of his property. Private property in land was unknown. The debts of a dead man were paid by his relatives, a custom which worked to the advantage of the white traders. Descent seems to have been traced through the mother. Murder was punished by the death of the offender at the will of the relatives of the victim. A sort of composition by wergild was also known.

Religion and superstition. The highest aspect of the religion of the Kootenay seems to be a species of "sun worship" on the way toward the recognition of an ever-ruling and beneficent spirit. The pagan Kootenay believed that the dead go to the sun, and that at some time in the future they would come back to meet the Indians at Lake Pend d'Oreille, in northern Idaho. At this place the various Kootenay tribes used to meet at a festival, with many dances, which lasted for days, but was held at rare intervals. On their way thither, all who were not engaged in family or tribal disputes danced sun-wise round a fire—the rest the opposite way. Formerly, it is said, the first-born child was sacrificed to the sun for the welfare of the whole family, the first joint of the finger cut off, and other like offerings made. But a good deal of this may have been imitated from the Blackfeet, with whom they were so long in close contact. A survival of "sun worship" is to be noted in the ceremonial *wusitlwatlakoine*, "making the sun smoke." Prayers seem also to have been offered to the sun.

The Kootenay believe in the existence of spirits in everything animate and inanimate, and at death the spirits of Indians may enter any object or creature whatsoever. The touch of the spirits causes disease and death. Spirits of the dead return to visit their friends. Formerly sacrifices were made to the spirits of mountains and forests to secure success in hunting, etc. The mountain spirit, especially, figures in myth and legend. The shaman, *nípikáka*, gets his name from the fact that he has to do with the spirits (*nipíka*), to whom he prays and whom he invokes by set ceremonies to reveal to him matters for prophecy, give him power to cure disease, etc. The Kootenay shamans seem to have impressed many of the whites with their "satanic power" in the early days. They are said to have been initiated in the woods with fasting, and were believed to be able to kill animals at a distance by merely glancing at them.

The birth ceremonies of the Kootenay were, probably, connected with such "sun worship" as existed. Segregation of girls at maturity, with certain food taboos, was in vogue. In former days the dead were buried with considerable ceremony, loud shrieking being a part of the mourning rites. The property of the deceased was buried with him or hung on a tree near his grave. Sometimes the burial took place on low lands, which were covered with water when the river ran high.

Mythology and Folk-lore. The Kootenay have a considerable number of cosmologic and explanatory myths. The sun, regarded as a woman, was made by the coyote (or, by other accounts, the chicken-hawk), the moon (looked upon as a man), by the chicken-hawk. The stars are Indians, who have been taken up into the sky, or reached it in some way or other. The Great Bear is a female grizzly, the Milky Way, the "dog's trail." The thunder is caused by a great bird, the

shooting of whose arrows makes the lightning. The coyote gave his daughter, when she married the thunder, the clouds for a blanket. There is a characteristic deluge legend in which the chicken-hawk (a man) figures, together with a monster who ravishes his wife, and whose death leads to the catastrophe. In some version of this tale the "monster" is a lake-animal or a fish.

The Kootenay have many animal tales in which the coyote (prairie-wolf) is the chief figure; he caused the first prairie-fire, got thrown into fire by the chicken-hawk (whence his singed fur), got his mouth burned by trying to smoke the buffalo's pipe, appeased the mountain spirit, ran a race with the fox, etc. Other prominent animals are the grizzly, the fox, the "mountain lion," the skunk, the wolf and the buffalo. Of birds the principal figure is the chicken-hawk (Accipiter Cooperi); the owl is represented as an old woman who steals children. The butterfly is mistaken by the coyote for a man instead of a woman, and the cricket is the coyote's younger brother. The frog (grandmother of the chipmunk) cheats the deer in a race.

There are many legends of giants and similar monsters. Also two interesting stories of "Seven Heads" and "Lame Knee," which approach in nature and content the European folk-tale.

The Kootenay have, likewise, some folk-lore in relation to the cries of birds (owl, robin, tomtit, etc.). For further information concerning the Kootenay Indians consult the following: —

F. Boas: Einige Sagen der Kootenay. Verh. der Berliner anthrop. Gesellschaft, 1891, pp. 164-172; Kootenay Indians, in Report of the British Association for the Advancement of Science, 1889. A. F. Chamberlain: Report on the Kootenay Indians of South-Eastern British Columbia. Report of the British Association, 1892, pp. 549-611; Kootenay Indians, American Antiquarian, 1893, pp. 292-294, 1894, pp. 271-274, 1895, pp. 68-72; Kootenay "Medicine Men." Journ. of Amer. Folk-Lore, 1902, pp. 95-99; articles on Kootenay language, etc., in American Anthropologist, 1894, 1900-1904, Archivio per l'Antropologia 1893, Verhand. der Berliner anthrop. Gesellschaft, 1893, 1895, Proceedings of the Amer. Assoc. Adv. Science, 1894, 1895; Tales of the Kootenay Indians, Mem. Intern. Congr. Anthrop. (1893), pp. 282-284. E. F. Wilson: The Kootenay Indians; Journ. Amer. Folk-Lore, Vol. III. (1890), pp. 10-12, and also Our Forest Children, Vol. III, (1889-1890). J. Maclean: The Kootenay Indians in "Canadian Savage Folk," (1896), pp. 137-148. P. J. De Smet, in "New Indian Sketches (1863)," pp. 90-91, 104-117, 118-125. Ross Cox in "Adventures on the Columbia River (1831)," Vol. II. pp. 152-155. Prince Max. of Wied-Neuwied in "Travels (Trans. Lloyd, 18-41)," pp. 242-248, 272-279, and Appendix. O. T. Mason: Pointed Canoes of the Kutenai and Amur. Rep. U. S. Nat. Mus., 1899, pp. 523-537.

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8. THE CANADIAN DÉNÉS.

By the Rev. A. G. Morice, O.M.I.

If Alaska were politically one with Canada, as it is geographically, we could say without hesitation that, as regards territory, the Dénés are the most important of all the aboriginal races within

the Dominion. The Algonquin are close competitors for territorial supremacy, but there is no doubt that the area occupied by the former is more extensive within the same political division.* Being so remote from civilization, the Dénés cannot boast so thrilling a history as some of the Algonquin tribes; but their very isolation from disintegrating influences and the compactness of their ancestral domain render them so much the more attractive to the ethnologist. It stands to reason that the more the student of anthropological lore strays from long established settlements by representatives of our own blood, the more genuinely aboriginal must be the life, manners and customs of the natives he will meet.

If we add to this consideration that, in accordance with their wonderful receptiveness, the Dénés have appropriated many of the sociological peculiarities of the heterogeneous tribes with which they have been in contact, it will soon become apparent how extremely interesting a close study of those Indians must be.

By Dénés is meant that great family of American aborigines wrongly called Athapaskans, Tinné or Tinneh by scholars who think it proper to designate it by an Anglicized Cree word, and by travellers who, in their ignorance of its dialects, take some disfigured form of word-endings for its national name.† Déné means men, or people, and when that nation assumes that apparently pretentious appellation, it simply follows the example of many other divisions of mankind, such as the Eskimos, the Aleuts, the Hurons, some Carib tribes, the Tungus of northern Asia, the Ainos of Japan, etc. Now, is it logical to call a people by a hybrid word, of which it knows nothing itself, and which does not represent the thousandth part of the territory it claims as its own, when it already possesses a name, which is easy of pronunciation and fully representative?

And here let us premise that tribes of that race are to be found all the way from the sunny plains of Mexico to the frozen steppes of the Eskimos, important off-shoots of the family tree having taken root at irregular intervals throughout the western or Pacific States of the American Union. This essay shall embrace only those which have remained within the limits of our own Dominion.

Their habitat extends practically from the mouth of the Churchill River in the east, following the course of that stream in a southwest direction; then, by 54° latitude, up to the sources of the Northern Saskatchewan, where their southern boundaries cross the Rocky Mountains into British Columbia. Within that Province they are to be found as far south as the Lillooet range of mountains, by about 51° 30'. North of that line their representatives occupy the entire country up to the Arctic Ocean and the Strait of Behring, with the exception of narrow strips of land claimed by the

*Powell's ethnographical map, which accompanies his important paper on the classification of the aboriginal stocks north of Mexico (Seventh Ann. Rep. Bureau of Ethnol.), invaluable as it is otherwise, must nevertheless be pronounced misleading, inasmuch as it gives to the Crees the territory adjacent to Lakes Caribou, Wollaston, Cold, and Isle-à-la-Crosse which belongs to a Déné tribe. This makes a difference of fully five degrees of latitude and as many of longitude. The land of the Eskimos is also made thereby to project too far south along the Mackenzie. On the other hand, it attributes to the Dénés several spots on the littoral of Alaska which are in reality settled by Eskimos.

†This question is fully treated in my "Notes on the Western Dénés," pp. 8-10. Trans. Can. Institute, vol. IV.

Eskimos on Hudson Bay, the polar sea and round Alaska, while the Pacific coast is also throughout settled by heterogenous stocks.

I.

The different tribes into which the Canadian Dénés are divided are, from north to south:

1st. The Loucheux, the Quarrellers of Sir Alexander Mackenzie, sometimes, but wrongly called Kutchin, whose habitat extends from the frontiers of the Eskimos' fishing grounds to 67° of latitude north, and between Anderson River in the east and almost the Pacific Ocean, throughout the lower Mackenzie and the vast forests of Alaska. They number some 5,500 souls, forming according to Petitot,* thirteen distinct subdivisions based mostly on linguistic peculiarities.

2nd. The Mountaineers, or Eta-go'tinne, who roam throughout the valleys within the Rockies. Population about 300.

3rd. The Hares, a timid tribe among not any too valiant congeners, whose hunting grounds lie along the Anderson and the Macfarlane Rivers, from the northern shores of Great Bear Lake. They may be 600, with five subtribes. They were originally famous for the smartness of their conjurers.

4th. The Dog-ribs, who hunt to the number of nearly 1,150 souls, between Great Slave Lake and Great Bear Lake, east of the Mackenzie, as far as the Coppermine River. They pretend to be the offspring of a dog: hence their name.

5th. The Slaves, whose numbers are about the same, are divided into five subtribes. Their habitat may be described as lying between the western shores of Great Slave Lake, along the banks of the Mackenzie, as far as the outlet of Great Bear Lake. They are also found along the Liard River, east of the Rocky Mountains. Sir John Franklin called them Strong Bow Indians, and their present name, which betokens the poor opinion of their manliness entertained by their neighbors, is due to the Crees of the south.

6th. The Yellow-knives may number 500. They are the Red-Knives of Richardson, the Copper Indians of Hearne and Franklin. Their original habitat, the valley of the Coppermine, explains the nature of their name. Alone of all the Dêné tribes, they formerly boasted the possession of copper tools, wrought out of pieces of that metal they found scattered on the slopes of a particular mountain. They now roam chiefly over the barren steppes to the northeast of Great Slave Lake.

7th. Closely allied to the above are the Cariboo-eaters, an important tribe numbering 1,700 individuals or thereabouts, whose territory comprises the waste lands east of Lakes Cariboo, Wollaston and Athabaska. The trading post of Fond du Lac, on the latter, may be considered their commercial rendezvous.

8th. The Chippewayans are divided into the Athabaskans, who hunt around Lake Athabaska, as well as along Slave River, and the Chippewayans proper, who dwell on the shores of Lakes Isle-à-la-Crosse, Cold and Heart. They form an aggregate of about 4,000 souls.

9th. The Nahanais are, like the Loucheux, distributed over both sides of the Rocky Mountains, though their main seat is west thereof

*_Monographie des Dêné-Dindjié_, p. xx, and other works. Fr. Petitot is our main authority on the distribution of the northeastern Dénés.

They form a total not short of 1,000 persons, whose habitat is the Stickine River and tributaries, in northern British Columbia, from Tahltan, near Telegraph Creek, up to Dease River and the Upper Liard, some distance east of the Rockies.

10th. The Beavers, who might be considered a subdivision of the Sékanais (see No. 12), are now the aboriginal inhabitants of the vast plains along Peace River, immediately to the east of the Rocky Mountains. Their numbers are not much more than 650 souls.

11th. The Sarcees are likewise an offshoot of the Sékanais, the result of a second scission from the parent tree due to a difference caused by a trivial offense.* They are now incorporated within the Blackfoot Confederation, to the number of 190 souls, and their present seat is about five miles south-south-west of Calgary.

All the following are western Dénés, within the limits of British Columbia:

12th. The Sékanais, whose original home was east of the Rocky Mountains, and who, for all linguistic purposes, have remained eastern Dénés, are now practically western members of the great aboriginal family under study. After the double secession above recorded and the ravages of want to which the paucity of their economical resources exposes them, they have dwindled to some 450 souls. Their principal trading posts are to-day Forts McLeod and Grahame. The abuse of fire-arms newly in the possession of the easternmost portion of the tribe was the final cause of the exodus westward and of the formation of the Beavers into a distinct tribe.

13th. Immediately to the west of the Sékanais, on Babine Lake and along the Bulkley valley down to French and Morice Lakes, are the Babines, a tribe numbering 530 souls, south of which are

14th. The Carriers, who, like the preceding, are semi-sedentary. Their villages are to be found between Tremblay Lake in the north and Alexandria, a distance of two degrees and a half of latitude. Present population, 970.

15th. Finally, we have the Chilcotins, the southernmost of all the Canadian Dénés, whose habitat is immediately south of the Carrier territory, on either side of the river after which they are called. Since the advent of the whites contagious diseases and other causes have reduced to some 450 their numbers which, but forty years ago, were fully 1,500.

To the above we might perhaps add the Ts'ets'aut, an offshoot of the great Dené stem, which Dr. F. Boas discovered some time ago on Portland Inlet. But these have long since lost their tribal autonomy, if they ever possessed it, and for that reason they may be neglected without impropriety in common with a small band, apparently of Chilcotin descent, who, till some years ago, resided among the Salish of the Nicola valley.

II.

This enumeration is in itself sufficient to give an idea of the great importance to the ethnologist of the Dené family, even though we do not take into consideration its southern half within the United States. A people covering such an immense territory, under so different climes and with so many distinct dialects, which originally

*See my "Notes on the Western Dénés," p. 12. Trans. Can. Inst., vol IV.

rendered social and commercial intercourse difficult, is bound to exhibit numerous points of dissimilarity.

Considered from a physiological standpoint, the Loucheux are undoubtedly the best representatives of the human species within its fold. Tall and well formed—most of their hunters who frequent Peel River Fort being over six feet in height—they have regular features, with high foreheads, fine sparkling eyes, moderately high cheek-bones and a fair complexion.

Their neighbors to the south and east of the Rocky Mountains cannot boast such a good physique. They are generally dolichocephalic, though with receding foreheads, prominent cheek-bones, noses of an aquiline type and yet abnormally broad at the base. Their mouths are wide, and furnished with well set and very white teeth; their lips, apparently too long, give them a quasi-prognathic appearance, when they are not ungracefully parted, leaving the mouth open, while their chins are either pointed and slightly curved up, or receding, especially in cases of real prognathism.

The Dog-ribs and the Slaves met by A. Mackenzie were "a meagre ugly, ill-made people, particularly about the legs, which are very clumsy and covered with scabs."* Altogether, the impression they made on the great explorer was not very favourable, and they also seem to have been rather unhealthy, owing mostly to their want of cleanliness.

In the west the physical differences of the Déné tribes are still sharper, relatively to the various tribes. While the Carriers are in stature perhaps above the average and stoutly built, with coarse features, thick lips, prominent chins, indices generally more brachycephalic than otherwise, and noses straight with extended nostrils, the Sékanais, their immediate neighbours in the northeast, have fine, almost delicate features, wiry limbs, well formed and sometimes rather long noses, thin lips slightly protruding, and very small eyes deeply sunk in their sockets. Their size and weight are certainly much below the average. On the other hand, the Chilcotins and Babines are short and broad, with heavy features and flattish faces, though the women of the latter have abnormally round and fat heads with remarkably thick lips. The fair sex is more attractive among the Nahanais of the north, who enjoy an even whiter complexion which, in many cases, is not far from rosy.

Though all the tribes are always more or less swarthy in appearance, they are nevertheless much whiter, and, as a rule, better looking, than the Salish tribes of southern British Columbia, especially after a stay of some time at home.

The principal traits common to all the divisions of the Déné race are the black and straight hair, prominent cheek-bones, dark eyes,† small hands and feet, which seem to be the heritage of all the American aborigines.

Previous to the advent of the whites among them, longevity was the rule rather than the exception. But the importation of farinaceous foods, strong drinks and consequent vices, not to speak of the more sedentary character of their lives, unaccompanied by the hy-

*"Voyages from Montreal to the Frozen and Pacific Oceans," vol. I, Toronto reprint.

†So dark indeed that in young children even the white of the eyes is noticeably tinged with blue, as if this was a reflection of the lustrous black of the iris.

gienic precautions this should entail, generally prove too much for their constitutions. The chief diseases to which they are subject are pulmonary complaints, rheumatism, vitiated blood and, last not least, fear and imagination. I know personally of cases when otherwise healthy individuals died because they thought they had seen in their rambles through the woods a fabulous animal whose appearance is believed to portend evil, and of others who were convinced that they were the victims of the ill-will of persons supposed to be endowed with malefic powers. On the other hand, I am almost as sure that some should have died who survived through the effects of their strong faith in my medical and other abilities. Dowie and his adepts would certainly find a splendid field for their operations among these primitive children of nature.

III.

As a means of enhancing their natural charms, most of the tribes had but lately recourse to tattooing. But this was always restricted to the face and wrists, and it had never the same connection with clans or totemic ideas as has been noticed on the coast of the northern Pacific Ocean. A few lines from the lower lip to the bottom of the chin or horizontally across the cheeks, with possibly a cross or the symbolic emblem of a bird on each temple, supplemented by additional, but shorter, bars above the bridge of the nose, were the style most in vogue among the women, whilst the men more often omitted the tatooing of the chin, which they generally replaced by some emblematic device on either side of the mouth. They also painted their faces, especially on ceremonial occasions or when animated by evil dispositions. A species of red ochre or vermilion did duty on joyful occasions, while a figure daubed on with charcoal told of warlike or murderous designs. Among the Loucheux both colours were often concurrently used in stripes along the nose, the forehead or the cheeks, according to the whim of the individual.

Nasal and aural pendants of dentalium shells or haliotis were also much in vogue, while, among the Loucheux and partially also the Carriers, two, sometimes three, long shells of that description with juxtaposed smaller ends passed through the septum were preferred. These were replaced among the Slaves and Dog-rib Indians by a goose quill or a small piece of wood.

To those ornaments the Babine women still added a bone or wood labret, thereby giving to the lower lip a prominence which made of the belles of the past generation veritable caricatures. Ear-rings of a peculiar pattern were then the exclusive apanage of men of rank. Finally, youth, rank or social aspirations delighted in shell necklaces and bracelets of wood, horn, bone or, in later times, copper.

When not in mourning, both sexes wore their hair long and parted in the middle. The men had it tied in a knot and falling down to the shoulders, or when in repose, twisted behind the head, much after the manner of the Chinese, while the women preferred to plait it in two tresses falling on their breasts, and often adorned with strings of dentalium shells or of glass beads obtained from the fur traders. In some of the eastern tribes this latter style was followed by both men or women.

In common with most American aborigines and even the natives of the eastern Asiatic littoral, the Dénés have as a rule a few straggl-

ing hairs on the upper lip and the chin, which were sedulously plucked with tiny tweezers made of horn before the introduction of copper, which replaced with them the knives which the Chukchee use for the same purpose.* It is but right to add, however, that among some of the western tribes individuals are occasionally found with quite heavy beards; but these are, as among the North Asiatic races, almost always coarse, black and straight, hardly ever soft or curly. A few half-blonde beards are, however, noticed even with persons of undoubted full Déné blood.

As to their wearing apparel, it originally consisted for the men of a breech-clout of tanned skin, over which a shirt-like vestment of beaver, lynx or marmot skin with the fur next to the body was worn. Among the Slaves and the Dog-ribs this was more commonly of moose skin. These shirts or jackets were cut evenly round and thigh-high among the Chippewayans and other eastern tribes, with the exception of the Loucheux, whose frocks were pointed in front and behind, for the men, while those of the women had slightly larger appendages behind, but none in front. A graceful fringe hanging round the bottom of all those garments, pointed or not, adorned the costume of the various tribes.

Over this rows of beads, dentalium shells, or, in some tribes, dyed porcupine quills along the seams, with occasional bands painted across the breast and shoulders contributed to give elegance and denote rank or wealth. A pair of leggings reaching to the thighs, together with moccasins of pattern and material varying according to the tribe, and which were sewed to the leggings among the Loucheux and some eastern Dénés, completed the costume. In cold weather a robe of furs or a blanket of woven rabbit skins was at times thrown over the frock and kept round the waist by means of a belt furnished with a quantity of beaver teeth, bear or caribou claws or, in later times, thimbles and brass shells which produced in walking a jingling sound quite appreciated by the native ear.

For a head-dress the aborigines of the lower Mackenzie valley had a stripe of skin passing round the head as a bandeau, which was replaced in British Columbia by a cap usually made of small ground-hog skins. The skin of the head of a deer was formerly used for a like purpose, among the Chippewayans.

I must not forget their mittens, which, under such inclement climes, form quite an important part of their dress. They are of dressed skin, and usually hang from the neck by a skin cord passing over the shoulders, though with the primitive Chippewayans they were sometimes sewn to the sleeves of the coat.

IV.

As with the physical characteristics of the various tribes, so it is with their mental faculties; great divergencies tell of the deep influence of their environment. For manliness and other kindred qualities the Loucheux have no superiors among the Canadian Dénés, though they are treacherous enough towards their enemies and can be as cruel as any other redskins. They are more cleanly in their persons and, as a rule, more humane in their treatment of the women than most American aborigines. The Hares and Slaves are noted for

*"Ten months among the Tents of the Tuski," p. 37. London, 1853.

their timidity, which is carried to the point of being ridiculous. This quality is, however, more or less shared by all the divisions of the Dêné stock, whose members are living in constant distrust of one another, and especially of people of different tribes, whom they represent to themselves as continually lurking in the woods with evil designs.

None could lay claim to great natural veracity. Exaggeration or depreciation, according to the dictates of their personal interests, seem to be part and parcel of their very nature; but the Dog-Ribs and the Hare Indians deserve to be pointed out as absolutely devoid of any feeling of shame when detected in the act of lying, though no more scorching insult can be imagined for any Dêné than the epithets liar and thief.

We may as well confess, however, that, when not spoiled by commerce with unprincipled whites, the members of all the tribes, except perhaps the Carriers and the Chilcotins, are remarkably honest, especially when dealing with representatives of their own tribal divisions. It is customary with them to leave on well beaten trails or cache up in the trees provisions, personal goods, traps, snares, snowshoes and other property, which is there as safe as within the dwellings of the owner. On the other hand, I know of a Nahanai who travelled twelve full miles through a thick forest, simply in order to return one bunch of matches which the white trader had given him, by mistake he thought, over and above what was due him.

The Dog-Rib and Hares are of a mild and rather indolent disposition, obliging and hospitable, in fact spending much of their time in dancing and singing. Nay, if we are to credit Sir John Franklin,* the former are even noted for their kindness to the weaker sex, an attitude which is the more remarkable as it is rare among the Dênés. As to the Chippewayans, they are far from being so considerate in their ways towards women. Yet they are strongly religious, or rather superstitious, in temperament.

Within British Columbia, the Carriers are proud, touchy and naturally progressive, the Sékanais naive, honest and credulous, the Babines loquacious and stubbornly attached to their ancestral customs, while the Chilcotins are energetic, violent and somewhat prone to profligacy.

Taken as a whole, however, it may be said that the Dêné race within the limits of Canada is religiously inclined, of a timorous nature and kindly disposition, which, as usual in such cases, does not preclude occasional outbursts of anger, when the most revolting deeds may be committed. So timid, indeed, are these aborigines that, according to Sir John Richardson, not even the possession of fire-arms would embolden them "to risk an encounter with the Eskimo bowmen."†

While thus their mental activities appear to be dormant, their senses are highly developed. I remember reading that the keenness of the American Indian's senses had been greatly exaggerated. He that penned that remark could certainly not have been, like the present writer, travelling for over twenty years with individuals of that race, or he would have totally modified his opinion concerning the acuteness of its senses. A Dêné will smell smoke for miles; I do not mean the smoke of a general conflagration in the for-

*"Journey to the Shore of the Polar Sea," Vol. III., p. 49.
†"Arctic Searching Expedition," Vol. I., p. 212. London, 1851.

est, but merely of the lonely native's bivouac fire. His hearing is just as good. A slight rustle in the woods, the breaking of a twig under the feet of game will immediately draw his attention and make him stand up in his canoe in order to locate the exact seat of the disturbance and discover its cause.

As to his sight, it is that of the eagle. How many times have I not wondered at its incredible keenness when, exploring large lakes or mountains bare of timber, objects which my eyes refused absolutely to perceive were pointed out to me by hunters who could not understand what they were pleased to call my blindness! It is but fair to remark, however, that the Dené being preeminently a huntsman, he can hardly travel any distance without being constantly on the lookout for game. His piercing eye is constantly scrutinizing every nook of nature's primeval domain. "See, a grizzly bear passed here last night," he will exclaim when your attention may be engrossed with a philological or other problem. You look, and see nothing. But the child of the forest has noticed one or two blades of grass bent in the same direction at regular intervals, and his instinct prompts the proper deductions.

His memory is likewise very retentive, especially that form of the faculty which is known as local memory. "Here is a twig which was not broken when I passed here last," he will sometimes remark, or "somebody bent down the top of this sapling; so-and-so cut this piece of wood," etc.

Hence it is next to impossible for him to get lost even in the most intricate forest, especially if the sun is visible in the heavens, for its course is to him a very accurate compass as well as a clock which requires no repairing.

Few people have such a control over their emotions, and such power of exciting manifestations of emotions at will. While among themselves they will generally keep up a certain decorum and would not for anything pass for beggars, they generally consider the whites as a fair field for exploitation. They will then feign to perfection sickness, starvation, grief or any other feeling or situation which they think will be the most profitable to themselves. Hearne assures us that he "can affirm with truth he has seen some of them with one side of the face bathed in tears, while the other has exhibited a significant smile."* I cannot say quite as much from personal observation, but I remember well having sometimes been affected by the cries and unmistakable signs of despair of females who burst into laughter as soon as they perceived that I was taking them seriously.

V.

As to their morality, the lewdness of the Carrier women shortly after the establishment of the first trading posts could hardly be exaggerated, while Samuel Hearne declares of their sisters near Hudson Bay that "they are the mildest and most virtuous females he had seen in any part of America." It should be remarked, however, that that explorer, who wrote a hundred and ten years ago of a journey performed long before, was the first white visitor to their country, a circumstance which implies no great benefiting effects of our civilization over primeval barbarism, as the compliment could pro-

*"A Journey to the Northern Ocean," p. 308. Dublin, 1796.

bably not be repeated to-day with regard to the descendants of those women.

And yet, in spite of their good qualities, the temporary exchange of wives was not then deemed improper at all. It was rather considered the supreme token of friendship, an act of unsurpassed hospitality. The Copper Indians, or Yellow-Knives as they are now called, were less obliging. But that in their reserve with their guests a becoming regard for chastity was hardly their moving spirit is shown by the fact that, whenever they met any party of the meek Dog-Ribs, or Hares, they used to rob them of their women, a proceeding which, in 1823, occasioned an unexpected reprisal, when their whilom victims fell upon them unawares and cut off quite a number of them.* Even cowardice can be transformed into courage, or at least treacherous activity, under the sting of incessant provocation.

This seizing of strange women recalls to mind a practice which was formerly universal among the eastern Dénés. Woman was then considered a prize which belonged by right to the strongest or most skilful pugilist. Whenever a man had set the eyes of covetousness on any female, he would challenge her mate or suitor to a duel, wherein wrestling decided her fate. This was not done in an unbecoming or unduly violent manner. The struggle was considered a matter of course under the circumstances, and the spectators would see to it that fair play was not wanting on either side, just as among more modern savages seconds are supposed to protect the rights of the duelists. Meanwhile the poor woman, who may have been really attached to her husband or may have secretly harbored strong preferences for another party, had to be a silent witness of the combat which was perhaps to launch her into the arms of a bully, who would deride the idea that her own tastes and inclinations might not improperly be consulted.

East of the Rocky Mountains, the same stigma which we have seen affecting the character of the Carrier women originally attached itself to the Chippewayan men, if Hearne's companions during his voyage to the Arctic Ocean may be taken as true representatives of their tribe. Brutal rapes and revolting incests seem to have been the order of the day, whenever they had an opportunity of gratifying their worst passions.

Their almost incredible lack of humanity to their own wives, who had to do all the hard work, even to the dragging of their heavily loaded toboggans on the day they had been delivered of a child, can only be compared to their cruelty to their enemies, or rather the poor hapless strangers they surprised in their sleep, before and after death. Their revolting deeds on such occasions stamp them as little above the station of the brute. Were not my space so limited, I should not refrain from reproducing the above mentioned traveller's entire description of the massacre of over twenty poor Eskimos by his own Chippewayan companions, especially of that girl of eighteen, who "fell down at (his) feet and twisted round (his) legs, so that it was with difficulty that (he) could disengage (himself) from her dying grasp."† One cannot but feel thankful for the influence of the Gospel

*"A Narrative of the Discoveries on the North Coast of America," by Thomas Simpson, p. 318. London, 1843.

†"A Journey to the Northern Ocean," p. 154.

which has transformed the descendants of those miserable wretches into the considerate, virtuous and law-abiding Christians they are to-day.

VI.

Another characteristic, a remarkable receptiveness or propensity for borrowing from foreigners supposedly higher in the social scale, is proper to all the Canadian Dénés. For that reason we must now give it a few moments' consideration.

This distinctive faculty probably flows from their natural timidity and consequent diffidence. The northern Dénés are pre-eminently meek, in the sense that they instinctively allow aliens to play over them the rôle of superiors, whose manners they must ape, and that they look upon them as models whom they must copy. To see the Dénés in their original guise, we must turn to the eastern tribes peopling the middle of this continent, where no neighbourhood of foreign races ever tempted them into altering their ways. Even then, however, should foreigners penetrate into their desolate country, those children of the soil immediately prove adept imitators, as Thomas Simpson noticed during his short stay among them. "I must not close this part of the narrative," he wrote in his account of the discoveries on the northern coast of the American continent, "without bestowing a just encomium on the generally docile character of the natives of Great Bear Lake. They soon became attached to the white men and are fond of imitating their manners."*

The Dénés, uninfluenced by foreign contact, lived in semi-circular huts of coniferous boughs laid over a frame-work of stout poles, mere shelters, in fact, rather than even attempts at house building. Whenever practicable these shelters went in pairs, the second hut facing the first, so as to complete the circle, yet leaving sufficient room between the two for the fire-place, which was thus common to both. This arrangement had also the advantage of creating a draft in the proper direction and reducing to a minimum the quantity of smoke in the lodges themselves. It is still followed by the western Dénés of to-day when they camp out.

But their innate penchant for imitation soon led the Chippewayans and the Beavers to adopt the skin-covered tepees of their southern neighbours, the Crees, and in the far west the same receptiveness made the Babines and the northern Carriers build large lodges with low walls and regular gables, accommodating several related families, such as those they saw among the Tsimshians of the Skeena River, while the southern Carriers and the Chilcotins took to underground houses after the manner of the Shuswaps. And as if it were necessary to accentuate the fact that the Déné tribes were indeed the borrowers, not the lenders, it so happened that those subterranean hovels, which seemed regular ovens, even in winter, were adopted, not by the people of the north, but by those of the south, where the climate is, of course, considerably milder. On the other hand, "the lodges of the Kutchin Loucheux resemble the Eskimo snow huts in shape and also the yourts of the Asiatic Chukchee."†

*"A Narrative of the Discoveries on the North Coast of America," p. 243.

†"Journal of a Boat Voyage through Rupert's Land," by Sir John Richardson, vol. I., p. 393. London, 1851.

We have just metioned the neighbours of the Eskimos. The characteristic acquisitiveness we are now studying can be demonstrated to the point of absolute certainty by reference to the technology of that tribe, which is conspicuous for its unusually independent and manly nature. Nevertheless the Loucheux have borrowed the peculiarly peaked shirts to which we have already alluded from the Eskimos.* According to Richardson, they also have "the hose (or leggings) and shoes of the same piece, thus imitating the Eskimo boot, though with a different material."† Nay, even such a small detail as the particular shape of their sleighs marks them out as great imitators. All the other Déné tribes within Canada use, in connection with their winter travelling, the birch boards curved up in front widely known under the name of toboggan; but the Loucheux have long since adopted the regular sledges with separate runners and upright supports proper to their northern neighbors. All the students of Eskimo life are also familiar with the rude wooden goggles in use by the aborgines of the northern coast of this continent as a protection against snow-blindness. The Loucheux manufacture similar "spectacles," which have remained unknown to all the Déné tribes not in immediate contact with the Eskimos, though long, snowy winters are common to all of them.

Then we have the case of the Sarcees, who, according to the late Archbishop Taché, "have identified themselves with their allies (the Blackfeet) with whom they are now confounded as regards their manners and customs. . . . The Sarcees have lost the mildness, love of peace and honesty which characterize all the tribes of their race, and adpoted the vindictiveness and thievish dispositions which are proper to the nation with which they are now mixed. This is so true, that Sir George Simpson calls them "the boldest of all the tribes that inhabit the plains."‡

They retain their own language, the one thing a Déné will never lose, but otherwise they are practically Blackfeet. They now have a sun dance like the Blackfeet, a ceremony in connection with tobacco growing and a thunder pipe ceremony borrowed from the Blackfeet even to the smallest details, and the myths current amongst them are much the same as those found among the Blackfeet and others.¶

*Petitot states (*Monographie des Dènè-Dindjié*, p. XXIX.) that this frock with tail-like appendages was the original costume of all the Dénés. In this the learned ethnographer evidently follows Archbishop Taché (p. 102 of his *Esquisse sur le Nord-Ouest de l'Amerique*) who tries to account for the name Chippewayan by deriving it from two Cree words meaning pointed skin, or blanket. If both authors are correct in their surmise, their opinion does not impeach the truth of my own assertion. In that case, instead of one Déné tribe having adopted an alien costume, we will simply have to say that at least eight tribal divisions of that stock changed the shape of their outer garment, in order to conform to the style of the same prevailing among their southern neighbours. Within what is now British Columbia such pointed coats were never known, and S. Hearne does not mention any in his Journal.

†Ibid., vol. II., p. 11.

‡"Narrative of a Journey round the World," vol. I., p. 110. London, 1847.

¶These last details I owe to the kindness of Dr. P. E. Goddard, who lately visited the Sarcees in connection with an investigation relating to the distribution of types of Indian culture organized and planned by Dr. Boas, in order to repeat among them the researches he had already conducted in the reservation of the Hupas, another Déné tribe now living in northern California.

VII.

The mode of disposing of the dead among the different tribes is another striking proof of their remarkable power of adaptation. The original custom of the family seems to have been to enclose the bodies within rough cratings made of small logs crossed at the ends, which were raised from three to seven feet above the ground on stout poles or posts, much after the manner of the scaffoldings whereon they cache their provisions and other household impedimenta. Any object which might have belonged to the deceased either accompanied him in his final retreat, or was cast into the water, burnt or cached in the branches of trees near by.

The Sékanais, who were surrounded on all sides by related tribes, in common with all the eastern bands so situated, acted thus in connection with influential hunters, though the former occasionally concealed the remains of their dear ones within trees hollowed out for the purpose. Simple plebeians, or people who enjoyed no special consideration, were simply left where they died, their fellows immediately lowering on their scarcely-cold bodies* the shelters they had lived in, and moving on in their incessant peregrinations after game. In no case was cremation resorted to. But the Babines and Carriers had no sooner come in contact with the Skeena representatives of the Tsimshian stock, among whom the dead were cremated, than forsooth they commenced to burn the remains of those who fell out from among them. They even went so far as to erect as resting places for the small bones that would escape the ravages of fire those lofty funeral poles with square ornamented boxes so common along the coast of the northern Pacific.

As if to make still more patent the extraneousness of the practice among them and mix the old order of things with the new, the western branch of the Nahanais tribe but lately used to depose those charred remains within small travelling trunks set up on two or more poles in the woods, which were the equivalents of the original cratings mentioned above.† The eastern Nahanais never practiced cremation.

In the beginning of last century, an irresistible instinct of imitation had even prompted some tribes to adopt, second-hand, the customs already borrowed by their own congeners; since Harmon, one of the first representatives of the Northwest Fur Trading Company in the west, tells us that the influence of the Carriers was leading the Sékanais to burn their dead.‡

As to the Chilcotins, they are neighbors of the Shuswaps, among whom the dead were always buried. Therefore the former had not

*Fear of death and the necessity of following the migratory game on which the tribe almost exclusively subsists were the primary causes of that neglect. The same sense of self-preservation, which is innate in the lowliest savage as well as in the most highly cultivated Aryans, prompted the abandoning of old people whose state of decreptitudedebarred them from taking part in the tribe's migrations. These were generally provided with fire, water and a few morsels of food, and left to die. In times of famine little children were similarly treated, when they did not meet with a still more horrible fate by their life being made to prolong that of their parents.

†Some of these can be seen even at the present day throughout the territory of the Nahanais.

‡"A Journal of Voyages," p. 266. New York reprint of 1903.

failed to adopt interment as their national mode of disposing of bodies.

At the time of the first advent of the whites, the custom of erecting totemic columns with the heraldic coat-of-arms of the heads of clans whom they were intended to honor had already reached that portion of the Babine tribe, which had almost daily intercourse with the Tsimshian. The extension of this custom inland was only prevented by the advent of a still superior civilization.

We have already referred to the labrets worn by the Babine women. These supposed ornaments and the ceremonies which accompanied the assuming of the same by pubescent girls were also borrowed from their western neighbours of Tsimshian parentage. So that these observances might be considered as so many steps in the evolution of Dené custom and reliable gauges of the influence of aliens over those singularly receptive people. First we have the practice of erecting totemic poles; it was apparently the last noticed by the Dénés, or it did not appeal to them as very important, since it did not penetrate further than their villages on the Bulkley River, thus leaving a full half of the Babine tribe untouched. Then we see the use of labrets universal among the entire tribe, a sure token of an anterior adoption. Finally, cremation, with its attendent practises, ceremonial mourning and the enslaving of the widows, had already become general among both the Babines and the Carriers; whence we may fairly deduce the conclusion that those several customs had preceded the two others among the western Dénés.

The one practice which was original and proper to the tribe in which it obtained is that which was responsible for the distinctive name of the Carriers. For that reason it might not be out of place to enter into some details concerning its causes and results among those aborigines. But for the better understanding of the same, preliminary remarks touching other points of the Déne sociology, which betray the same receptiveness of the family, now become necessary.

VIII.

First, as to the organization of society among them. The influence of environment, the particular occupation, or even the geographical situation of a tribe cannot fail to bear more or less on the mode of life prevalent among its members. Thus it is that, while the eastern Dénés are inveterate nomads, all the western divisions of the stock are semi-sedentary. They live in regular villages with habitations of a permanent character, which they periodically leave for their hunts after fur-bearing animals. The peculiar resources of the country they inhabit, no less than their innate penchant for imitation, are primarily responsible for these different social conditions. While the eastern tribes have to be constantly on the move after the migratory game on the flesh of which they mainly subsist, their congeners in the west have the resource of salmon, which they take in such quantities that, once properly dried, it becomes their daily bread, and allows a longer stay at home.

It has been said that matriarchy, or the fundamental law whereby the mother, instead of the father, is recognized as the head or basis of the family, on which depend the subdivisions of a tribe, the right of inheritance of the individual and the other functions inherent to agglomerations of human beings, is the principle after which

society was originally constituted. My own opinion, based on the study of the Dénè and neighboring aborigines, would run counter to that idea. It seems to me that mother-right implies two particulars which point to a secondary condition of society: the gathering of numerous families into regular villages, and a consequent looseness of morals. The unit of primitive society must have been, if not the family as we understand it, at least the paterfamilias, as the natural head and protector of the children and women-folk. If living during a few generations, he would still have been regarded as the chief or patriarch of the group of related families.

On the other hand, matriarchy supposes a stage in the evolution of society when this has become demoralized by promiscuity to such an extent that the search after paternity is difficult and, in some cases, untruthful. The mother is then the only recognized source of all family ties, the only link which binds together individuals who would otherwise have no known blood relationship, and the basis of aggregates of families which cannot trace their kinship except through the female line; and here we have the tribal subdivisions usually called the clans. Now, it is well known that, with races not animated by high aspirations or guided by a pure ideal, too easy a social intercourse soon degenerates into undue familiarities and illicit commerce between the sexes. Such disorders, even if thought of, would hardly be possible among nomads or unimportant groups of related families leading, under the eyes of their patriarch, the simple life of primitive folks.

Be this as it may, the eastern Dénés, who pass their time roaming in bands with necessarily limited numbers through mount and vale, forest and barren grounds, know of no other fundamental law than patriarchy, while such of their western congeners as the Carriers, the Babines, and the westernmost Nahanais, who live in regularly constituted villages, had adopted matriarchy, with all its consequences, after the example of the coast Indians. Only the Chilcotins formed an exception to this rule. But in this they were only obeying the dictates of their national instinct, I mean the need of copying the social customs of their neighbours, the Salish and Kwakiutl races, which were both almost entirely governed by father-right.

IX.

Most of the western Dénés are therefore divided into clans, among which succession to rank or property follows the female line. Members of those clans are supposed to be so intimately related to one another, to whichsoever village they may otherwise belong, that marriage between them is not to be thought of. In fact, this law of exogamy was formerly believed to be more binding than are with us the ties of blood relationship. First cousins married each other without any scruple if related only through the father's side; but no youth would ever dream of seeking the hand of a girl who was a perfect stranger to him if told that she belonged to the same clan as himself. On the other hand, a Babine from the far northwest, if chance brought him in contact with a clansfellow from, say Alexandria, 500 miles to the south, was sure of protection, hospitality and every mark of attachment, though Carrier and Babine might not before as much as have known of each other.

The headmen or representatives of these gentes were called *tæneza*, the men *par excellence*, by the Carriers and Babines, while among the Nahanais they were known under the name of *tènè-thie*, or great men. They formed a privileged class of hereditary chiefs, on behalf of whom the hunting grounds were parcelled out as their lawful patrimony, over which nobody else had any right. They enjoyed a great consideration in the tribe, were respectfully listened to, and obeyed as far as consistent with a society which, in other respects, was little above the stage of savagery, and, on ceremonial occasions, they wore a special costume, occupied places of honor, that is, as far as possible from the doorway, and, if dancing or distributing presents, their appearance in the assembly elicited songs or chants proper to their title and handed down by their ancestors. Let us remark, however, in further confirmation of the little claim they had to originality, that the very words of these hereditary songs were nothing else than badly pronounced Tsimshian.

To them alone belonged the right of hunting on the lands of the clan, or special portions thereof, with the assistance of related families, which received only such a share in the spoils of the chase or trapping expedition as they were pleased to bestow. There were several such dignitaries in the same gens, and each bore a distinctive name, which was as denotive of the individual's rank as that of any European nobleman.*

In fact, the whole institution had more points of similarities with the landed nobility of the old countries than with the modern class of tribal chiefs. The mental vision of the American aborigines is proverbially limited, and it hardly ever went beyond the notion of the clan as the maximum social unit. Hence chiefs in the present sense of the word never existed among the Dénés prior to the advent of the whites. Occasionally thrift and wealth, aggressiveness and mental superiority would raise an individual *tæneza* above his peers, especially if generosity was one of his virtues; but the chieftainship of a full tribe or even of a single village is with them of modern origin.

Even the children of such primitive noblemen shared in some degree the consideration enjoyed by their father. For that reason they were dubbed *ɑ̀zkhɑza*, or the true children. But, as they belonged to the clan of their mother, which was necessarily different from that of their father, since the tribes were exogamous, they could not succeed to the rank or property of the latter. As the lands could not be expropriated in favour of a different gens, it followed that only a sister's son, or, this failing, one's own brother, or even sister, or a sister's daughter were the lawful heirs to the *tæneza's* rank.

This last peculiarity accounts for the occasional female chiefs, or *t'sèkhuza*, among the western Dénés. In 1838-39, Robert Campbell, who established the first post in the upper basin of the Liard River, met such a chieftainness, who was of great help to him at a time when he was in sore distress. His fort had been destroyed

*Though the entire social system is unknown east of the Rocky Mountains, in several of the tribes there "the hunting-grounds descend by inheritance among the natives, and this right of property is rigidly enforced" ("Narrative of the Discoveries on the N. Coast of America," by Thos. Simpson, p. 75. London, 1843).

through the ill-will of the Tlingit of the coast, and his party were condemned to live on skin ropes and parchment at the rate of a meal a day, when he was succoured by the above mentioned female chief, whose kind-heartedness and influence perhaps prevented an even direr catastrophe.*

X.

Connected with the clans were sets of animals or other beings, which were supposed to have had in pristine times something to do with the establishment of those artificial divisions. They were regarded with a particular respect almost amounting to veneration, and, on festival occasions, they personified the whole clan and its members, whose symbol or crest they became. These were the well known totems.

Several kinds of these existed among the western Dénés, viz.: the gentile, the honorific, and the personal totems. Were it not that they are connected more with localities than with men, another class could be formed with those spirits whose functions seem to have been to preside over particular spots in the forest or along the lakes. These recall the *genii loci* of the Romans, and large rocks *in situ* were sacred to them, which every traveller had to honour by offering thereto a stone or a pebble as he passed by. I have seen myself that practice in actual force among the western Dénés, and Hearne speaks of some such rocks "which are covered by many thousands of small pebbles. . . On its being observed to us that it was the universal custom for every one to add a stone to the heap, each of us took up a small stone to increase the number, for good luck."†

On the question of the primary origin or derivation of the two first kinds of totems I need not tarry, since there is not the shadow of a doubt that the Dénés owed their existence among them to the natives dwelling on the Pacific coast. The gentile totem, of course, represented the whole clan, while that which I call the honorific totem was restricted to some individuals. It was assumed, with befitting ceremonies and dances, by any person desirous of acquiring in society a rank to which he could not aspire in virtue of the laws of heredity.

As to the personal totem, it was common to both eastern and western Dénés, being as indigenous to them as most of the institutions in vogue among all the northern American Indians, since it was with them part and parcel of their religious system, shamanism, and had nothing to do with society as such. For that reason I cannot better explain its nature than by entering into some details concerning the theogony of these aborigines.

Although they hardly realize it themselves, the Canadian Dénés of all tribes originally believed in a twofold world: the one visible and purely material now inhabited by man, the other invisible, though in some way co-extensive with the first, which is the home of the spirits.

Of these there are two kinds, good and bad, all more or less under the control of the Supreme Being, whose personality and attributes

*"Overland Journey Round the World," by Sir Geo. Simpson, vol. I., pp. 210-11. London, 147.

†"A Journey to the Northern Ocean," p. 132.

are not well defined. Some, as the Chippewayans, called him "he (or it) whereby the earth exists," or simply "the Powerful;" others, like the Hares, designated it under the name "*Enna-gu ini*," "he that sees before and after," while the prehistoric Carriers knew him as *Yuttare*, "that which is on high." The reader will please remember that these are all purely aboriginal names, in no way due to the whites or the missionaries. A clearer knowledge consequent on the ministrations of the latter caused them, in course of time, to be replaced by more appropriate terms.

What the exact essence of that Being was in the native mind would be hard to say, as the Indians themselves did not agree on that point. Sometimes it seemed to be confounded with the dynamic forces of nature, that which caused rain and snow, wind and the other celestial phenomena. That it was, however, a real entity, which they feared rather than loved or worshipped, is evident from the phrase, *Yuttare nyäzilht'sai*, "That-which-is-on-High heareth thee," which I am in a position to affirm was currently addressed to obstreperous or profligate people. The meaning was: keep quiet, behave yourself, if you do not want to draw on yourself the wrath of Him-who-is-on-High.

Beside the Supreme Being, there were, in the estimation of the Dénés, numerous spirits, mostly of a malefic character, which were supposed to lurk among them, animated by evil intentions. Should they ever come into immediate contact with man, the result was what we call disease, which, though sometimes invested with a concrete form not unlike the microbes of modern scientists, was always believed to be due to the action of hidden beings with noxious properties.

XI.

Alongside of these, however, was another class of spirits, which had on earth, in the animate or inanimate world, representatives wherein were embodied, as it were, some of their own marvelous powers over nature. In the estimation of the Dénés, and I think I may say practically of all the North American Indians, all the present entities in nature were at one time endowed with human-like faculties. Even trees spoke and worked and fought, and the fowls of the air and the animals of the earth were then men like ourselves, though possessed of potent virtues which are not ours. This magic, though now somewhat reduced in strength, has remained in the brute creation, and is the means whereby man can communicate with the spirit world, and by whose aid he is enabled to succeed in his quest after happiness and the necessaries of life.

This is so true that even to-day, when the native's original notions have yielded before a superior theogony, his language, which is the one item perfectly immutable in him, has retained traces of those zootheistic ideas. If unsuccessful in his hunt after bear or beaver, the western Déné, even though animated with the most Christian sentiments, will not say: "I had no luck with bear or beaver," but "bear or beaver did not *want* me."

Now, those spirits, which are personified by the representatives of the vegetable or animal kingdoms, occasionally manifest themselves to man, and give evidence of their friendly dispositions by adopting individuals and protecting them through life, in return for some con-

sideration shown their present concrete forms or symbols. In a word, they are the link which connects man with the invisible world, and the only means of communing with the unseen: *these are the personal totems* of the Dénés, and, I cannot help thinking, of most of the American aborigines as well.

It has been said that totemism is a purely social institution. I feel absolutely no hesitation in denying this, in so far at least as the Dénés are concerned. Totemism among them is essentially and exclusively connected with their religious system, and I am inclined to believe that the gentile totem is nothing else than an extension to the entire clan of an institution which was originally restricted to the individual.

The personal totem revealed itself usually in dreams, when it appeared to its future *protégé* under the shape of the animal, etc., which was to be thenceforth his tutelary genius. Sometimes the totem animal was met in the woods under striking circumstances, and even at times went so far as to speak (?) to the Indian.

Thenceforth the most intimate connection existed between the two. The native would be careful to carry on his person and publicly expose in his lodge the spoils of that animal, its entire skin or part of it, which he would not suffer to be treated lightly. Occasionally he would even carve a rough representation of the totem. He would treasure any object—such as a stone or a vegetable excrescence,—between which and his totem he fancied he saw a striking resemblance. He would paint its form or symbol in bright vermilion on conspicuous rocks along lakes or rivers, etc. Under no circumstance would anything induce him wilfully to kill, or at least to eat the flesh of the being the prototype of which had become, as it were, sacred to him.

In times of need he would secretly invoke its assistance, saying: "May you do this or that to me!" Before an assault on his enemies or previous to his chase of large game, he would daub its symbol on his bow and arrows, and if success attended his efforts, he would sometimes thank it by destroying in its honor any piece of property on hand, food or clothing, or in later times tobacco, which he would throw into the water or cast into the fire as a sacrifice.

XII.

So much for the personal totem and its relation to the individual. It sometimes happened that, instead of being simply revealed in a dream or in a quiet manner as just related, the totem spirit suddenly prostrated the native, who fell as if struck dead. Bystanders, if there were any, knew well the reason of the phenomenon. The prosaic Indo-European would have simply attributed the accident to a cataleptic stroke. Not so the American aborigine, however. According to his own psychological notions, the mind and soul of the smitten native had been attributed by some powerful totem spirit, with which he was evidently communing.

By loud chanting with rhythmical beating of drums the bystanders would seek to prevent that this interview with the denizens of the invisible world did not last a dangerously long time, and when the patient came to, he was looked upon with a consideration bordering

on awe. Ordinarily he had quite a story to tell of his visit to the home of the spirits. Should the attacks of his disease—I mean his excursions to the world of the unseen—prove of frequent occurrence, he would be treated with fear and trembling, and pronounced a powerful medicine-man or shaman. In the same way as contact with magnetism begets magnetism, it was evident to the simple mind of the aborigines that potent magical virtues were bound to be imparted through these repeated communings with the world of magic.

In that sense the shamanistic powers were but an extension or an exaggeration of the tutelary virtues inherent in the personal totem. The latter were for the individual alone; the former were intended for the benefit of others. When thus the mysterious forces of some powerful totem reposed in a member of the tribe, it was but natural that he should make use of them in order to counteract the influence of the malignant spirits whose presence caused sickness. Thus it was that disease was treated among the Dénés not only by the use of herbs, cauterizations and other remedies or surgical operations, but also and chiefly by the exertions of the shaman.

The hidden forces of which he was the proud possessor were called *con* in Carrier, a word which means at the same time magic and song, which circumstance reminds one of the ideas of the ancients on the same subject. They certainly seem to have had some similarity with those of the uncultivated people now under study. Chanting in rhythmic cadence was apparently reputed to have a sort of influence over nature not much short of that of magic, if we are to believe Virgilius when he sang:

"Carmina vel cœlo possunt deducere lunam."

—(Bucol., Eglog. VIII.)

When the services of the adept in the magic art were called into requisition, the great protégé of the powerful totem divested himself of all his clothing, and donned the spoils of his own tutelary genius, a bear skin, the claws of a grizzly bear, the feathers of an owl, etc., and the ceremony commenced near the patient who was lying on the ground. While the assistants were beating vigorously their drums, the "doctor," with his rattle in hand—a hollow receptacle filled with sonorous pebbles, to which a short handle was attached—danced to the time imparted by the drummers. By dint of bodily efforts and the singing of a particular chant of his, whereby he strove to impose his will on the evil spirits in the patient, he worked himself to a state of frenzy which, at times, brought on himself additional attacks of catalepsy.

As soon as he had recovered, he would recommence his dancing and singing amidst the ever increasing tumult of the drummers and other assistants, who were now lustily taking up his own song. Then, receding a while from the patient, he would point to the prostrate form on the ground the image of his own genius or totem, wherewith he would exercise the evil spirits of his victim, all the time moving in his dance in his or her direction. Then, falling suddenly on the naked limbs of the sick, he would suck out therefrom either a diminutive reptile, a thorn, a stone, etc., which he would present to the gaze of the admiring assembly as the materialized form of the cause of the disease.

Another rôle played by the shaman among some western tribes, such as the Carriers and the Chilcotins, was that of father confessor.

I have long known of that particularly, but always refrained from mentioning it, out of fear lest I should seem to be drawing on my imagination. But Harmon, the very first author who lived among the Carriers, is very explicit on this point. "When the Carriers are severely sick," he writes, "they often think that they shall not recover unless they divulge to a priest or magician every crime which they may have committed, which has hitherto been kept secret. In such a case, they will make a full confession, and then they expect that their lives will be spared, for a time longer. But should they keep back a single crime, they as fully believe that they shall suffer almost instant death."*

XIII.

Conjuring remained, however, the main function of the shaman. This was of seven kinds among the Dénés. There was, first, the curative conjuring which I have already described. The second kind, preventive conjuring, I shall treat of in the next paragraph.

A third form of the art was inquisitive conjuring. I cannot find a better instance of it than in the following extract from my last book, which has reference to the loss and finding of the first iron axe ever possessed by a Carrier Indian. "The native chronicler goes on to relate how that shaman, who enjoyed a wonderful reputation even among his peers, had a personal totem or familiar genius, in the shape of a skunk-skin, which he wore hanging from his neck. This, during his trances, he used to press in his hands, when it emitted a piercing scream. On the occasion of Na'kwoel's loss, in the midst of dancing, singing and beating of drums, the shaman squeezed his skunk-skin, upon which it cried as if the animal had been alive, and, detaching itself from the neck of the medicine man, it made for the heap of boughs, wherein it plunged and remained for a while. When it came back, it bore in its mouth the lost adze blade!"†

Another circumstance, of much more frequent occurrence, called the same powers into play. Did any influential or greatly beloved person die? Nobody would think of attributing his or her demise to natural causes; but the friends or relations of the deceased would want to ascertain the name of the party who had brought his malefic gifts into play in order to encompass his or her death. The shaman was therefore consulted, who, in the midst of his dancing and singing, attired in all the glory of his usual paraphernalia, so as to be the more easily brought into direct communication with his totem, would suddenly fall down, feigning death or sleep, during which he was held to see through the machinations of the dead person's enemy. On resuming consciousness, he would unhesitatingly name the latter, and thereby in most cases pronounce his death warrant.

This brings us to the consideration of malefic conjuring, which is the fourth kind of shamanistic activities. This was much feared, and such as were supposed to be addicted thereto were but half safe among their fellows. Its use, real or imaginary, was the cause of many murders committed in retaliation for deaths attributed to the black art.

*"A Journal of Voyages," pp. 256-57.

†"Primitive Tribes and Pioneer Traders," p. 10 of third edition. Wm. Briggs, Toronto, 1905.

Intimately connected therewith, and yet different in the mode of exercising it, was witchcraft. This consisted in secret practices by ordinary mortals with a view to causing bodily harm to an absent enemy or injuring his possessions. Pieces of his attire, a lock of his hair, or if possible parings from his finger-nails, hidden in certain unlucky places, by the side of dreaded reptiles or their skins, amidst the muttering of imprecatory words, were reputed extremely efficacious in such cases.

Whether the victim of real witchcraft or of malefic incantations, the doomed individual, as soon as made aware of his dreadful position, almost invariably began to feel unwell. He would then gradually wither away and die in a short time. Such was—indeed, I should perhaps say such is the power of imagination with these timorous people!

A fifth kind of conjuring may be termed operative. It was intended chiefly to create good weather, make rain, bring on fair wind, hasten the annual run of salmon, or render it more abundant, remedy the barrenness of women, implant love in persons of different sex, etc. When the object of the incantations was of public utility, several shamans usually combined their efforts towards the attainment of the desired end.

There was, moreover, a sixth kind of conjuring, which was in reality nothing else than juggling or prestidigitation. It was at times resorted to in order to retain the shaman's hold on the admiration of the plebs, and still further increase faith in his ministrations. Marvellous deeds, such as the eating of fire, the swallowing and disgorging without any unpleasant effects of reputedly venomous reptiles, etc., were then accomplished in the sight of wondering natives.

In my recent work already referred to, I quote the case of a famous Babine shaman who "in the course of his religious dances, would introduce in his mouth the green, unmatured fruit of the amelanchier or service-berry, which, in the presence of all the spectators, would soon ripen to the extent of yielding a copious flow of dark juice."*

The seventh and last kind of conjuring we will dignify by the name of prophetical. The epithet sufficiently explains its nature. What the reader will probably be more anxious to know is whether there ever was any actual sample of the genuine article among the Déné tribes. To this I cannot answer otherwise than by referring to the above mentioned Babine shaman. He was the founder of a kind of religion and the center of some sort of Messiah craze, and when his authority and prestige had been well established, not only within his own tribe, but even amongst the tribes of coast Indians, he set upon prophesying. All his surviving tribefellows, and even a trustworthy white lady who has mastered the Tsimshian language, assure me that in every case his prophecies were fulfilled, which fact, if really true, is so much the more extraordinary as he is reported to have even announced the introduction of the telegraph into his country, an institution of which the natives had not then the least idea.†

*"Primitive Tribes and Pioneer Traders," p. 240 of third ed.

†Harmon himself says that "it is not uncommon for events to take place much as these conjurers predict." *Op. cit.*, p. 325.

XIV.

I have left preventive conjuring out of its natural place because, to be properly understood, it requires more than a passing reference. To fully grasp its import we must penetrate still further into the intricacies of the Indian mind.

According to the primitive Dénés, man is made up of a perishable body and of a transformable soul, if soul this can really be called, which they knew as *nezal*. This is almost equivalent to the *anima* of the Romans, inasmuch as it gives warmth and vitality to the body. However, etymologically speaking, it is rather the effect than the cause of life, since *nezal* means at the same time human heat. In fact, though this word is used to-day to designate the soul as we understand it, it is possible that its signification was originally slightly different.

Besides this principle or physical condition, there was *netsen*, man's shadow, commonly called second self among us. This was a kind of double, a reflection of the individual personality, which was, of course, invisible in time of health, because then confined within its proper corporeal seat, but which, on the approach of sickness and death, wandered off the body and roamed about, seldom seen, but often heard, in the vicinity of its normal home. Its absence therefrom, if too prolonged, infallibly resulted in death.

The rôle of the shaman in such cases is easy to guess. His duty was to coax or force the truant soul to return to its proper seat. With this end in view, he would, in the evening, hang up the patient's moccasins previously stuffed with feather-down, and, on the following morning, should the down be warm, he would carefully put them back on his feet with the wandering shade therein. At other times, the simple imposition of the conjurer's hands on the patient's head, or silent ablutions of the weak parts of the body, with water endowed with magical properties through the manipulations of the conjurer, would have the same effect on the patient.

Should the exertions of the medicine man prove of no avail against the claims of nature, the soul or immortal personality of his patient — or victim — was then called *nezal*, in Carrier, a word which implies void and impalpability. It was supposed to embody what was left of man's previous self.

As to the fate of these shades after death, very little was known. The eastern Dénés believed them to be constantly erring in some underground world, where their occupations were not much different from those of their survivors on our sphere. Most of them live, they claimed, on fœtuses, mice, toads and squirrels, while some, who are more fortunate, pass their time in fishing for small fry, visiting their nets in double canoes, or dancing together on the shores of the river.

According to the Carrier mythology, the shades inhabit some subterranean village beyond a large river, which they have to cross after a dismal voyage through snakes, toads and lizzards;* but the fact that some of their homes—large board houses like those of the coast Indians—and half of the canoes used to ferry them across the river,

*See my paper on "The Western Dénés." Proc. Can. Inst., 1889.

were painted red, the color of brightness and bliss, while the others were black, the token of bad feeling and of a spirit of revenge, would seem to indicate that their fate is unequal.

Most of these and other notions probably originated in the brains of some shamans who professed to have visited the land of the shades.

Before parting with this important personality in the Déné theologic system, we may as well ask ourselves what were the usual effects of its ministrations among the sick. Strange as it may seem, they were generally satisfactory. Hearne mentions two striking cases that fell under his observation,* and my own experience and studies go to confirm the good results claimed for the shamans' conjuring. People will cease to wonder, when they take into consideration the extraordinary influence of the mind over the body, among credulous and naturally timid aborigines as the northern or Canadian Dénés are.

Of course, it did happen often enough that death claimed its own. In such cases the shaman had to build up as satisfactory as possible a theory as to the real causes of his failure, were it only to save his prestige in the tribe; but under no circumstances had he to return the generally valuable presents—dressed skins or ornamental shells—received in consideration of his labors. As to the relatives of the deceased generally sacrificing "the quack or some of his connections," as Ross Cox declares† was done by the Carriers of British Columbia, there is absolutely no ground for that assertion.

XV.

Unless otherwise noted, the foregoing applies to all the Déné tribes, irrespective of geographical location. We now come to the custom characteristic of the Carriers exclusively.

We suppose that a *tæneza* or notable among them was evidently doomed. The hereditary chant denotive of his rank was taken up by a member of a different clan and continued by exo-gentile villagers until he expired, while his own relatives and clanfellows, especially the women, would rend the air with their lamentations. On the chief's demise, one or two young men of another clan were deputed to announce the sad tidings to neighboring villages, and invite their inhabitants to the incineration ceremonies.

In the meantime, daily dances by exo-clansmen would act as a diversion to the relatives' grief, while the poor widow, already shorn of her hair by the relatives of the deceased, would have to keep watch day and night by the body of her late husband.

On the great day of the funeral, in the presence of as large a concourse of people as could be secured, the remains were laid over a pile of dry wood, face upwards and painted as on festive occasions, while the rest of the body was covered with a robe of beaver skins and the feet encased in a new pair of moccasins.

*"A Journey from Prince of Wales' Fort," pp. 194 and 219.

†"Adventures on the Columbia River," p. 325. New York, 1832. It is but simple justice to the reader to warn him against the exaggerations and one-sided assertions of that author, or rather his informant, Jos. McGillivray, when he speaks of the Carriers. For instance, notwithstanding his explicit declarations, those Indians never practised scalping, except at the bidding of the whites among them.

Fire was now applied to the funeral pyre by an exo-clansman, who was paid on the spot for this service, while the widow was obliged by etiquette to hold in as long embrace as was possible under the circumstances the remains of her late husband. When the agony of pain arising from the violence of the fire or the suffocating smoke became unbearable, she was momentarily drawn off by her own relatives, but had soon to return to her post, until a fit of fainting would again part her therefrom. If her apparent earnestness in her endeavors to get burnt with the body did not satisfy the relations of the deceased, they would themselves jostle her into the furnace, thereby disfiguring her for life, with a view to diminishing her chances of remarriage, especially when she had not proved a model wife.

The garments of the dead once consumed, they were immediately replaced by others, skins or blankets, which were thrown over it by exo-clansmen, whose presents were carefully noted, as they had to be repaid in kind on subsequent occasions of a similar character, or in the midst of one of those ceremonial feasts of which I shall soon entertain the reader. Not unfrequently the shaman who had unsuccessfully treated the deceased adopted this expedient as a means of wiping out his shame, as they called it; but, of course, in this case this was an unrequited offering.

Shortly after the cremation of the remains, a bark shelter was erected on the spot, and the relatives of the deceased would pick up from among the ashes the few remaining bones, which they would enclose, first in a birch bark receptacle, and then in a leather satchel ornamented with fringes and suitable designs. This they would hand to the widow, who had thenceforth to *carry* it constantly on her back, or, at night, keep by her side. Hence the name of the tribe, which is but a translation of the *Arehlne* by which they are known of the Sékanais. This is the most notable of the few really aboriginal customs proper to a Déné tribe which I can recall to mind.

I will not expatiate on the terrible fate of the now enslaved widow, who had become part and parcel of the chattels belonging to the female relatives of the late *tawèza*. I also feel reluctant to repeat here what I have elsewhere written with full details* concerning the series of ceremonial feasts which the maternal nephew of the deceased headman had to give to crowds of exo-clansmen, in order to be entitled to succeeded to his rank, privileges and property. Yet these feasts, or potlatches as they were called from a Chinook word meaning "giving away," were of such importance in the eyes, not only of the Carriers, but even of all the western Dénés, who borrowed the entire social system from the coast Indians, that I must at least summarize that information for the benefit of such as may not have read my previous papers published by the Canadian Institute of Toronto.

XVI.

These feasts were public distributions of dressed skins, eatables and other property by the people of one gens to the assembled members of other gentes. Apparently useless shows of vainglorious liberality on the part of the headmen, who seemed for the nonce to act as well deserving benefactors, they were withal nothing more or less than formal payments of debts contracted by the potlatching clan

*"The Western Dénés," p. 147 *et seq.* Proc. Can. Inst., vol. XXV.

towards the present partakers of its bounties on the occasion of past feasts or public distributions. They might also be considered as letters-patent granted by and paid to the community, whereby the hunting grounds of a deceased "nobleman" were turned over to his lawful heir. The Dénes were eminently democratic in their social constitution; the assembled multitude of various clans, with their respective headmen, represented the highest authority amongst them, and these solemn assizes had for their principal object what was in their mind tantamount to the payment of the fees which, with more civilized nations, accompany succession to rank and landed estate.

A series of six feasts had generally to be gone through before this latter end was accomplished among the western Dénés. The first was called "the taking off the ashes," because the remains of the dead *taneza* were supposed to be therewith removed from the fire-place, where they had theretofore been lying. It was given soon after his demise, and consisted mostly of a public repast followed by the distribution of dressed moose or cariboo skins, torn, in the gaze of the assistants, into strips of the dimension most convenient for making pairs of moccasins. Such as were intended for notables were always given twice the size of those that went to the *commune vulgus*.

The second potlatch took place some time afterwards, and was intended to celebrate the deposition in the place of honor of the remains of the late *taneza*, though said remains might have been previously cremated.

The third was called "the imposition of feather-down." As among the coast tribes, this material was considered as distinctive of rank and honor. This feast was one of the most important of the whole series, and it was equivalent to the aspirant *taneza's* elevation to the social status of his late maternal uncle. It was celebrated with an elaborate ceremonial, which lack of space prevents me from detailing.

The fourth potlatch was to honor the installation of the new headman in the traditional seat of his predecessor.

The fifth was simply an unostentatious meal given to bands of young men and notables, male and female, who entered, while dancing and singing, the lodge of the new "nobleman," whose last and most important feast was expected to take place within a short time.

This latter potlatch was a most elaborate affair, whose chief feature was the erection by the public of a large ceremonial house for the new *taneza*. In the evening, two masked jesters would try to amuse the public by their antics, while the notables, dressed in their insignia, would dance on a kind of primitive stage. Prominent among these insignia were the ceremonial wig, a beautiful head-dress made out of the hair of three women tastefully plaited, with numbers of fine long shells (*Dentalium Indianorum*) inserted therein at regular intervals, or laid out side by side in complete rows; a long apron with a fringe decorated with many sonorous trinkets, and a breastplate cut in the shape of a wide crescent practically covered with the same precious shells.

The day after this dance took place a pantagruelistic repast, during which the bones of the late *taneza* were taken from the back of the widow, who was then presented with a new blanket and publicly declared free to remarry.

The third day of that feast might have been called shaman day, inasmuch as those possessed of magical powers then used the same for the benefit of the whole assembly. Then took place the great distribution of clothing, blankets, etc., and the guests were obliged by custom to offer the rudely carved image of the totem of the host's clan any piece of property with which they might choose to present the new *tcaneza*, and through him his entire clan. Due count of these was as usual taken and carefully remembered for compensation on a future occasion of similar import.

XVII.

I have mentioned dances. They were as rude and unartistic affairs as could well be devised. Among the Carriers they consisted mostly of jumps and leaps with both feet simultaneously, to the time of one or two drums or tambourines, accompanied by a phrase repeated *ad nauseam*, with meaningless monosyllables sung out to the tune of the weirdest imaginable melody. With the Sékannis, their immediate neighbors in the north-east, the motions of the legs were not so much in evidence, and were sometimes entirely replaced by alternate sets of two or three jerks of the shoulders to the right and to the left.

Sun, or strictly religious, dances were unknown among the Canadian Dénés.* The nearest approch thereto was that practiced on the occasion of an eclipse. To hasten the reappearance of the luminary, they would silently emerge from their lodges, and then, ranging themselves in single file, they would start a sort of propitiatory dance. To this effect, bending under an imaginary burden, though packing only an empty bark vessel, they would strike in cadence their right thigh, repeating in piteous tones, *hanaintaih, qé!* Come back, oh, do!

Ceremonial dances, such as that noticed in the preceding paragraph, were usually performed either on a stage or in a free place within a large lodge by one or two men, rarely by any woman, unless she be a titled noble woman. Common, or simply pleasure dances would be started almost anywhere by people of either sex. In these the dancers moved in circles.

Among the eastern Dénés, the Dog-Ribs were considered the master-dancers of the family. Yet, that their art was not any too remarkable for its gracefulness is shown by this quotation from Sir Alex. Mackenzie's journal, who witnessed one of their dances when he first met them in 1789: "The men and women formed a promiscuous ring. The former had a bone dagger or piece of stick between the fingers of the right hand, which they kept extended above the head, in continual motion; the left they seldom raise so high, but work it backwards in a horizontal direction, while they leap about and throw themselves into various antic postures, to the measure of their music, always bringing their heels close to each other at every pause. The men occasionally howl in imitation of some animal, and he who continues this violent exercise for the longest period appears to be considered the best performer. The women suffer their arms to hang as without the power of motion."†

*Except among the Sarcees, who are far from being typical Dénés.

†"Journal of a Voyage," vol. I., pp. 233-34.

A common occasion for an impromptu dance was until recently the meeting of parties representing different tribes. The Dog-Ribs, Loucheux, Carriers and Chilcotins are on record as following that custom, which amounted as much to a mark of deference as to a token of friendship. This is evident from the fact that, when the leader of a Chilcotin party of marauders who had just massacred almost the entire population of a Carrier village fell in with the chief of the latter, accidentally reduced to a state of utter helplessness, the victorious Chilcotin asked his rival to "dance for him."*

On such occasions "the two bands commence the dance with their backs turned to each other, the individuals following one another in Indian file, and holding the bow in the left hand, and an arrow in the right. They approach obliquely, after many turns, and when the two lines are closely back to back, they feign to see each other for the first time, and the bow is instantly transferred to the right hand and the arrow to the left, signifying that it is not their intention to employ them against their friends. At a fort they use feathers instead of bows."†

Generally of a most indolent disposition, and with plenty of leisure when not pressed by famine, the Dénés were naturally not deficient in games wherewith to while away their time. The scope of this paper will not allow of more than a mere enumeration of them. Among the Carriers *atiyèh*, which was played with circular pieces of bone, was based on the principle of the modern dice. *Athih* necessitated the use of a number of slender bone sticks, a few inches long. Both have become obsolete. This cannot be said of what I will call the "hand-game," from two more or less polished bone-sticks held in the hands, while a band of Indians execute a song proper to the game. Winning depends solely upon a successful guess as to the hand into which the peculiarly marked stick has been surreptitiously transferred.

These are games of chance, and are played anywhere and at any time, though innumerable nights, especially, are made hideous by the tumult and revelry which the last game usually entails. This is so absorbing to the native mind that many a Déné has been thereby despoiled of all his belongings. Other games there are in which personal skill, or a certain degree of exertion, are the chief factors. Besides lacrosse, which seems to have been known long before the advent of the whites and is responsible for the name of an important locality—Isle-à-la-Crosse—within Chippewayan territory, the most popular among the western Dénés is *tatquh*, which is played with slender sticks, four or five feet long, thrown out through the air, the distance reached determining the winner. Its equivalent in winter time is *nazaz*, which is also the name of the finely polished wooden rod, with a sort of elliptical head, which is launched on the frozen surface of the snow. Two rival teams, composed sometimes of half a dozen men or boys, are then in the field, and the largest aggregate of points gained indicate the winning side.

Another game of a quieter character is *ta'ko*. It is played mostly by the fireside, during the long winter evenings, with a blunt-headed

*"History of the Northern Interior of B.C.," p. 15. Wm. Briggs, Toronto.

†"Journey to the Shores of the Polar Sea," by Sir J. Franklin, vol. III., p. 50.

stick sent by two partners sitting opposite to one another, against thin, springy boards firmly set in the ground near each player. When one of these is struck so dexterously that the stick bounds back to the knees of the party who threw it, the latter is entitled to recommence until luck ceases to favor him.

This is of too childish a character to suit the lively disposition of most Dénés, who prefer arrow-shooting by two competing bands taking as a target a rolling disk or wheel of willow bark. The arrows which go home become the stake which the rival team has to win over by hitting the disk now hung up on a stick.

XVIII.

But, though little more than a grown-up child, even when well up in years, the Déné has to live, and therefore to work, at least occasionally. With no absolutely sedentary status, and forming an embryo society with ranks too thin to warrant or require a distribution of labor among differently endowed individuals, any great diversity of avocations cannot be thought of in his case. In fact, his occupations may be said to be reduced to hunting, fishing and gathering berries or roots, and, in this respect, practically every family is on the same footing. Hunting is exclusively the men's work; fishing, mostly the women's, and berry collecting entirely so.

Hunting may be considered under two heads: hunting proper, or the chase of the larger game, and trapping or snaring. To this division corresponds closely enough that of venison and fur animals. The former are moose (*Alce americanus*), cariboo (*Rangifer caribou*, and, east of the Rocky Mountains, *R. groenlandicus*, or barren ground cariboo), the musk-ox (*Ovibos moschatus*); while, on the same range, or exclusively to the west thereof, are to be found the mountain goat (*Capra americana*), the mountain sheep (*Ovis montana*), and the mule deer (*Cariacus macrotis*). These were originally dispatched with strong bows, and arrows usually fletched with three half feathers, and tipped with augite-porphyrite, obsidian, or impure quartz, though sometimes also with bone.

While the task of chasing game is within man's province, it is reserved to woman, as the beast of burden and factotum of the family, to fetch home and dry its meat. For this purpose it is neatly carved into thin and very long slices, which are suspended on transversal poles by the fire-side. In the east these were afterwards pounded fine and mixed with grease or marrow, under the name of pemmican, a preparation which does not seem to have ever been extensively introduced west of the Rocky Mountains.

As adjuncts to winter hunting and travelling, all the Canadian Dénés have snowshoes, which vary in pattern and finish according to the tribe which makes them. The Sékanais snowshoe is abnormally long, as it is sometimes used as a sliding sleigh while descending the precipitous slopes of their mountains. The eastern snowshoe is chiefly remarkable for its uneven sides, the outer stick of each bulging out, so that they cannot be more easily interchanged than modern shoes. Its Louchoux equivalent is long and very broad in front. Almost all the Déné models are curved up in their fore-parts, which are sometimes pointed and made of two sticks, and sometimes round, or rather elliptical, being made of only one stick.

Among those tribes which subsisted principally on deer or caribou, pounds with avenues of stout sticks or trees leading thereto were formerly erected, at the cost of much labor. Therein whole herds of animals were driven and finally slaughtered.

It would be too long and foreign to my purpose to describe the various devices resorted to by the Canadian Dénés with a view to entrapping or ensnaring bears and the minor fur-bearing animals. I must be allowed to refer the reader to my "Notes on the Western Dénés,"* pp. 93-104, where he will find a full description of the same. I will simply remark, as a token of that people's regard for continence, that, among the Carriers, a married man separated *a thoro* from his wife a full month prior to setting his traps or snares, during which time he led a sort of penitential life intended to secure good luck for his forthcoming efforts.

If eminently huntsmen and trappers, the Dénés are also, and perhaps to a still greater extent, fishermen. In fact, among the western tribes, salmon may be said to be the staple food for old and young. Three or four species of that fish annually ascend the rivers emptying into the Pacific and their tributaries, but *Oncorhinchus nerka* is the only one dried for later use, on account of its well-known gregariousness and excellent keeping qualities. Several contrivances, too numerous to describe in detail, are used, according to the nature of the localities. Whenever possible, the streams are staked across as in northeastern Asia and provided with weirs leaving access, every few feet, to openings in the trellis work leading to basket-like traps from which escape is impossible. Enormous quantities of the fish are usually secured every year.

Salmon is not found within the basin of the Arctic Ocean. It is replaced to some extent among the eastern Dénés by many varieties of minor fish, prime among which is the coregone, or whitefish (*C. transmontanus*) and several species of trout. When taken in the beginning of the winter, the former is allowed to freeze, after which it is considered a great delicacy. Nets of various sizes, which were originally of the fibres of nettle (*Urtica Lyallii*) and willow (*Salix longifolia*), are usually the means of catching that and any smaller fish, though spearing and hook-fishing are also quite often resorted to. But among the Yukon Loucheux who, if we are to believe Sir John Richardson,† were till his time unacquainted with nets, weirs with wicker baskets were the only means of procuring whitefish.

XIX.

This, as well as salmon and smaller fry, is ordinarily boiled without salt or any seasoning, or roasted by the fireside. But when the Carriers of old wanted a really palatable dish, they buried their salmon in the ground until it reached a state of semi-putrefaction, when it was mixed with more or less rancid oil, originally extracted from the heads of the same fish. If a few dried berries were added to the compound, it was considered the *nec plus ultra* of table delicacies.

*"Transactions of the Can. Institute," vol. IV. Toronto, 1894.

†"Arctic Searching Expedition," vol. I., p. 390.

Their berries, as a matter of course, greatly vary according to the territory of the tribes. They are mostly of the *Viburnum*, *Vaccinium* and *Empetrum* genera, though, to the Carriers, for instance, there is nothing like the fruit of the *Amelanchier alnifolia* for economic importance in the vegetable kingdom. They gather it in immense quantities in bark vessels, and compress it into thin cakes which, properly dried, will keep for quite a long time. The soap-berry (*Shepperdia canadensis*), and several other berries or roots, prove also valued additions to their larders.

Prominent among the latter in the eyes of most of the tribes is the root of the red lily (*Lilium columbianum*), which is appreciated as an article of diet even by the natives of northeastern Asia. The Chilcotins prefer two tubers which they call, respectively, *nunti* and *æsroah*. These are small, and spheroidal or oblong, somewhat of the form of potatoes, which their women dig up in large quantities.

All the vessels of the prehistoric Dénés were made, without much art, of birch bark, sewed with the fibrous rootlets of the black spruce (*Abies nigra*). They have to this day remained unchanged as to shape or material except among the Chilcotins, who do woven basketry as their Salish neighbors in the south. As a matter of course, the original bark kettles have long been discarded in favor of the tin kettles of commerce. The process of boiling by means of hot stones thrown into a vessel full of water, though abandoned when the white man's wares were adopted, has not, however, entirely disappeared from among all the tribes. The Carriers have still recourse to it when cooking their service-berries.

It is a long way from berry gathering or cooking to war. But, since we have mentioned the use of bows and arrows, it is, perhaps, natural that we end this paragraph by a few words on that subject. War among the Dénés was but a series of ambuscades and surprises, resulting when circumstances were favorable to the attacking party, in general massacres. Women and children fell victims to the aggressors' rage just as well as the men; but in some cases the former were spared in so far as their lives were concerned. They were then taken prisoners, and almost invariably became the wives of the leading men among the attacking party. In too many cases the most barbarous cruelties were exercised against the fallen foes, whose bodies were horribly mutilated.

But the two first chapters of my "History of the Northern Interior of British Columbia," which relate with full particulars well authenticated war expeditions among the Carriers and the Chilcotins, will enlighten the reader on this subject better than any didactic treatise on the same could do. Suffice it to add that the war-bow of several prehistoric tribes was usually furnished with one, sometimes two, stone or bone points, which allowed of the weapon being used as a spear when shooting had become impossible. Two kinds of armour, one of stiffened skin, the other of rods tied together, were also in use among the western Dénés. Moreover, the Carriers, at least, knew of the shield, which they called- indicating thereby its material—*'kella-thon*, or "amelanchier which is held by the hand.

XX.

We will close this compendium of Déné ethnology and sociology by a few remarks on woman, and her place in the primitive society of these aborigines. Though, as we have seen, her condition in a few tribes was bearable, we may safely assert that, in general, it was humble and lowly, nay, we should say miserable. Some authors, in these latter times, have striven to react against the common and very just idea of her pitiful state in barbarous societies, such as that of the northern American Indians. They have quoted well authenticated cases of regard for individuals of her sex, and even instances when some of them have attained rank and consideration in their tribes. In particular, the female chief who practically saved Robert Campbell's life among the Nahanais has been represented as a splendid exemplification of the power of woman in aboriginal society. As I intend writing for the Congress of Americanists a paper specially devoted to the treatment of this very question, I shall content myself with remarking here that those authors simply confound the exigencies of tribal organization with the status of woman as woman.

As we have already noted in the course of this essay, the laws which govern inheritance preventing the expropriation of land from one clan to another, they occasionally forced the tribes to confer on women titles and privileges which went by right to men. Such cases invariably predicated the absence of any suitable male heir, and did not affect the standing of woman as daughter, wife or mother. In other words, if these exceptional circumstances rendered her lot more tolerable, this was simply owing to social necessities, but not, as amongst us, because the titulary happened to belong to the weaker sex. Marks of deference were, indeed, paid her in public, but there was very little chivalry in this; in the privacy of the family life she became a woman again, that is, an inferior human being, whose duty it was to do all the menial work by the lodge or tepee, unless her special rank and private circumstances furnished her with attendants to replace her in the discharge of her household duties.

Among all the Déné and most other American tribes, hardly any other being was the object of so much dread as a menstruating woman. As soon as signs of that condition made themselves apparent in a young girl she was carefully segregated from all but female company, and had to live by herself in a small hut away from the gaze of the villagers or of the male members of the roving band. While in that awful state, she had to abstain from touching anything belonging to man, or the spoils of any venison or other animal, lest she would thereby pollute the same, and condemn the hunters to failure, owing to the anger of the game thus slighted. Dried fish formed her diet, and cold water, absorbed through a drinking tube, was her only beverage. Moreover, as the very sight of her was dangerous to society, a special skin bonnet, with fringes falling over her face down to her breast, hid her from the public gaze, even some time after she had recovered her normal state.

This had also another purpose. It replaced with our Indians the common houses for pubescent girls which obtain among some of the aboriginal tribes of the Philippine Islands, in that sense that it

announced the fact that the wearer of it was now in the ranks of marriageable parties.

With some of the eastern tribes girls were betrothed from their infancy by their parents, but among most of the western Dénés the young man had to work quite a period of time for his intended bride's parents. In the northeast, as we have seen, wrestling decided the fate of a maiden. Some cases are also on record in connection wherewith goods and property were the only consideration determining a match; in other words, the woman was then the object of a regular bargain. In no case was there any marriage ceremony; the young man simply took the girl to a new tepee and lived with her as husband and wife, or, as among the Carriers, he settled with her in a corner of the large lodge of his father-in-law.

Polygamy was prevalent everywhere, but, except in the cases of very good hunters or of prominent members of the tribe, few men had more than two wives. I know of a chief who had four, and Hearne mentions another who had eight. Divorce was also common enough, especially when the woman had proved barren, lazy, or self-assertive. Cases of independence, however, were exceedingly scarce, and all the early explorers were struck with the down-hearted countenance and humble behavior of the Dené wives.

Every recurring menstruation brought about a temporary separation *a thoro*, and this naturally followed also child-births. Parturition was generally easy enough, though even in the early times painful confinements occasionally happened. If in the woods or travelling, the poor mother was not on that account treated with any more feeling or humanity, but had to proceed with the drudgery of her daily life, while packing her new-born on her back.

In case of any one losing her husband, the wife had to follow the laws of the levirate, and marry her surviving brother-in-law. Many other directions of the Mosaic code were also in vigor among the original Dénés and not a few of their modern descendants. I leave it to my previous papers to detail the same.

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9. THE SALISH TRIBES OF THE INTERIOR OF BRITISH COLUMBIA.

By Franz Boas.

The interior of British Columbia is inhabited by Salish tribes and by the Chilcotin and other Athapascan tribes. Their culture resembles to a certain extent that of the northern Athapascan tribes in its simplicity, and is also allied to that of the tribes of the plateaus farther to the south. It differs fundamentally from the culture of the tribes of the north Pacific coast, and is also quite different from that of the Indians of the Plains, although certain traits of culture have been imported from both sources.

The Indians of this region are hunters and fishermen. Salmon, which ascend the large rivers, are an important staple food; but, besides this, deer and other mammals are hunted, and are infinitely more important in the domestic economy of the people than they are among the coast tribes. The people also gather large quantities of roots and berries, and for this reason their habitations are changed from season to season, according to their pursuits. During the fishing season they live in the river valleys, where the permanent villages are located; while during the hunting season and root-gathering season they live in the mountains. Since the lower part of the country is dry, and wood is not plentiful, the wood industry, which is so characteristic of the coast Indians, is only slightly developed. Stone implements are made both by battering and flaking. Jade axes and adzes are of frequent occurrence. The art of painting is only slightly developed. Clothing is made principally of deer-skin which is carefully prepared. The clothing is much fuller than it is among the coast tribes, moccasins, leggings, breech-clouts and various types of shirts being worn. The head is covered with a cap or with a headband. Besides deer-skin clothing, woven blankets and ponchos made of sage-brush bark, are also in use. The weaving is done by a simple process of twining around strands of shredded bark. The tribes of the Coast Range have a highly developed art of basketry. They make beautiful coiled ware with designs produced by imbrication. These coiled baskets are generally angular in shape, and suggest that the type was developed from bark baskets and boxes. Bark basketry is found principally among the more eastern tribes of this region. Mats, baskets and pouches are also made by twining, the material used being rush and Indian-hemp fibre. Blankets of strips of rabbit-skin are also made by twined weaving.

The permanent house is a semi-subterranean lodge, consisting of a large, round excavation over which a conical roof is built. The entrance to the dwelling is through the smoke-hole in the middle of the roof by means of a ladder consisting of a notched tree. In summer the pople live in round or square tents of varying construction, differing, however, in type from the skin tent of the Plains Indians. The tents are generally covered with rush mats; while, on the other hand, in the mountains the simple lean-to is used. The double lean-to, which is so characteristic of the Athapascan tribes, is found throughout this area.

In the ornamentation of dress, feathers are much more important than among the coast tribes, and they are treated in much the same fashion as by the Plains Indians. Nose and ear ornaments of dentalia and beads are commonly used.

The bow is partly of the some type as that found on the coast, being flat in cross-section with round grip in the middle; but by far the greatest number of their bows are of the characteristic sinew-backed type of the plateau area. Arrows with simple stone points and with barbed bone points are used. Deer and small game are often trapped in snares. Fences were also built at appropriate places to drive the deer in the direction of the hunter. Fish are caught, partly in fish-traps, partly by means of bag-nets, which are used from rocks near the banks of the river, or from platforms built over the water. Hooks and fish-spears are also used. In travelling on the rivers, both dug-

outs and bark canoes are used. The bark canoe has long spurs under the water line, and is made of spruce bark.

In warfare the bow and arrow, lances, knives and various forms of clubs are employed. The war-club with loose stone encased in hide, which is characteristic of the Plains Indians, is found here also. For protection, slat and rod armor was used.

Some of the games are almost identical with those played by the coast Indians, while others resemble those played by the Indians of the Plains. To the former group belong the beaver-teeth dice and the painted gambling-sticks. The well-known hoop-and-spear game is found here also. The game of hiding-the-button is played in the same manner as on the coast. On the other hand, some of the ball games—for instance, a kind of lacrosse—resemble very much the ball games of the Plains.

The decorative art of the plateau Indians is very slightly developed. It is probable that in former times there may have been a more marked development of designs produced by means of embroidery, but these no longer survive. There is almost a complete absence of works of plastic art. Among the archæological remains of this region, which, without any doubt, belong to the ancestors of the present inhabitants of the area, are found a few good carvings in bone, and fairly good realistic representations on stone mortars. These, however, are very few in number. In type they resemble somewhat the plastic art of the coast, but the small number of specimens shows clearly that these objects must always have been rare. Painting is also of a very crude character. A number of highly conventionalized designs are found, which are interpreted in accordance with the general ideas prevailing among the people. Some of these designs consist of simple lines and dots. They are, probably, the oldest type of decorative design of those tribes. Other designs seem to be related to those of the Prairie Indians. This is also suggested by the fact that these designs occur on a few painted pouches and parfleches that are found here. Most of them are angular and consist of rectangles and triangles. By far the bulk of the painted designs are pictographic in character, and are related to the characteristic pictographic art of the Plains Indians. In a few cases very simple forms are interpreted in a symbolic manner. Thus a red dot on a round stone club has been interpreted as a thunder-bird in the sky, and a cross as the world with its four corners. There is practically no trace of the semi-realistic animal representations which are so characteristic of the Pacific coast.

The social organization of the tribes is very loose. There is no recognized tribal unit, and the population of the villages undergoes frequent and considerable changes. There are no exogamic groups, and no hereditary nobility is found. Distinction was obtained principally by wealth and wisdom. Captives made in war became slaves, but if one of the slave women was married to a member of the tribe she and her children were considered equals of the other people. It does not seem that names were restricted to certain families, although names of ancestors were frequently given to young children. In marriage the wife generally followed her husband to live with his family, although shortly after marriage there was a frequent change of resi-

dence of the young people, who for some time lived with the bride's family, and for some time with the groom's family.

The hunting territory was considered the common property of the whole tribe, but deer-fences and fishing-places were the property of certain individuals and families. In most cases an old woman was put in charge of berry-patches, which were the property of the whole tribe. It was her duty to prevent any one from picking berries before they were ripe.

In recent times the custom of giving potlatches has been introduced among the more western plateau tribes, the custom evidently being copied from the coast tribes.

In the western part of the country the infant cradles were shaped like small baskets, and resembled somewhat the infant cradles of the coast. Farther to the east the characteristic North American cradle-board was used.

A young man who desired to marry gave presents to the girl's parents, and their acceptance indicated the acceptance of his suit. In other cases the girl's relatives proposed marriage to the parents of the young man. Levirate was common.

The body of the deceased was buried, the grave being purified by means of thorny bushes to drive away evil spirits, and often tents were erected over the burial-site. If a person died in a foreign country the body was burned and the remains were wrapped up and carried along to be buried in the family graveyard, each family having a burial site of its own. Among the Lower Thompson Indians and Lillooet the burial customs were somewhat similar to those of the coast tribes. In many cases the bodies were placed in large cedar boxes supported on posts. The bodies of members of one family were placed in the same box. It is worth mentioning that terms of affinity undergo a change after the death of husband or wife.

The religious concepts of the Salish tribes of the interior were also much simpler than those of the coast Indians. Since the social organization is simple, and ritualistic societies are not found, the whole group of ideas connected with these concepts does not occur. The essential trait of the religious beliefs of these tribes is connected with the acquisition of guardian spirits. Each person is believed to have his guardian spirit, which is acquired by the performance of ceremonials. Only a few shamans are believed to have inherited their guardian spirits from their parents who have been particularly powerful. All animals and objects possessed of mysterious powers can become guardian spirits, whose powers are somewhat differentiated. Objects referring to death—such as graves, bones, teeth, and also natural phenomena, such as blue sky, east and west, and powerful animals—could become guardian spirits of shamans. Warriors had weapons and strong animals for their guardian spirits; hunters: the water, the tops of mountains, and the animals they hunted, or others that were themselves successful hunters. Fishermen had for their guardian spirits canoes, paddles and water animals; and gamblers: a variety of smaller animals, and also objects used for securing good luck or wealth. The frequent occurrence of guardian spirits that are only part of an animal—as a deer's nose, the left or right side of a thing, the head, the hand, the hair, or the tail of an animal—is remarkable.

The puberty ceremonials during which these guardian spirits were acquired were quite complex, and the ceremonies which boys had to perform depended upon their preferences. Those who desired to become great hunters had to practise hunting and shooting in a ceremonial way. Those who desired to be warriors prayed to the sun to give them their wish, and had to perform mimic battles. The would-be gambler danced, and played with gambling-sticks. One of the important rites connected with these ceremonies, as well as with all other ceremonies, was purification by means of the sweat-bath. In every village there were a number of small lodges, consisting of supple poles bent, and tied together in the middle, and covered over. These were used very frequently by the people.

The puberty ceremonials of girls were much more complicated than those of boys. Girls were forbidden to touch their bodies with their hands, and for this reason had scratchers and drinking tubes which they had to use through the whole ceremonial. They were isolated, and during the period of isolation they had to dig trenches, pick off leaves from fir branches, and make baskets and small mats—all symbolic of the work they had to do later in life, and intended to give them strength. Girls as well as boys made records of the offerings and ceremonies they had passed through by means of pictures painted with red paint on boulders. Generally the period of isolation of boys and of girls extended over several months.

Every living person, all animals, and even inanimate objects, are said to have souls. The Thompson Indians believe that each soul has a shadow which remains behind in this world, while the soul itself goes to the country of the ghosts, which is believed to be situated in the west, and which is guarded by a number of spirits that may turn back the soul of a person who has fainted, and who is not ready to die.

The mythology of the tribes of the interior centres around Coyote. The Thompson Indians, whose beliefs are best known to us, believe the earth to be square, the corners directed towards the points of the compass. The confluence of the Fraser and Thompson Rivers is believed to be the centre of the world, which is perfectly level in the centre, but very mountainous near the outer edge. It is surrounded by lakes over which hover clouds and mists.

Mountains and valleys were given their present form by a number of transformers who travelled over the world. The greatest of these was the Old Coyote, who, it was said, was sent by the "Old Man" to put the world in order. At the same time there were other transformers who travelled all over the world working miracles. It is said that Coyote finally disappeared, and retreated to his house of ice. The beings who inhabited the world during the mythological age, until the time of the transformers, were men with animal characteristics, gifted in magic. They were finally transformed into real animals. Most of the rocks and boulders of remarkable shape are considered as transformed men or animals of the mythological period.

The coyote legends of this area have the characteristics of the coyote cycle of the whole North American plateau district. The coyote is believed to be the ancestor of some of the tribes, and was the only person to survive the deluge. Most of the stories related of him deal with his greed and covetousness, and belong to the characteristic American trickster stories. One of the most famous of these tradi-

tions tells how Coyote coveted his son's wives, and induced his son to climb a tree. By lifting his eyelids, Coyote caused the tree to grow up to the sky. The son then reached the sky, where he found various things which he obtained for the future use of mankind. Finally the Spider let the young man down in a basket. He found his wives, and took revenge on his father. Other stories deal with Coyote's attempts to overcome animals and monsters. Although many of these end with the defeat of Coyote, in others he succeeds in ridding the country of the monsters which infested it.

Many other traditions deal with his visit to the sun, with the origin of fire, which is believed to have been obtained by the Beaver and the Eagle, and with the origin of certain peculiarities of animals. Several of this last class of stories deal entirely with animals, while most of the other legends of the tribe relate to adventures of men who meet with supernatural beings or with animals.

Cold winds are caused by the people who live far to the north, where earth and sky meet. Hot winds are made by another people, who live far south. Wars between these people, which exposed the earth to alternate spells of hot and cold winds, were ended by an intermarriage between them.

The thunder is believed to be a bird a little larger than a grouse. It shoots arrows, using its wings as a bow. Giants, dwarfs and other beings of mysterious power are believed in, and high mountains are considered with particular awe. Great mysterious power is believed to reside in the dawn of day, which is frequently prayed to.

The only communal festival of importance seems to have been a feast connected with dancing and praying, which lasted a whole day, and was repeated more or less regularly. The dancing ground was generally carefully prepared, and it would seem that the dance had some reference to a belief in the return of the souls. This appears more clearly among the tribes in the eastern part of the plateau, while the tribes in the region near the coast range either had lost the knowledge of the earlier significance of the dances, or have never had any definite idea in relation to the return of the dead connected with the ceremony. A characteristic feature of the dance in the western region was the custom of according to the young men and the young women the right of touching one another, thus symbolizing their desire to be married. The act of touching was considered a formal marriage.

The general consideration of the culture of this district suggests that in former times the culture was even more simple than it is now. A greater complexity has developed, partly owing to the influence of the coast tribes, and partly owing to dissemination of cultural elements belonging to the Plains Indians. The influence of these two areas is indicated, not only by the complex character of the mythology of the region, but also by many other traits.

Many of the coyote tales are almost identical with those told by the Plains Indians from the upper Mackenzie as far south as the lower Mississippi River, while the other transformer myths of the Salish tribes are analogous to the traditions of the coast Indians. Other indications of affiliation to eastern North America are the elaborate feather technique, the highly developed pictographic painting, and the peculiar angular decorative elements which are found particularly

in the decorative designs executed on hide. The influence of the coast Indians upon technique does not extend far to the east. It makes itself felt in the wood-work, particularly in the dug-outs of the western tribes, and in the high development of the fishing industry. Their influence upon the art of the people seems to have been very slight.

The most important trait in regard to which the culture of the plateaus differs from that farther to the east and from that of the coast is the great simplicity of social and religious life. There is practically no indication of the complex ritualistic symbolism of the Plains Indians, nor of the strict organization of the ritualistic brotherhoods and societies of the coast. The more complex forms that occur on the plateaus are clearly due to foreign influence. Thus the most highly developed forms of religious dance seem to have been found in the eastern plateau regions, while the influence of the social organization of the coast has made itself felt among the most western tribes of this area. Thus, the Lillooet, a Salish tribe in direct communication with the coast tribes, have gentes similar to those of the coast tribes; and analogous developments, even in a more marked degree, are found among the Athapascan tribes that are in contact with the Tsimshian Indians of Northern British Columbia.

It would seem that in the early history of this district the coast of Southern British Columbia partook of all the essential traits that are now characteristic of the plateaus; and both linguistic and archæological indications suggest that the Salish tribes which now inhabit the coast of the Gulf of Georgia separated from the Salish tribes of the interior at a time when both had the simple form of culture that seems to be characteristic of the whole plateau area and of the Mackenzie basin.*

10. THE SALISH TRIBES OF THE COAST AND LOWER FRASER DELTA.

By Chas. Hill-Tout.

In attempting in this necessarily brief paper to describe the lives and conditions of the westernmost of the Salish tribes of British Columbia I can only touch upon the more striking features of my subject, and this I propose to do under the threefold division of Social Organization and Customs; Religious Beliefs and Practices, and Material Culture.

*James Teit. The Thompson Indians of British Columbia. Publications as the Jesup North Pacific Expedition. Vol. I., pp. 163-390. Leiden, 1900.

Livingston Farrand. Basketry Designs of the Salish Indians. Ibid., pp. 391-399. Leiden, 1900.

James Teit. The Lillooet Indians, Ibid. Vol. II., pp. 193-300. Lieden, 1906.

James Teit. Traditions of the Thompson River Indians. Memoirs of the American Folk-Lore Society. Vol. VI. Boston, 1898.

The social organization of the littoral Salish is found to differ materially from that of their congeners of the interior. The difference begins with the Lower Lillooet tribes and continues as we proceed down the Fraser until when we reach the Vancouver Island tribes, a condition of things is found to prevail as unlike that which characterizes the inland tribes as if no relationship existed or ever had existed between the two divisions.

From a social structure which in its simplicity and looseness borders closely upon pure anarchy we reach a comparatively complex social organization under which the commune is divided into a number of hard and fast classes or castes which exhibit at times a rigidity and inflexibility that in some features recall the social divisions of the natives of India.

Among the Lkúngen and neighbouring tribes there are three of these castes not counting that of the Slaves. First, there is what may be called the "royal" or "princely" caste composed of the ruling chiefs of the local communes and their families. These form a class apart from the rest of the people as inaccessible and exclusive as any of the Royal Houses of more sophisticated peoples. The chieftaincy which is elective among the interior tribes is here strictly hereditary, passing from fathers to sons in the same families as automatically as clock-work. This class is known under the distinctive name or title of *teilángen-siám*.

Next to this came the *silce-siám* or caste of the hereditary nobility—men with family histories, as proud of their lineage and honourable descent as any Spanish or Castilian grandee.

Below these came the *kwutlqelinqus* or common-folk, "people without grandfathers;" and beneath these again the slave class.

Between each of these classes or castes there was an absolutely impassable barrier as far as the Island Salish were concerned. Among the Delta tribes class exclusion was not apparently so rigid and inflexible as on the island; nor was the chieftaincy regarded, in theory at least, as hereditary, though practice was fast making it so here also, when we first came into contact with them.

The rigidity of the island classes and the jealous exclusiveness of the hereditary nobility is clearly brought out in a most interesting and significant manner, viz., by the upgrowth and existence among them of an intermediate classs, a kind of *bourgeoisie*, called in the Lkúngen tongue *nitcnángit*, which name has exactly the same significance among these people as the term *parvenu* had under the old French regime. The *nitcnángit* were men who, by their ability or good luck, had acquired wealth, by means of which they had gained a certain social standing, but as they had no "grandfathers" no pedegrees of honourable descent, and no family or kin-crests, they could not be admitted among the hereditary nobles and so had to form a class intermediate between these and the common-folk.

The family pride and exclusiveness of the privileged classes was further illustrated in every social function which they held, and of these there were a goodly number, such as naming-feasts, marriage-feasts, mortuary-feasts, and the "potlatch," or gift-feasts. On

these occasions the chiefs put on lofty and condescending airs, conversed only with one another, and formed a group apart by themselves. The hereditary nobles, or men of pedegree, formed a second group, and the untitled or common-folk a third. The *nitcuăngit*, or *nouveaux riches* held on these occasions a very equivocal position determined largely by the condescension of the nobles and the degree of respect accorded them by the people.

The Lkúngen method of receiving and placing their guests was absurdly like that in vogue in high social functions in Old World Society. Two or more of the older noblemen stood at the entrance of the Feast Chambers and received the visitors, enquiring their names or titles and those of their fathers and grandfathers and placing them accordingly—rank being determined and marked by these as distinctly as among ourselves. Each social division or caste had its own list of names or titles so that a person had but to give his name or that of his father or grandfather to show his social position and standing in his tribe.

The name systems of the Salish, like those of other primitive peoples, are very interesting, and their study reveals some of the most curious phases of savage culture. The limits of this paper preclude a full consideration of these here, but a few remarks upon the name-feasts of the Coast Salish—a function which had an important place in their social life—may be offered.

These naming-feasts refer only, of course, to the customs of the upper classes, the chiefs and nobles, the common people could not afford such.

Titular names were bestowed upon their bearers only when they had reached and passed the age of puberty. To show the way in which this was generally done let us suppose a nobleman of standing has a son fifteen or sixteen years of age, on whom he desires to bestow one of the family names or titles. He first goes to the chief of his commune, informs him of his desire and secures his acquiescence and promise of assistance. A date is then fixed for the event and invitations are sent broadcast throughout the neighbouring tribes. On the day appointed for the ceremony great numbers of guests come in from the friendly villages round about, some also coming from distant settlements if the giver of the feast is well known and of distinguished rank. Preparations have been going on for days past to receive and entertain these visitors. Large quantities of food have been brought together by the host and his kinsfolk; the family treasure-chests have been opened and their contents set in order for distribution at the feast. When all is ready the father of the boy who is to receive the name, the boy himself, and his immediate sponsors, friends and kinsfolk all ascend the roof of their house—the pitch of the roofs always being low and convenient for the purpose—and from this vantage ground the proceedings take place. These vary a little from tribe to tribe and from district to district. Commonly the ceremony is opened by the father of the boy dancing one of his family dances—to dance meaning also to sing at the same time. This song dance is probably a more or less dramatic representation of some event, fancied or real, in the life or history of his ancestors, perhaps that which gave rise to the name he is going to bestow upon his son. When this is over a distribution of blankets—the measure of wealth of the coast tribes—is made to honour the names and spirits of his

family, it being held dishonorable to speak of or even mention an ancestral name publicly without making gifts. The father now calls about him some thirty or forty of the leading noblemen among his guests to act as sponsors or witnesses of the rank his son will acquire by the name he is about to receive. Two eldermen, or preferably two aged chiefs, who know his lineage and ancestry, now bring the youth forward and standing one on either side of him the elder of the two proclaims in a loud voice to the assembled audience that it is the wish and intention of the father of the youth to bestow upon him his paternal grandfather's name or title. At this the people express their assent and pleasure by clapping of hands and shouting.

The name is then given to the youth after which another distribution of blankets takes place, special care being taken to give at least one each to all the formal witnesses of the ceremony and to the officiating elders. If the father is wealthy he will throw other blankets among the common-folk to be scrambled for. When this part of the ceremony is over the feasting begins.

After the naming ceremony is over the youth is known by his newly-acquired name though, according to their customs, he is never called by it except on special and ceremonial occasions.

Among the Lkungen and cognate tribes a man could not take his own father's name should his father die before he had received his titular name, the names of deceased persons being tabooed among them for a whole generation. Hence in the case just imagined the youth received and revived the name of his father's father. The ancestral names were thus handed down in these tribes.

The marriage customs among these tribes bring out in the same way the exclusiveness of the upper classes. Marriage in their rank was an exceedingly formal affair and hedged about with many precautions to prevent *mésalliance* and sullying of their blood. When a youth had arrived at a marriageable age his family cast about for a suitable bride for him. It goes without saying that she must be his equal in rank. Having selected a girl the father sends two or more old women of his family to sound the girl's parents and ascertain their willingness to the union. If they receive the offer in a friendly spirit he next sends two eldermen of his kin-group or crest whose office it is to set forth to the girl's family the rank, honors and standing of their young kinsman. Should these be satisfactory to the girl's people both parties then make preparation for the marriage.

We gather from all this how important these tribes regarded the marriage unions and how jealously they guarded their rank. There are many other interesting social features in the lives of the tribes under consideration which I have not touched upon at all; but to speak of them here would be to extend my paper beyond the limits accorded me. Those interested in a further study of the social organization of these tribes may consult the writer's ethnological reports on this division of the Salish in which all these features are dealt with in detail, each tribe being treated separately.

Religious Beliefs and Practices.

Closely connected with one side of the social life of these tribes was one of the most characteristic features of their religion. I refer to their totem or kin-group crests. Among the Delta and Coast

tribes a marked social phase of totemism has been developed, of a character such as is generally found among other totemic peoples. Although the kin-groups are not commonly called by animal or plant names, as most of them are among the Haida and Tlingit, they were nevertheless distinguished one from another by crests in the same way as the kin-groups of the northern tribes, each family of standing possessing its own crest or crests. These are more or less conventionalized representations, plastic or pictographic, of the ancestral totems of the family or kin-group, commonly thought to have come down from the founder of the family or group. These totems are looked upon as spirit guardians of the household, representations or symbols of them being carved or painted on some portion of the family dwelling, usually upon the supporting pillars of the roof, and among the Island tribes they largely take the place of the individual totems or guardian spirits of the Interior Salish—the personal totem among these tribes having given place almost entirely under their changed social conditions to the family or kin-group totem.

Belief in protecting spirits constitutes the chief feature of the religion of the Salish. Such beliefs were not confined to this stock; they were held in one form or another by practically all the aboriginal tribes of the New World when we first came in contact with them. It has its source, of course, in those animistic, anthropomorphic conceptions common to primitive man the world over. The Salish in common with other tribes in the same plane of culture as themselves, peopled their environment with mysterious beings and sentient agencies of beneficent and maleficent character, mostly of the latter. The land, water and air teem with mysteries; they are surrounded on all sides with capricious beings that have power to harm or destroy them. They are at any moment of their lives liable to come under the influence of these—to be made their victims or prey; consequently they felt a vital need of some protecting, guiding influence in their lives; and hence arose their practice of seeking and acquiring tutelar spirits.

The general method of acquiring these guardian spirits was by means of dreams and visions. These were not the ordinary dream or vision but others of a mystic order, which came to the novice or person seeking the spirits, only after long and special preparation. The seeker goes apart by himself into the forest or mountains in some solitary spot close to a lake or some other body of water, and imposes upon himself a rigorous course of training, which is called *kwakwaiyisit* by the Delta and some of the Island tribes and by other names in other divisions. This training consists of prolonged fasts, frequent bathings, forced vomitings and other exhausting bodily exercises. With the body thus enervated the mind becomes abnormally active and expectant and dreams and visions and hallucinations are as natural to the novice in such a state as breathing; and we can readily understand how real must seem to him the visions of his looked-for spirit helper.

Whatever object appears to him on these occasions, or rather what he conceives to be the spirit of the object, becomes his totem or tutelary spirit. It may be anything almost in nature—plant, bird, beast, fish, a tool, weapon or any other inanimate object, or natural phenomena. As, under the view he takes, everything in nature is possessed of a spirit and has mystery power, the spirit of a stick or

stone can protect and lend him aid as well as the spirit of living things. Usually, however, he recognizes some kind of hierarchical order among these ghostly helpers. Some things or objects were more "powerful" to aid than others, and some aided along special lines in one direction and others in another. Some conferred great hunting powers others great running or fighting powers. Others again assisted the "medicine" men in their cures. If therefore the seeker after mystery powers was not satisfied with the first "spirit" that came to him, or rather with the powers it bestowed, he would enter upon a second course of training and await the coming or vision of a second helper, or even of a third or a fourth, spending years perhaps in his seeking.

Between the individual and his protecting spirit or spirits a very close and mysterious relationship is supposed to exist. He does not pray to his totem in the sense in which we used this word, but expects and looks for its aid and protection when needed. The totem is supposed to warn him by dreams and visions of impending danger and to assist him in difficult undertakings, and indeed in all the issues of his life.

Outside of this belief in tutelary spirits there was no conception among the Delta or Coast Salish of a Supreme overruling Being who ordered and regulated the universe. It is true they did in a kind of way look to a being who was thought to have taught their first ancestors such knowledge as they possessed, and who by his magic, wonder-working powers procured for them their fish and game and roots; but this being was a very mythical creature, having none of the attributes of a god about him; their stories concerning him and his life and doings when he was among them show him to have been half human, half bestial. Indeed, all the beings that peopled their world in its infancy were of this nature, possessing the same dual characters and assuming at will that of man or beast. Many of the Indians believe themselves to be descended from these mythical creatures and claim in consequence power over the *animal* descendents of them to-day whom they look upon as related to themselves. Thus the people of the Mountain-goat or Sturgeon ancestry believe they can secure animals of these species more readily than other people can, because of the supposed relationship existing between them; and they had esoteric formulas and ceremonies which they employed when they wished to capture them and which were thought to cause the fish or animals to yield themselves readily to their human kinsmen.

In these religious ideas of the Salish there is nothing that might be regarded as of an ethical or moral character. Yet it must not be supposed they were without morality or rules of conduct. Before contact with ourselves no people could be more moral and decent in their lives and actions. But their morality was of a social, practical kind, having no religious sanction whatever. Customary law and public opinion are the source and guides of conduct among primitive people like the Salish, as indeed they are to a larger extent, than would perhaps be generally admitted among ourselves. No religious or moral obligation could be more binding or more effective in regulating sexual and other social relations than that imposed upon the Salish by their customary laws and the public opinion of the commune, and though none of these laws were conceived as god-

given they were none the less binding upon them on that account. Custom founded upon the wisdom and experience of their forefathers had established certain lines of conduct, and the sense of the community as expressed by public opinion, saw that these were observed. For example, chastity in both sexes, but, of course, particularly in that of the female, had been found to be conducive to good order and social well-being, and was demanded; and a lapse from virtue in either sex, married or unmarried, was regarded as a deep shame and lasting disgrace to the persons involved and all their kindred. So keenly was social disgrace of this kind felt among the Salish that it not infrequently led to self-destruction, particularly among girls. We have many of their folk-tales in which incidents of this kind occur. It is indeed in their traditional lore that we get our best insight into the character and lives of those tribes before the disrupting, unbalancing influences of our civilization made themselves felt among them. The view we gather of their lives and conduct from these sources makes one, indeed, almost wonder whether the restraints upon conduct imposed by the authority of religion are any stronger or more effective in a community than those having their sanction in public opinion only; and certainly those who look with dread at what they think is the subversion of the authority upon which our moral or religious laws and restraints are grounded, and expect nothing but social anarchy, disorder, shameless immortality and all other imaginable evils to shortly come upon us, may take heart from the picture which the Salish folk-tales reveal to us of the life and condition of these pagans before we attempted to impose upon them our superior Christian civilization, the blessings of which they very ungratefully do not properly appreciate.

In common with other primitive peoples the Salish had an unquestioning belief in the imperishability of the soul or spirit—of a life hereafter; but their views of this after-existence are like some of our own, not always clear or well-defined.

They also believed fervently in ghosts, particularly those of recently-deceased persons. They believed also that some of their wise men or shamans could restore the soul to the body and bring the seeming dead to life. Many forms of sickness, fainting spells and swoonings in particular, they attributed to the straying away or withdrawing by magic means, of the soul or spirit from the body; and certain of the shamans were held to be skilled in going after and bringing back these missing spirits, and hence the power and influence of these men in the community.

These shamans or "medicine" men believed in their own powers just as sincerely as their more sophisticated brothers do in theirs, and thought their sometime cures were effected by the might and magic of their protectors. So did the patients; for according to the measure of their faith in the power of the medicine man, so was their cure in all cases where the mind was able to influence the body. Nowhere are there such wonderful "faith-cures" as among primitive races, only they are not here called by such names nor recognized as such. The medicine-man gets all the credit and all the glory; but then as a set-off to this he was held responsible for all failures to cure, and if his patient died under his hands he had to pay to the relatives of the deceased person a heavy death fine, so things were after all pretty fairly balanced between doctor and patient among them.

The more one studies the old-time Salish the more one is constrained to admire the wisdom displayed in the ordinances which regulated their lives and actions. They appear to have been an eminently practical people, and to have found satisfactory solutions to many of the problems of existence more advanced races are still much exercised in mind upon.

Material Culture.

Under this division we will discuss as far as our space permits the habitations, food and dress of the Delta and Coast Salish.

Habitations.

The main or permanent dwellings of these tribes differed radically from those of their brothers of the Interior. In nothing does the difference in the physical surroundings of the two divisions manifest itself more clearly than in their habitations.

The typical coast structure was the communal long-house; and some of these dwellings were truly and literally *long* houses, stretching under one roof in unbroken continuity for six, seven, eight and even nine and ten hundred feet. Houses of from four to six hundred feet were quite ordinary structures. Simon Fraser records seeing one in his trip down the river which afterwards bore his name, that extended for upwards of six hundred feet and had a width of sixty feet.

These houses were generally of the half-gable, single-slope style; and as their fronts or face-walls were only a few feet higher than their back walls, their common great width made the roofs very shallow indeed in their pitch. But such disadvantage as this might entail upon them by occasional leaks was more than compensated for by their use as platforms, for which purpose, as I have already indicated, they were customarily used on all festive and ceremonial occasions.

The frame work of these houses consisted of two rows of massive pillars which ran from end to end of the structure on either side, each pair of pillars being from fifty to sixty feet apart in a typical dwelling. On these pillars long stout beams rested in notches cut for the purpose, and upon these again the supporting poles of the roof which was formed of thick cedar slabs laid one upon another after the manner of tiles. Upon one of the faces of the main pillars figures in high relief were customarily carved. These represented the family or kin-group totems,—the presiding, protecting spirits of the household.

The walls of these structures were always built separately from the main frame work, which was intended to support the roof only, and were made of cedar planks or slabs, the same as those forming the roof laid horizontally between sets or rows of double sticks, between which they were fastened by cedar withes. The planks were built up from the ground, the lower edge of each being made to overlap the one beneath it for an inch or two to keep out the wind and rain. There were no windows or chimneys in these dwellings, temporary smoke holes being made in the roof by pulling down or thrusting aside a plank or two. Light had access in the same way. Within the structure low, broad platforms were built all round the walls. These formed the lounges or resting places of the inmates by day and

their couches or sleeping places by night. Their beds consisted of several layers of long reed mats, one end of which was rolled up to form a pillow or head rest. Blankets woven from a mixture of dog and mountain-goat hair and bird's feathers and skins of their larger game animals formed their bed clothes.

Beneath these bed platforms some of the tribes stored away their winter supply of roots, others their fire wood. Overhead suspended from the rafters were hanging-shelves, on which they placed away their store of dried fish, meat and fruit.

The inner walls of these dwellings were lined during cold weather with swamp grass mats, and hangings of the same material divided the interior of the building into a number of separate compartments or sections, each of which corresponded to the space between the main pillars, making an area usually of about fifty or sixty feet. The compartments of the chiefs were sometimes half as long again as the others. These were usually situated in or about the middle of the building. Next on either side came the compartments of the nobles, the common folk occupying the sections nearest the ends of the house.

The position of the doors varied somewhat with the locality. Sometimes these were placed in the ends near the lower or back wall, sometimes at intervals where the dwelling was a long one, in the front wall, at others in both front and back walls, a boarded passage-way running right through the building.

During the great dance season or *Smĕltas*, which lasts from one to two moons, corresponding to portions of our months of December and January, the hanging mats which divided the interior of the dwellings, were taken down and the whole space thrown into one large, common hall. It was because of these annual social events that the partitions were of the temporary character described. For among the upper Delta tribes who did not observe the *Smĕltas* or winter dancing season, the partitions were always of a permanent kind. Here they were made of boards which divided the long-house into a number of double compartments, each of which was subdivided again into two separate ones by the passage way I spoke of just now as existing in some buildings, entrance to the living room being made from the centre of these. Usually each compartment was shared which were closely related to one another and between whom no marriage or sexual intercourse was allowable.

The household utensils consisted usually of an assortment of basketware, wooden, trough-like dishes of various sizes, wooden and horn and shell spoons, reed serving mats and plaques of basketry, cooking-stones, tongs for handling them, and the family treasure-chests. A well-to-do family would have several of these latter and the wealthier chiefs would own perhaps a score or more. These chests were most ingeniously made from three pieces of cedar, the cover bottom and sides being each formed of one piece. They are rectangular in shape, the board forming the sides being so cut on its inner face at three of the angles, as to enable it to fold without cracking or breaking, the fourth angle being formed by the juncture of the two ends which are evenly mitred and sewn together from the inside. The bottom is a shallow tray fastened by stitching to the inside of

the box, and fitting so evenly that the box will hold water without leaking. The top is a similar tray which overlaps the edges of the sides. In these receptacles are stored away the family treasures which consist mainly of blankets and their ceremonial costumes and ornaments.

Food.

The food of the Delta and Coastal Salish consisted mainly of fish, in which the salmon figured largely, this fish taking much the same place among these tribes, particularly those of the Delta, as rice does among the orientals or bread among ourselves. It was the staple of their larders and was eaten in one form or another the whole year round. The Island Salish, and those of the mainland who had settlements actually on the coast waters, made use of many other fish and marine products as well, such as the seal, porpoise, sea-lion and whale. In addition to their fish diet they eat the flesh of most of the animals and birds of their habitat, of which deer and mountain-goat, ducks and geese were the most important. They also gathered and ate many kinds of wild berries and bulbous roots, particularly those of the lily kind of which they had several varieties. These latter they cooked by steaming or baking in ovens made in the ground. The fruit they eat either in its fresh, raw state or dried like the currants of commerce, or made into compressed cakes or into thin sheets of sun-dried "jam."

They cooked their food by baking, roasting or boiling. The baking was done in ovens or holes made in the ground heated with hot stones or by fires. The roasting was accomplished in different ways, before or over open fires, and the boiling by means of heated stones which were cast into their wooden or woven pots or kettles. The food was commonly served in dishes if of a liquid nature, if solid on mats or plaques.

All the tribes dried large quantities of salmon and stored them away for winter use. They also extracted oil from the salmon, dog-fish, "candle-fish," and several other kinds, but particularly from the salmon. This they also stored away in bottle-like receptacles of various kinds. Some were made from the whole skins of salmon, others from the hollow, bulbous, bottle-shaped stems of a species of kelp or sea-weed, and others again from the sounds or air-bladders of fish, or the larger intestines of animals.

Dress.

The clothing of the Delta and Coastal Salish was commonly of a scantier nature than that of the Interior tribes. In summer the men customarily went naked save for a loin-cloth. Most possessed a blanket of dog and goat hair or a cloak of dressed deer skin, but these were not ordinarily worn, being reserved for cold weather only, or for formal ceremonial occasions. Some of the nobility and all the chiefs possessed deer or elk hide tunics and long heavily-fringed leggings, but these articles of clothing belonged rather to the style of dress of the Interior Salish than to those of the Coast.

The women went more modestly attired, though their persons were not so tastefully nor so scrupulously covered as those of their sisters of the Interior. The ordinary female dress of the wives and

daughters of noblemen was a long shroud-like garment made of tanned doe-skin. This was commonly decorated about the breast with shell work and the side and arm seams were profusely covered with fringes. To this they added at times short leggings like the men's and coarse hats made of the same material as the best water-tight basketry.

Women of the poorer class and Slaves wore skirts of woven cedar bark and sometimes short shoulder coverings or ponchos of the same material, or others made from the untanned skins of small animals such as squirrels and chipmunks.

The upper Delta tribes wore more clothing habitually than the Coast people, and made it in a more careful and tasteful manner, copying in this respect the beautifully made garments of the inland tribes. The materials they employed were the usual dog and goat hair, skins of various kinds and the soft inner bark of the cedar (*Thuya gigantea*). The dogs from which this hair was taken were a special native breed, possessing a fleecy coat of a texture resembling sheep's wool.*

II. THE TRIBES OF THE NORTH PACIFIC COAST.

By Franz Boas.

The North Pacific coast is inhabited by quite a number of distinct tribes, whose culture, however, is fairly uniform. According to the degree of typical development we may distinguish three groups of tribes: the northern group, embracing the Tlingit, the Haida, and the Tsimshian; the central group embracing the Kwakiutl tribes and the Bella Coola, and the southern group embracing the Coast Salish and the Nootka. Among the last group the characteristic traits of North Pacific coast culture are weakest, while in the first group they are most strongly developed.

Economically, the people of this region are fishermen, who subsist partly on the salmon that ascend the rivers of the coast in great numbers; partly on deep-sea fishery, which is prosecuted on the cod-fish and halibut banks off the coast. At the same time, seals and sea-lions are hunted. Whales that drift ashore are used, and the

*F. Boas. The Lku'ñgen. Report of the 60th meeting of the British Association for the Advancement of Science, 1890, pp. 563-582, and

F. Boas. The Indian Tribes of Lower Fraser River. Ibid. 64th meeting 1894, pp. 453-463.

F. Boas. Indianische Sagen von der Nord-Pacifischen Küste Amerikas. Berlin, 1895, pp. 18-97.

C. Hill-Tout. Notes on the Skqomic. Report of the 70th meeting of the British Association for the Advancement of Science, 1900, pp. 472-495.

C. Hill-Tout. Ethnological Studies of the Mainland Halkomē'lem. Ibid., 72nd meeting, pp. 3-18, 48-63.

C. Hill-Tout. Ethnological report on the Stseē'lis and Skaū'lits. Journal Anthropological Inst., Vol. XXXIV., 1904, pp. 311-376.

C. Hill-Tout. Report on the Ethnology of the Sī'ciatl. Ibid., Vol. XXXIV., 1904, pp. 20-58.

Nootka carry on actual pursuit of the whale. Those tribes that live near the fjords of the mainland are also energetic hunters, and they pursue particularly the mountain-goat, but also the bear and the deer. Vegetable diet is not by any means unimportant. Large quantities of berries are picked in summer and preserved for winter use. The sap of the hemlock and some species of kelp are treated in the same way. The oulachen is sought for eagerly and the principal oulachen rivers are visited by all the neighboring tribes. This fish is caught particularly on account of its oil, which is tried out and kept in large bottles made of the stems of the giant kelp. Fish and clams are dried in a great variety of ways, and are used as a staple food throughout the year.

The industries of the Indians are based to a great extent on the occurrence of the yellow and red cedar. The wood of the red cedar, which is easily split, is worked into planks, which serve for building houses and which are utilized in a great variety of ways by the native wood worker. The bark of the red cedar is also used extensively for making matting, baskets, and certain parts of clothing. Strong ropes are made of twigs of the cedar, while other ropes are made of twisted cedar bark. Blankets are woven of the inner bark of the yellow cedar, which is shredded and softened by careful beating and then woven by a simple method of twining. It may be said that the salmon and cedar are the foundations of northwest coast culture.

Part of the year the Indians live in permanent villages. These villages consist of large wooden houses built of cedar planks and arranged in a row facing the sea. A street is levelled in front of the houses, and the canoes are placed on runways on the beach in front of the village. In olden times the houses of the northern tribes were of moderate size, probably about 30 feet square. An excavation several feet deep was made, which formed the floor of the house. In front and in the rear two pairs of heavy posts were erected, which supported a central beam. Other posts were placed at the corners of the house, and these supported beams parallel to the central beam. Over these three beams the roof was placed, and the sides of the houses were walled in by means of heavy split planks, placed horizontally and either tied between pairs of supporting poles, one inside, one outside or fitted neatly into the posts that formed the corners of the house.

A fire was kept in the centre of the house, and over it an opening was made in the roof, which served as a smoke-hole. In the daytime, people lived on the floor of the house, while the beds were arranged on a platform that ran all around the walls. Provisions were also kept partly on this platform, partly on lofts, which were suspended from the beams and rafters. According to tradition, there were some houses that had more than one platform, and in which the excavation of the floor was quite deep. In some regions the whole house was supported on poles of moderate height.

The building of a house of this type required considerable skill in woodwork. In former times the Indians felled large trees by means of stone chisels, stone axes, and fires, but the planks used for house-building were usually split off from a live tree by cutting deep notches into the trunk at appropriate distances and then splitting off pieces from the tree by means of large wedges, which, in the north-

ern part of the coast, were driven with long handled stone mauls, while in the southern part of the coast, hand-hammers were used. After the planks had been split off, they were smoothed by means of stone or bone adzes. For very fine work, the process of smoothing was continued until the surface of the plank had reached a high degree of finish. The planks and boards were finally polished off with grit stones and dogfish skin. The art of making household utensils from thin planks of this kind had reached a high degree of perfection. The method pursued was that of kerfing the planks and of bending, after having subjected the wood to a steam bath. In this manner the sides of boxes and buckets were made. These were fastened to a wooden bottom, either by means of pegs or by sewing with twisted cedar twigs. The joints were caulked, and in this manner water-tight boxes were secured. These were used not only for storing provisions, blankets, etc., but also for cooking food, the box being filled with water, which was then heated by means of red-hot stones.

Other household utensils were made of large blocks of wood, which were hollowed out by means of chisel and ax, and which were finished with the carving knife, which had a crooked blade and a handle, well fitting the hand. One of the best products of the woodwork of the natives of this region is the dug-out canoe, which is made of cedar, hollowed out and worked down to an even thickness. After the cedar has been hollowed out, it is steamed and then spread and thus large canoes are made of graceful form and capable of withstanding a heavy sea.

As compared to the woodwork, the basketry of the tribes is very simple. The bulk of the basketry of the more southern tribes consists of woven or twilled matting, made of wide strips of cedar bark, while in the northern regions twined spruceroot basketry prevails. Among the Tlingit, spruceroot basketry takes to a great extent the place of the small boxes which are common on the southern part of the coast. Baskets are largely used for storage of provisions, for keeping blankets, as covers of boxes, for holding spoons, and for berrying.

For fishing, hooks, harpoons, and fish traps are used. A great variety of forms of fish traps are found, in which large quantities of salmon are secured during the summer months. Traps are also used for securing land game. Small fur-bearing animals, as well as larger game, such as bears and deer, are trapped in this manner.

The bow is of simple construction. It is made of a single piece of yew wood, with slightly curved back, flat belly and narrow, round grip. It is carried in a wooden quiver. Arrows with detachable head are used for hunting sea-otter, while land game was hunted with arrows with bone points.

It would seem that in olden times, practically all along this coast, the art of stone chipping was not in use while rubbed slate points and pecked and battered stone hammers and stone mortars were common.

While the men procure all the animal food, except shellfish, the women gather berries and dig roots and shellfish. In some regions of the coast, clover is treated with particular care; although it is not actually planted, clover patches are cleared and surrounded by

fences to indicate the limit of garden patches. On Queen Charlotte Island tobacco was raised in olden times in gardens cleared near the villages.

Household utensils, canoes, and practically all objects utilized by the natives are elaborately decorated. This is true particularly of their woodwork. The style of decoration is very characteristic. It consists entirely of the application of animal motives, each design generally consisting of a combination of various parts of an animal's body. The animal forms, although highly conventionalized, are easily recognized. The style of conventionalization consists in an extended use of curved lines and a tendency to arrange, wherever possible, oval fields, which may be decorated with a group of concentric or almost concentric elliptical or rounded designs. These peculiar designs resemble eyes, and the north-west coast art may be said to be characterized by the prevalence of the eye motive. The eye is used with great frequency to indicate the joints of the body, the original idea being evidently a representation of the ball-and-socket joint, the curved outline of the figure representing the socket, the inner field the ball. In general the artist endeavors to represent the whole animal on the decorative field. In doing so, he is at liberty to distort and dissect the animal figure, so as to fit the whole as nearly as possible into the decorative field. Very frequently this is accomplished by splitting the animal in two and by representing the two halves as spread out; but many other processes are used. These designs are done both in carving and painting. The colors applied are principally black and red, although green and blue also occur. The animals used for ornamentation are almost throughout those which play an important part in the mythology and in the beliefs connected with the social organization of the tribe. It is remarkable that geometrical designs are practically absent. In the southern regions, where the decoration of basketry is almost absent, geometrical designs are also absent. The only region where a highly developed geometrical decorative art accompanies the more realistic art before described, is found in southern Alaska, where elaborate decoration of spruce-root basketry occurs. It seems, however, probable that this art has been introduced through contact of the coast tribes with the tribes of the interior. The decoration resembles the porcupine quill designs of Athapascan tribes, and is executed in basketry by a peculiar method of "false embroidery." In the most southern part of the region in discussion, geometrical basketry designs are also found, particularly among the southern tribes of the Nootka. These are clearly related to the geometrical designs of the basketry of the coast of Washington.

The social organization of the North West coast tribes is very complex and remarkable differences are found among various tribes. Of the northern tribes, the Tlingit and Haida are divided into two exogamic halves, some of which bear the names of animals, and in which descent is in the female line. The two groups among the Tlingit are characterized by the Raven and Wolf, among the Haida, Eagle and Raven. The members of each of these groups have the privilege of using designs representing certain animals as their crests, and in many cases they claim a supernatural relationship to these animals. To a limited extent, the animals may therefore be

said to be the totems of these groups. It is, however, important to know that not always the principal crest animal and the animal from which the group takes its name are the same. Thus, the Raven clan of the Haida has as its principal crest the killerwhale, and in the Eagle clan of the Haida, the beaver is as important a crest as the eagle. Furthermore, not all the members of each group have the same crest, but there are a considerable number of sub-groups, each of which has a number of crest animals of its own. In a great many cases the acquisition of these crest animals can be traced by historical traditions, and we know that in some cases, crests have been obtained by gift from friends among foreign tribes. Often its acquisition is explained by a myth which belongs only to one of the subdivisions of the larger groups. It is therefore evident that in this case the animal name of the group and the crest of the subdivision of the group are not equivalent.

The sub-groups among the Haida and Tlingit are throughout local in character. They were evidently, at one time, village communities consisting of blood relatives, that is to say, of a number of people related by maternal descent. This group of people had their own local traditions, which in almost every case has the form of a crest tradition.

Although the village was the property of a subdivision of one group, necessarily a considerable number of individuals of the opposite group must have lived in the same village as husbands or wives, as the case may have been. It is probable that in this way the present conditions originated, the recent villages consisting of a number of sub-divisions inhabited by different branches of the two groups.

The social organization of the Tsimshian is not unlike that of the Haida and Tlingit, the only difference being that in this case four exogamic groups are found. Of these, two are named from animals, the wolf and the eagle, while the two others, which have the Raven and the Bear for their crest or totem, have names that are not derived from the names of these animals. Conditions among the Tsimshian are somewhat more complex than among the Tlingit on account of the existence of the greater number of groups. It seems, however, fairly evident that the same kind of local subdivision of the four clans exists which is found among the more northern tribes.

A very curious social organization is found among the Kwakiutl tribes. Among the Tsimshian there is a definite maternal organization, but the tendency toward maternal organization decreases as we proceed from the north to the south. The northern Kwakiutl tribes have a number of exogamic groups which take their names from animals, such as the raven, wolf and killerwhale, and descent is preferably reckoned in the maternal line, but not with such rigidity as is found among the more northern tribes. In certain cases children are free to be counted as members of the father's group. Among the Kwakiutl proper this freedom is even greater. A child belongs by blood to both his father's and his mother's family. By a peculiar arrangement, however, descent is so regulated that it proceeds in the maternal line. It is probable that the clan privileges of the northern tribes are responsible for this curious state of affairs. One of the essential property rights of each individual is his clan-legend and the use of his crest. According to the Kwakiutl custom,

the property right in these objects is held by the men of the tribe. It is, however, not transmitted as a permanent inheritance to the sons, but it is always acquired in marriage. Thus, if a certain man has the right to use the raven as his crest, he will give this crest to his son-in-law about the time when a child is born to the young man. In this way, the son-in-law practically holds the crest in trust for his wife's daughter, because when he in turn is to give up the use of the crest he must deliver it to his daughter's husband, who again holds it in trust for his future daughter. It is clear that in this manner a purely maternal descent is secured. Among the Kwakiutl tribes which follow these customs there is no limited number of exogamic groups as are found among the more northern tribes. Instead we find in each village a considerable number of families represented in the same way as are found in northern villages. It seems probable that here also the different families in each village were originally separate village communities, which, owing to historical fates, came to live in the same village, or which in other places split up and are now represented in different villages.

According to the group system of the northern tribes, each family of the village community must be necessarily exogamic. The custom among the Kwakiutl is not definitely settled, some of the families preferring marriages outside the group, while others prefer marriages in the group. On the whole, marriages outside of the group are more frequent on account of the eagerness of individuals to secure the privilege of using new and important crests.

The further south we go the less important becomes the crest, which among the Coast Salish and Nootka exists only in traces, as compared to its extended use in the north.

The Bella Coola of the central part of British Columbia, who are neighbors of the northern Kwakiutl tribes, and under whose influence their culture has developed, have also adopted the crest system. The village community is here also the social unit, and each village has its own crest. Here, however, the jealousy with which the property rights in the crests are guarded is so great that at least among chiefs' families exogamy is strictly forbidden.

This diversity of types of social organization on the Pacific coast is remarkable. There seems to be very little doubt that the group system of the Tlingit and Haida has exerted a very strong influence over their immediate neighbors. Thus we find that not only the northern Kwakiutl tribes have adopted the group system, but we find the same among the Athapascan tribes adjoining the Tlingit, and also among those adjoining the Tsimshian. Since the two-fold division of a whole tribe into exogamic group is a phenomenon of very wide occurrence, it is fruitless to speculate on its origin in this special case, but it is worth while to point out that Dr. Swanton in his investigations on the Haida was led to the conclusion that possibly the Eagle group may represent a foreign element in the tribe. However this may be, it is fairly clear that the crest system, which has developed on the north Pacific coast is not necessarily connected with this peculiar division of the tribe.

It may be pointed out that the crest system has an intimate relation to the artistic development among the coast tribes as well as to their mythological ideas, and that the religious importance of the

crest is in most cases very slight among the northern tribes. The Raven, which appears as a group name, is identified with the mythological raven, which will be discussed later. The killerwhale, which also appears as a crest, plays an important part in the religious beliefs of the tribe. On the other hand, the eagle, beaver, and grisly bear, which are important crests common to a great many families have no particular religious significance.

In later times, the idea of the occurrence of crests has exerted a powerful influence over the development of the semi-realistic art of the northwest coast. Almost all the subjects of artistic representation are selected from among the crests, and it would seem plausible that if the crest idea had not existed, the exuberance of artistic form would also not have developed. It is, however, worth while to bear in mind the question whether the artistic skill may not have added materially to the development of the crest idea. The simple fact that a person used to a great extent objects decorated with representations of a certain animal, may have fostered the tendency of using such an animal as a crest. That this has occurred is indicated by historical and semi-historical traditions, which state that a certain design, or object bearing a certain design was given to a person either by a friend or by a supernatural being, and that henceforth the object became his crest. These traditions may be compared to the reports of the origin of decorative designs so common in North America, in which it is stated that the design was received in a dream. Considering the weakness of the religious side of the crest, it seems to be very plausible that the art of the people has, to say the least, materially increased the total number of crests.

That an accretion of new crests has occurred, may be observed clearly among the southern tribes, which evidently had no crests in earlier times, and where we may observe to a certain extent the introduction of northern crests by intermarriage and imitation. I believe it can be shown by a study of the crest mythology of the Kwakiutl that their myths are quite recent and have developed at the same time with the development of artistic reproduction of these crests.

The religious significance of the crest shows great variations. It was stated before that the raven and killerwhale, both crests of the Haida, are the two most important supernatural beings of their mythology. There are a great many cases among the northern tribes in which the crest was acquired by an ancestor of the family in the same way as Indians of the plains acquire a manitou. It is told how a man went out into the wilderness and in the course of events, met a supernatural being or animal, which henceforth became his protector. The difference between the northwest coast traditions and those of the plains consists in the fact that the animal once acquired was transmitted by the ancestor to his sister's children. There is hardly a single case of traditions in which the family claims direct descent from the crest animal.

Among the southern tribes, the type of tradition is more varied. There are a considerable number of cases in which the myth claims that the ancestor of the family came down from heaven, wearing the dress or mask of the animal, which later on became the crest of the family, so that each person wearing this crest impersonates the

family ancestor. While there are many cases of this kind, there are also a great many others in which the crest is explained to have been acquired by the encounter of an ancestor with an animal or supernatural being, which became his protector. In both these cases, the crest is used in the same manner. On the whole, it may be said that the mythological explanation of the use of the crest is by far more complete among the Kwakiutl than among the northern tribes. Nevertheless, I am strongly of the opinion that these mythological explanations are quite recent. The reason for my conviction is the uniformity in type of all traditions of this kind and the phenomenally great extent of borrowing that the evidence shows. It may be well to give an example of this. A characteristic belief of the Tlingit refers to the land-otters, which were said to take away drowned persons. A number of Alaskan traditions refer to adventures of men who were drowned and who were rescued by the land-otters. This belief is not characteristic of the southern parts of the coast, but it has been worked into a myth among the Kwakiutl, which explains the use of a certain mask among one family. The details of this tradition are identical with the details of an Alaskan tradition, and they must have been recently borrowed.

Wherever the crest is strongly developed, we also find an exuberance of artistic forms, particularly representations of crests on houses and graves. The crest is either painted or carved on the house-front; the beams and the posts of the house are carved so as to represent the crest animal, and large posts, called totem poles, representing a series of crest animals are erected in front of the houses. Grave-boxes, memorial posts and posts marking the graves are carved in the same manner. It seems likely that before the introduction of iron tools, these carvings were of more modest form than later on. According to the reports of the natives, in olden times these carvings were cut out on the face of heavy planks; animal figures being cut out either in relief or in the round.

Society on the north Pacific coast was divided into four classes, chiefs, nobility, common people and slaves. Among the southern tribes there is a marked tendency to count the rank of a person according to the position held by his father, not by his mother—another indication that paternal descent in this region preceded maternal descent.

The system of barter and exchange among the northwest coast Indians is quite highly developed. At the present time the unit of value is the blanket, and values are calculated by blankets. The assumed value of the blanket at the present time is 50 cents. Canoes may be counted as worth so many blankets, and other objects are valued in the same way. In olden times curried elk skin blankets, canoes, and slaves were used as standards of value. In their dealings among themselves, objects are valued according to these valuations and exchanged on this basis, but in many cases actual payment is made by means of blankets.

A vast credit system has grown up among all the tribes of the north Pacific coast. We may observe that originally this system was based on the custom of loaning out property before the assembled tribe as a means of having a public record of the transaction. Consequently, the payment of debts was also made in the same way. This seems to be the fundamental idea of the so-called potlatches. At the present time

the fundamental idea of the potlatch is that of a great festival, at which the host distributes his whole property among his friends. In a small potlatch he will give presents to the members of his own family, in a larger potlatch he will make presents to the other families inhabiting his own village. In this he is assisted by the wealthy members of his own family. In still larger potlatches the presents are given to neighboring tribes that have been invited, and the host is assisted by all the members of his own tribe. In all these cases the presents are given to individuals as members of certain families and tribes. Through a potlatch of this kind high distinction is attained by the host, in accordance to the amount of property given away and the number of tribes invited. In principle, however, this distribution is partly a payment of debts, partly an investment of property, which at a later time will be returned with 100 per cent. interest by the recipients. Since the property has to be returned not to the host individually, but to him as representative of the position he holds in his family and in his tribe, this distribution is at the same time an investment for his successors, or, as might be said, it may become the life insurance for his children. Owing to this system of potlatches and the system of credits it involves, the total amount of property claimed by each individual among these tribes is ever so much greater than the blanket currency and other property in existence among all the tribes combined, and as a result currency blankets often change hands with remarkable rapidity. It may be partly due to the needs of this system that certain symbolic objects have attained fanciful values. This is particularly true of the peculiar copper plates which are used among these tribes, and some of which are valued at fabulous prices. Even now there are copper plates among the Kwakiutl that are valued at 7,000 blankets, although their actual value is nil. They may be compared to a certain extent to bank notes which represent property otherwise invested.

Connected with this complex system of values and of credits is also the occurrence of symbolic property which is given as a dower. This also is most strongly developed among the Kwakiutl. The property consists of bracelets tied together to sticks, each stick representing a certain value. Small imitations of copper plates about one inch in length are used in the same manner. The young woman also receives a large number of old box covers, of a type which has gone out of use entirely, but each of which symbolizes a box and its contents. Thus, hundreds of box-covers and hundreds of small coppers and of sticks of bracelets may be given away, which have only symbolic value, which, however, may be used as coin in exchange for objects of value.

The potlatch is celebrated on every occasion of importance to the family, such as, at the time of initiation of a young man, at the time of promotion in rank, the erection of a house, and at marriage ceremonies. The system has spread, in less pronounced form, to the Eskimo tribes of Alaska, southward as far as the Columbia River, and also to the Salish and Athapascan tribes bordering on the coast region.

All along the north west coast is found a ritualistic organization which intercrosses the family organization in a most curious manner.

This organization seems to be most marked among the Kwakiutl Indians, and I will describe the conditions found among them.

Besides the crests, which are owned by each individual, he has also the privilege, which is inherited, together with the crests, of being initiated by a supernatural being. The method of initiation is the same as that of the eastern Indian, who finds supernatural power after fasting. The difference between the acquisition of supernatural power among the eastern Indians and that believed in by the Kwakiutl is that among the former the relation between the individual and the supernatural power is purely personal, while among the latter it is a family affair, each family having the right to be initiated by a certain supernatural being. The relation between this idea and the property in crests is also characteristic. They descend in the same manner, but, while the crest is inherited without any particular ritualistic performance giving the individual the right to the crest, the protection of the supernatural being must be acquired in each individual case by an initiation. There is an important difference between the traditions relating to the acquisition of crests and those which relate to the gift of magic powers by a supernatural being. While the ancestor acquired the crest for the whole family, he only acquired the privilege for his descendants to communicate with the same supernatural being.

The supernatural beings who are the protectors of families are, comparatively speaking, few in number, and for this reason a considerable number of families have the same supernatural being as their protector. Notwithstanding this fact, the method of initiation is different for each family, the method being determined by the legend which accounts for the acquisition of the supernatural being as the family protector.

All the individuals in the tribe who have the same supernatural being as their protector are grouped together during the ritualistic performance in one group, which takes the place of the family organization that prevails during the rest of the year. Among all the northwest coast tribes these ritualistic performances are confined to the winter months, and the season is set off from the rest of the year as the sacred season. Since all the families participate in the rituals celebrated during the sacred season, the whole family organization is broken up during this period. The individuals initiated by supernatural beings form one group in the tribe. They are treated with particular regard and take the place of the high nobility. The uninitiated, on the other hand, take the position of the common people. The uninitiated, in turn, are also subdivided into a number of groups, not according to the families to which they belong, but according to their prospective position among the initiated. Thus, young children, who will probably not belong to the initiated for a considerable time to come, form a group by themselves. The young men, older men, and those who in former times belonged to the initiated, and who have given up their membership in favor of their sons-in-law, each form a class by themselves. Thus, we find the whole tribe, instead of being arranged in families, arranged in two large groups, the uninitiated and the initiated. The uninitiated are subdivided into age classes, while the initiated are grouped according to the spirits by which each group is initiated.

The most important among these are the Cannibal spirit, the Ghost, the Grisly Bear, and the Fool Spirit.

All the legends explaining the practices of these sacred societies relate some event telling how a member of the family was carried away by one of these spirits; how he saw the spirit's house, and the ritual

and how later on he was taken back, and imitated what he had seen. This, which is the characteristic explanation of practically all Indian rituals of North America is, of course, merely a re-statement of the practices that are used at the present time. The reasons assigned for the various practices, the most important among which is ritualistic cannibalism, show material differences, not only among different tribes, but even inside of the same tribe. Thus, the principal myth explaining cannibalism relates to the visit of four brothers to the house of the cannibal spirit, who threatened to devour them. By a stratagem the young men made their escape and reached their father's house pursued by the cannibal. The father then invited the cannibal, pretending that he would make a feast for him. In the course of this visit, the cannibal was thrown into a ditch filled with red-hot stones, where he was burned, and from his ashes arose the mosquitoes. From this time on one of the sons imitated the actions of the cannibal, while another son imitated the actions of the grisly bear, who was the cannibal's watchman.

In another tradition of the Kwakiutl, which accounts for the cannibalism of another family, it is told how a young man, upon leaving his house in the evening, was taken away by the cannibal spirit, who took him to his house, where he saw a dance performed, the singers being seated in a ditch, and the rainbow appearing during the dance in the house. While dancing, the cannibal killed and devoured a slave. Since that time the dance is performed in this manner by the young man's family.

Notwithstanding the difference of these traditions, the men initiated in these different forms by the cannibal spirit belong to the same society during the sacred season. The cannibal is highest in rank in the tribe, and next to him is the ghost dancer.

Among the Kwakiutl the ritual consists in the initiation of the novice, the return of the novice, and the exorcising of the spirit that possesses him. The usual sequence during the ritual is the following: The singers sit in the rear of the house, beating time on a plank with batons; in the left hand rear corner of the house is seated the man who beats the box-drum; in front of the singers, near the fire, which is built in the centre of the house, sit the members of the initiated, those highest in rank in the middle, those of lower rank arranged all along both sides. The uninitiated sit in groups along the sides of the house, those lowest in rank, that is the women and children, near the door.

The ceremonial begins with a number of speeches and songs, and with some of the incidents of the potlatch. During these introductory incidents, the voices of the spirits are heard (represented by whistles, which are blown inside or outside of the house), and suddenly one among the uninitiated disappears. It is stated that he has been taken away by the spirits, and that at a set time he will return. On the day set for his return the whistles of the spirits are heard again, and the people go to search for the novice, who is generally found at some little distance from the houses, in the woods, and he is then brought back by the tribe, who arrange themselves in formal procession. Then follow a series of dances, partly performed by the novice who impersonates the spirit that possesses him. Other dances are performed and songs are sung in order to quiet the spirit. After four formal dances it is supposed that the spirit has left, and the novice has to undergo a ceremonial purification, which lasts for a con-

siderable time, and consists essentially in ceremonial washings, which are repeated at intervals of four days, or multiples of four days.

This whole performance is interrupted by numerous accessory performances, consisting largely in dances of the older members of the initiated. These are often provoked by transgressions of the rules of behavior during the sacred season. Thus, the Cannibal may be excited by failure to observe the rule that nobody is allowed to eat before the cannibal has eaten; or the fool may be excited by mention of a long nose, which is believed to be characteristic of the fool.

The dances themselves, as stated before, are pantomimic presentations of the acts of the spirits. As a rule, the first dance is performed by the novice, who is dressed in certain rings made of hemlock branches, and with characteristic face-painting, these being determined by the tradition of the initiation. In the second dance the novice appears wearing a mask, which represents the spirit which possesses him. In the third dance he appears wearing rings made of cedar bark dyed red, which is a symbol of the sacred ceremonies. The form of these rings also depends upon the tradition explaining the ritual. In the last dance he appears again wearing the mask of the spirit.

The details of these rituals show great varieties in different regions. Thus, among the Nootka, who have adopted large portions of the ceremonial, the essential performance is always the appearance of a great number of men wearing wolf-skins and wolf-masks, who take away the novice and who also return the novice at a later time. Other forms of the ceremonial, which are more like those found among the Kwakiutl, are, however, not absent.

Among the Bella Coola, the traditions relating to the cannibal have quite a distinct form, being closely related to the concepts of the tribe who believe that a number of deities inhabit a house located in the zenith. Among these deities is the cannibal spirit. In this tribe the spirit of cannibalism is shown as a wolf or an eagle, which is bodily taken out of the body of the novice. The whole ceremonial among this tribe is much more dramatic than among the Kwakiutl.

Among the tribes of northern British Columbia a portion of these ceremonials have been introduced quite recently, and the ritual is, on the whole, more closely connected with clan ceremonials than with initiation ceremonials.

Linguistic evidence, as well as other historical data, show that the cannibal ceremonies were originally confined to the more northern Kwakiutl tribes—probably the Bella Bella and the tribe of Rivers Inlet, and that later on they were acquired through intermarriage by the neighboring tribes. It seems probable that many of these customs have originated from old war ceremonials. This is suggested by the fact that the reorganization of the tribe, according to ritualistic groups, took place also in times of war, and that during such times the high grades of the initiated, particularly the Cannibal, Bear and Fool were the warriors. The cannibalistic act seems to have consisted originally in the killing of a slave and, incidentally, in killing a slave by biting his throat, by which act the victory was sympolically repeated before the assembled tribe. Among the more northern tribes, particularly the Tsimshian and Haida, no such development can be traced, and it seems more likely that among them the custom was directly copied from their southern neighbors.

It seems likely that the development of the societies of the initiated and uninitiated has taken place, to a certain extent, under the

stimulus of the family organization with its crests, which pervades the whole life of these tribes. The privileges and duties of the groups that exist during the sacred season are quite analogous to those of the family organization, which exists during the rest of the year.

A similar effect of the social grouping of the tribe may be observed in many other directions. Thus, we find that in the summer season festivals are given, not only by the families, but also by the age classes, which, however, in this case appear as intercrossing subdivisions of the families. Even the shamans of the tribe are subdivided in similar ways. At least among some tribes there are two distinct groups of shamans, which have an organization similar to the family organization.

The form of ritual that has been described here is not confined to the sacred ceremonial, but is also used in the ceremonial admission of a man to the privileges of a family, or at other festivities that are of importance in the life of the family.

Among the Kwakiutl the family legend is often performed by means of pantomime at the time of marriage, the legendary marriage of the ancestor of the family being used as a subject of such performance. Among the more northern tribes, the acquisition of the crest is often presented in a similar way. Thus we have records of a performance among the Bella Bella in which an artificial rock was anchored in front of the village. The young man who was to assume his position in the family appeared as coming out of the rock, the performance being a pantomimic representation of the clan legend according to which the ancestor of the clan had obtained his privileges from the master of a certain small island.

The mythological concepts of the northwest coast Indians cluster around the Raven legend. On the northern part of the coast the Raven tradition accounts for the world as it appears at the present time. The same kind of traditions are also found on the southern part of the coast, but in somewhat different combinations. The general concept of the world is not quite definite. The Haida, the Tlingit and Tsimshian believe the earth to be four-cornered and to rest on a pole, which is supported on the lower world. The country of the souls is believed to be either in the lower world or at the outskirts of our world. Other souls, however, are believed to be able to visit the villages. The sky is conceived as another world, which may be reached by passing through a hole in the sky. The Bella Coola take quite an exceptional position in regard to these general concepts. Their mythological ideas, although in their material identical with those of other northwest coast tribes, have been highly systematized. They believe that there are five worlds, two lower worlds, our own world, and two upper worlds. Our own world is held in the east by a giant, while in the west stands the pillar of sunset. The sun travels over a wide trail along the sky, on which two beings are placed, one guarding the summer solstice, the other the winter solstice. In the zenith is the house of the gods, whose chiefs are the sun and his brother. The thoughts of these gods are transformed into action by four brothers, who mediate between the gods and mankind. The winter ceremonial referred to before is in charge of a woman who lives in a cave. As long as her cave is closed the secular season lasts while as soon as it opens the sacred season begins. The opening and closing of her cave is determined by the arrival and departure of the canoe containing the spirits of the winter ceremonial. The whole

mythololgy of the Bella Coola is grouped around these concepts, although, of course, a good deal of loose material, more or less disconnected, is also in existence.

It seems that according to the ideas of the Indians the present conditions of the world have always prevailed. However, in regard to many details the world was incomplete. Thus, according to the ideas of the Haida, there was in the beginning only sky and water, and a single rock on which the supernatural beings lay. Then the Raven created the mainland and the Queen Charlotte Islands from two stones. The trees had to be created. There was no sun nor moon nor stars. These were owned by a chief, who kept them suspended from the rafters of his house, well protected, in a box. The Raven allowed himself to be born as an infant in this chief's house, and then cried until the box was given to him. Eventually he took it away, broke it, and thus liberated the sun. He obtained the fire from a chief, who was its sole possessor. According to one version of this legend, he assumed the shape of a deer, tied shavings to his tail and lighted them by the fire, then ran away, setting fire to the woods, thus bringing fire for his own use and for that of man. He obtained fresh water by getting permission, by an artful device, to drink from the only well in existence and owned by a chief. Then he flew away and scattered the water all over the earth, thus creating rivers and lakes. He brought the salmon by carrying away the daughter of the chief of the salmon, and throwing her into the river. Tales of this character describing the feats of the Raven, by means of which he benefited mankind, are very numerous. There is, however, another large number of tales in which the Raven appears as a trickster, who tries to cheat every person he meets, and who is generally vanquished. Thus, the well known story of the imitation of the host, who, by means of magic, produces food, is told of the Raven. He tries to imitate the magical performances of his host, but fails. While the seal fills a dish with oil by holding his hands near the fire, the Raven, who tries to do the same, scorches his hands, which accounts for his black feet. Coarse and obscene tricks abound in this group of stories.

Analogous traditions are told along the southern part of the coast among the Kwakiutl and Salish tribes, partly of a human being, who is not identified with the Raven, partly of the Mink. The stories told of these beings are, however, not characteristic transformation stories, but rather a group of trickster stories. The transformation stories in this region are told of another being, human in character, who appears as a true culture hero, and one of whose functions is the introduction of the institutions found among these tribes at the present time. The culture hero transforms one hostile person into a deer, another into a raccoon. He travels all over the country killing monsters and restoring people to health. He meets all the ancestors of the various families and gives them the privileges which they possess at the present time. It is worth remarking that the culture hero is distinctly stated to belong to the uninitiated, and to be afraid of the sacred winter ceremonies, which play such an important part in the religious life of the tribes. Excepting the few tales of the transformation of men into animals, the culture hero is not a transformer who gives the world its present shape, but rather finds the world as it now is. There is no such connected account of the origin of phenomena found at the present time among the Kwakiutl and Salish tribes as is found further to the north in the Raven legend.

Besides the Raven myth, the northern tribes have a great number of stories which are essentially human in their composition. They treat of the events which happen in certain towns, bringing in, however, many supernatural elements. Many of these traditions are very long and complex, and consist evidently of a series of disconnected stories, which are centered around a favorite hero. The acquisition of privileges from supernatural beings, escapes from the all-destroying fire, and similar incidents, are prominent among these stories.

Tsimshian mythology, although it shares many of these characteristics with the tales of coast tribes, bears traces of a number of elements that do not occur in any other part of the north Pacific coast. Tsimshian mythology, in many respects, is the mythology of an inland people, and it shows close affiliation with the traditions of the Athapascan tribes and of other tribes of the plateaus. This is indicated, for instance, by the frequent occurrence of fairly short animal tales relating to contests between animals. To a certain extent these are similar to European fables. To this class belongs the story of the wolves and the deer, who have a laughing contest, in which the wolves induce the deer to open their mouths. When they see that the deer have no teeth, they devour them. To this group also belongs the story of a council of the animals, in which the animals appear as true animals, although endowed with reason and with the power to speak. They are, however, not individuals, like the Raven of the Tlingit or the Coyote of the tribes of the interior, but simply representations of their species. Another tradition of the Tsimshian, which illustrates the presence of foreign elements, is that of the origin of the sun. According to this tale, the animals hold a council and draw lots who is to be the sun, and, after a number of fruitless attempts, moon. A general review of the elements of Tsimshian mythology shows very clearly the presence of many foreign elements which point toward the interior.*

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DEPARTMENT OF AGRICULTURE.

NEW BRUNSWICK.

BULLETIN No. 8

Home Economics as applied to the Choice and Preparation of Food.

BY

MISS JEAN B. PEACOCK.

WRITTEN ESPECIALLY FOR THE WOMEN'S INSTITUTES OF NEW BRUNSWICK.

HON. J. A. MURRAY, MINISTER OF AGRICULTURE,
FREDERICTON, N. B.

HOME ECONOMICS AS APPLIED TO THE CHOICE AND PREPARATION OF FOOD

NATIONAL PROGRESS.

That we live in an age of unprecedented progress and achievement, I do not need to tell you. Marconi, with his wireless telegraph and telephone, is flashing this message from continent to continent; Uncle Sam is carrying it by canal from Atlantic to Pacific; Wright Brothers are speeding with it through the conquered air; Steffansson and Shackleton have brought the polar regions within a possible radius of this truth; John R. Mott has carried it into the realm of the spiritual; Edison shouts it from a thousand housetops by means of his ubiquitous phonograph, and it seems to me that the presence here in Sussex this week of you mothers and daughters of New Brunswick is a proof that this spirit of progress, characteristic of the age, has breathed upon the home makers of the land, and found them not unresponsive.

PROGRESS IN THE HOME.

The fact that you are here — and other facts for which we need not go far afield — is proof, I think, of two statements: (1) that the claims of the home upon the housekeeper have changed; and (2) that she has a saving realization of the change. While none of us wish to disparage or underestimate the method of our foremothers, we are forced to confess that times have changed, and we feel that if these women of two or three generations ago, were alive today, they would be as quick as any of us to sense the need of readjustment in the home.

PRODUCTION FORMERLY CARRIED ON IN HOME.

Perhaps some of us wonder why these changes in home life are inevitable. We have only to think of the marvellous changes wrought by the last few years in the industrial world. Why once — and so recently in our new country as to be within the memory of many living — each home was sufficient unto itself in the production of the necessities of life. Full of the romance of a not too distant past are the tales of apple-paring bees, of home grown and spun and woven woollen cloth, and of the dim religious lights cast by the hand-dipped candles of tallow. Then the violent death of the fatted calf made cheese a possibility, and even the skin of the luckless animal was tanned by the energetic father to be worked up later by his own hands into shoes for his family. Later in the more thickly populated localities certain conditions made it possible for one family or individual to make a better coat or bonnet, or pair of shoes, or piece of linen, than the others — eventually giving rise to the system of handicrafts or trades and apprenticeship. After a time this system of municipal or town supply, of material largely handmade, became antiquated because of improved means of travel, because of invention and of the demand for larger quantity and greater variety of products.

PRODUCTION NOW A NATIONAL CONCERN.

Soon production and manufacture and distribution were no longer home or municipal, but national concerns. That is where we stand today. It is indeed a far cry from the conditions prevailing when almost every need of the members of a family was supplied by self-produced articles, to the present state of affairs when the preparation of food is almost the only, so-called, creative work left to the home, unless we include the supreme work of developing manhood and womanhood.

A DEFINITION OF ECONOMICS.

A word often in our ears and on our lips of late is Economy or Economics. Economics treats of the relative value of things. As an abstract subject, dealing with intrinsic values alone, Economics admits of two great divisions — Production and Consumption. In the past, production has been pointed out as the important side of any economically sound enterprise. Of late years the conviction has grown that the use made of money after it has been acquired is of equal importance. In other words, the problem is now as much one of wise consumption, as of successful production. This emphasizes the important place of the home in Economics, as will be realized by those who consider how largely the home is the center of the consumption of wealth.

THE RESPONSIBILITY OF THE CONSUMER.

In the days when the housewife made her own linen and candles and cheese and carpets, and corned beef, and dried apples, she and her family suffered from any lack of care and skill in the process. Equally so now, when the problem is choosing and buying these products, the family purse and the family health are both endangered by ignorance or carelessness or poor judgment on the housekeeper's part. And farther than her family, reach the results of faulty discrimination in buying. When we buy a certain article we set the seal of our approval upon it, we endorse its manufacture. Why? It is the consumers who determine what the factories shall make. If no one bought willow plumes or the cheap grades of silk would there be 168,000 children in the United States alone at work on these and other products, do you think?

WOMEN THE "PRIESTESSES OF BEAUTY."

If every woman who patronizes a grocery store takes the trouble to insist upon absolute cleanliness, with the loss of patronage as an alternative, would there be as much filth in some country "back stores" as we know exists now?

If more of the women of the world followed the example of the New York and Chicago women in their method of keeping the price of eggs down, would eggs I wonder bring five cents each in the markets of a rural community? Truly since the days when nursery rhymes were made, times have changed — now *hens* lay golden eggs and

the *geese* of the world buy them. Someone has said that women are the priestesses of beauty. Well, if all women would keep the altar fires of beauty aglow, hideous china, flamboyant wall paper and extremes in dress materials would cease to be manufactured because of lack of demand for them.

WOMEN AS CONSUMERS ARE THE REAL RULERS OF INDUSTRY.

The entire work of the world must very largely be affected by supply and demand. The home and foreign policies of nations must reckon with these things.

Every dollar that we spend has a bearing on the scheme of things that we seldom think of, I fear. Women, the world over, being the spenders of the world's dollars, are therefore the real rulers of the industrial world at least. A time honored proverb runs "The hand that rocks the cradle, rules the world." We are prone to wonder what more then in the way of power is there to be desired by a mortal with the cradle to rock and the money to spend. The answer comes back "Votes for Women," and passing strange it is that many with a fair supply of both cradle and money clamor for the vote. I wonder if the opposition of mere man to the enfranchisement of women may be an acknowledgment that the balance of power between the masculine and feminine would be seriously disturbed by equal suffrage. I also wonder if it is the wisest ones among women who want to vote —I do not know.

THE ECONOMIC POSITION OF WOMAN.

But, jokes aside, "In the light of all these facts it is a surprising thing that anyone can look lightly upon the share that is given to women in the economic struggle" says Bertha M. Terril in a book called "Household Management." There are those who urge that the reason why women are finding the care of their homes less attractive than formerly, is the fact that all which adds zest and is worth while is taken from them. Rather is it true that some things which demanded time and strength have yielded to more vital things and there is now opportunity to perfect that which is left, with a better appreciation of its importance.

Devine in his book "Economic Function of Woman" further affirms that "it is the present duty of the economist to magnify the office of the wealth expender, to accompany her to the very threshold of the home, that he may point out, with untiring vigilance, its woeful defects, its emptiness, caused, not so much by lack of income, as by lack of knowledge of how to spend wisely. * * * The economic position of woman will not be considered, by those who judge with discrimination, inferior to that of man."

Miss Richardson says "The woman who longs to get where she won't have to count every penny, will never have her longing satisfied until she makes every penny count."

HOUSEKEEPING A PROFESSION.

The reason, very often, for failure, is because woman has not had any special training for her work as a spender for the family. She too often is supposed to imbibe the necessary knowledge incidentally and trust to instinct. Housekeeping ranks among the professions as truly as any other occupation, but how very recent are any attempts to provide for training in this profession. She has grasped the truth concerning the possibilities of her work, who sees in it an opportunity to share the responsibilities of the wage-earner, and to develop the powers of those making up the family.

HOME EXPENDITURE SHOULD CONFORM TO BUSINESS METHODS.

Now it were folly to speak of a need without some suggestions for its gratification.

Miss Richardson says "In olden times women thought and thought and thought before they spent. Now women often spend, and then think and think and think. Nor does the lack of thought beforehand ease the burden of the results of her spending." Authorities on Home Economics tell us that only by the application of business methods to home expenditure, can the best value be obtained for our money. It is natural to feel that economy is being practised when many a coveted article is left unbought. The year's bill, with its record of many unnecessary indulgences, is sometimes rude but wholesome awakening. Some system of bookkeeping which will keep track of every penny is one safeguard against thoughtless expenditure, and even such records are of little value unless we compare one month or year with another and consider well for the purpose of improvement, if necessary, the proportionate amounts spent for food, clothing, rent, running expenses, and the higher life.

Of course, if any such system were to be used in a family, it would be necessary for the members of the family to agree upon a certain standard of living, and decide just how much of the income should be spent for food or clothing, rent and running expenses and the higher life. Where no definite income comes in each week or month, the housekeeper would do well to keep it before her to live within a certain sum, easily covered by the minimum.

WELL-NOURISHED BODIES AT A MINIMUM COST.

From a study of real and ideal budgets prepared by Miss Ellen Richard it is found that the lower the income the higher the percentage spent for food. Therefore perhaps the eye of the economist could detect leakage in the vicinity of this greatest average expenditure. We all sense the need of well-nourished bodies. No type of human efficiency can flourish on anything but a sound basis of physical health, but our desire is to have well-nourished bodies at a minimum cost, if thereby we can save more money to invest in food for mind and soul.

This brings me up to my real subject which you remember was announced as "The Preparation of Food in the Home."

WASTE OF MATERIAL, TIME AND ENERGY.

In this work of preparing food there is, it seems to me, a chance for waste of material, of time and of energy. To laboriously beat up an egg white with a silver fork, when for five cents can be bought an egg beater which will in a moment change it to a froth, is a waste of time, energy and silver fork. To chop meat with a knife, when a food chopper can be purchased for $1.50, is a waste of time and energy. The possibilities of fireless cookers as fuel savers are just beginning to be talked about among us. Amply justified would we be in the saving of energy by the expenditure of a moderate amount of money upon such small conveniences as a soap saver, a measuring cup, strainers of different sizes, an asbestos mat or two, glass jars plainly labelled for such supplies as rice, starch, soda, salt, etc., a sink strainer, a covered garbage pail, a high stool, brushes of various sizes, a small paint brush for buttering pan, a roll of grocer's wrapping paper, linoleum for the kitchen floor.

RUNNING WATER IN KITCHEN.

I know we all appreciate the value of a supply of pure running water in the kitchen. Perhaps you each one have it. If you have not, don't let any one make you believe it is an impossibility. Modern methods of plumbing make a bathroom and a supply of hot and cold water a possibility, wherever there is water to be forced into the house by natural or artificial means.

LABOR-SAVING DEVICES.

We all know, probably, that a little washing soda in a greasy pot, some vinegar boiled in the kettle to which the odor of fish clings, soaking a burnt saucepan in strong salt water, cold water first in dishes used for egg and milk, and the use of a three cent brush on obstinate, sticking particles of food, will lessen the labor of that thrice hated dish-washing. Some excellent machines for washing dishes are on the market now, but probably the price would be out of proportion to their usefulness in a small family.

A careful planning ahead of the meals of the week will conserve the energy and time, not to speak of the pennies of the cook, as she can at one time prepare enough potatoes for dinner today and breakfast tomorrow. She can plan to have enough fish left over from dinner for a fish scallop for the evening meal of the following day, or she can bake the cakes that need constant attention while she stirs the custard which keeps her by the stove. Of all the worry savers in regard to cooking, I do think the planning of the meals a week or more at a time, ranks first. The use of papers as aids in cleaning the stove and preventing the necessity of much scrubbing of tables and draining boards, cannot be overestimated.

The sifting of a large panful of flour and baking powder at one time, mixed in the right proportion, to be used for biscuit, muffins and cake, will save the use and washing of sifter and bowl at each subsequent baking.

KITCHEN EQUIPMENT.

In the matter of kitchen equipment, the best is eventually the most economical. Agate saucepans or aluminum ware (if the price is not prohibitive) are the best. Food cooks more quickly in aluminum, and less energy is needed to keep this metal clean.

A steel range gives better satisfaction, is more easily cleaned, more durable and more economical of fuel than a cast iron stove.

Hard wood boards and table tops, while not so white as soft wood, are more durable and satisfactory. Tin utensils are neither healthful nor economical for most purposes. Hardwood floor in the kitchen wastes the energy of the housekeeper because it is trying to walk on, and the scrubbing of it is no easy task. Linoleum kept in a good state of varnish is much better.

ECONOMY IN BUYING.

Of the food itself — apart from the mechanical appliances used in its preparation — I have this to say: Both the choice of the raw materials and the skill used in their preparation, are factors of "adequate nourishment at minimum cost."

In the choice of food (1) the kind we buy and (2) the amount to be bought, each deserves some attention. The French woman, that most frugal of housekeepers, we are told, buys a franc's worth or less of each food at one time, while the thrifty English housewife goes to the opposite extreme. In America there is no rule, the amount of any given food bought at one time varying with individual opinion and climate.

We all regard as shiftless the hand to mouth method of buying 10 lbs. of sugar, 10 cents worth of vanilla, and a cake of soap, just as each is needed. In this climate such supplies as sugar, bread and pastry flour, cereals, flavorings, tea, spices, soap and starch, can be taken care of in amounts sufficient for a month at least. It is considered inadvisable to buy sugar and flour in bags as there is danger of its having come in contact with unclean liquids or other dirt in the process of distribution. Often the difference in expenditure from buying in the larger quantities will save 20%. Canned goods can be bought by the dozen, or two families might buy a case together. Buy when a fresh supply comes from the factories. Cereals keep better when bought in sealed packages. They may be bought by the dozen. We each know the economy of buying soap by the box, removing the wrappers and giving it a chance to dry out. Soda, cream of tartar and baking powder, can be bought in large amounts, and the small cans or jars for daily use filled.

It is never good economy to buy cheap grades of flavoring and spices, or those not known to be reliable. Know a good brand and accept no substitute.

CHOICE OF MEAT AND FISH.

Perhaps there is more waste in the buying of meat than any food. It is surprising how many there are who do not know what part of the animal supplies certain cuts of meat. This is not usually a problem

of farm homes, when a half or whole animal may be consumed by the family, part as fresh meat and part as corned, dried or smoked. If, however, one is buying meat by a few pounds at a time, the cuts without excess of bone or gristle or fat — while apparently much more expensive — give more nourishment for the money. Yet, with the proper treatment in the hands of the cook — that is with long, slow cooking by means of hot water or steam — the cheapest cuts can be made palatable and they are just as nourishing.

Fish is usually considered cheaper than meat, but this is not true in inland localities. Great care must be exercised in the choice of fresh fish. If even slightly tainted there is grave danger of ptomaine poison. Oysters and lobsters have prices altogether out of proportion to their nutritive value. We pay in these fishes for flavor and rarity, and we think them occasionally worth the price, though not if rigid economy is being practised. The same may be said of poultry and game.

Of vegetables, the storing and not the procuring is the problem in the country home. Fruits are not usually bought in large quantities, apples being an exception to this rule.

As to the relative cost of baker's and homemade bread, there is much controversy. As to which is more palatable, we are not in doubt.

COOKING AN ART.

But the real art of the housekeeper is not displayed in the buying of the food stuff. That is a purely business proposition. It is in the cooking that the artistic in her temperament comes to the surface.

Ruskin says "Cooking means the knowledge of Meadia and of Circe, of Helen and of the Queen of Sheba. It means the knowledge of all herbs and fruits and balms and spices, and all that is healing and sweet in the fields and groves, and savory in meats. It means carefulness and inventiveness and willingness and readiness of appliances. It means the economy of your grandmothers, and the science of the modern chemist; it means much testing and no wasting; it means English thoroughness and French art and Arabian hospitality; and, in fine it means that you are to be perfectly and always ladies — loaf givers."

It is not drudgery. Do not tolerate that statement in regard to it. It is a science. It is the work of an artist of the highest order.

Michael Angelo found angels imprisoned in every block of marble his chisel touched. Millet, the French painter, saw in two peasants bowed in prayer at the sound of the angelus, the possibilities of a great picture.

Shakespeare found "sermons in stones and books in the running brooks." What made these men different from their fellows was not that they had better materials or different with which to work. The difference lay in the perspective of each, in the vision each had.

We cannot afford, for our own sakes, to miss the vision which makes us sure that cooking at its best is a consummate art, for it is the changing of crude materials into that which will keep perfect our bodies, the temples of the living God.

USE OF FOOD.

However, I must not soar so far away from things material that I shall forget to tell you some things about the preparation of food. First, let me tell you that food has a four-fold function in our bodies.

(1) To cause growth.
(2) To repair the worn out tissues.
(3) To supply heat.
(4) To furnish us with energy to think and work.

CLEAN FOOD IS VITAL.

Much beside cooking is included in the preparation of food — as any of us will readily see if we think of what meat has to undergo before it is ready to cook — how vegetables and fruits and cereals must be harvested and packed and sold. The matter of clean food is of course a vital one to us when we consider how disgusting unclean food is, and the great danger of spreading of disease. The washing or cleansing of food before cooking is then the first step in the preparation of most food.

This phase of the food question will be dealt with at greater length in a subsequent lecture.

WHY FOOD IS COOKED.

We cook food for a variety of reasons:

(1) To make it more digestible.
(2) To make it taste and look better.
(3) To preserve the food and destroy parasites.
(4) To furnish a greater variety of food.
(5) To economise expense.

Each food is probably not cooked for all these reasons. Meat, eggs and fat, are more digestible raw, but they taste and look better when cooked. Different methods of cooking the same food furnish the desirable variety. Often in cooking, left-overs can be used in the production of a new and palatable dish — thus economy is practised.

METHODS OF COOKING.

Many mechanical processes are applied to foods before or during cooking, which tend to make them more digestible or more sightly. I speak of such things as the beating of eggs which makes the mixture to which they are added easier to digest, the folding of air into pastry to make it light, the beating of mashed potato, the creaming of butter for cakes, the whipping of cream, the grating of cheese, the shredding of fish, the kneading of dough, etc.

Cooking is a very old and a very universal process. Some methods of cooking are used by even the most savage of races.

It is accomplished by the application of heat to the food material. The method varies with the food and with individual taste.

The more common methods are:

(1) Baking or cooking in an oven.
(2) Broiling or roasting over coals.
(3) Boiling or stewing in water.
(4) Cooking by steam in steamer or double boiler.
(5) Frying in hot fat.
(6) Cooking by means of frying pan or griddle.

COOKING OF MEATS, EGGS AND FISH.

Broiling or roasting is applied to meat or fish. Intense heat is needed at first for meat so that the outside may become seared, thus preventing the escape of the flavour-giving juices. The temperature of the meat is then lowered or it will become tough and hard to digest. Pork needs a very long cooking, partly because it is sometimes known to contain a parasite which causes trichinosis. Veal, too, needs long cooking, but all meats must be cooked at a low temperature to be tender.

Eggs should never be boiled, but cooked from five to thirty minutes in water just below the boiling point. Cheese needs no cooking; melting does not injure it, but long cooking toughens. There is a great waste of good material and of good digestive energy among us as a result of the wrong kind of cooking applied to these animal foods. Probably meat is most frequently overdone, or the wrong methods of cooking is used on the tougher joints. Such tough cuts require long, slow cooking always. Preferably the heat is applied by means of hot water and steam.

Milk to be digestible must not be boiled. If milk is to be heated for any culinary purpose, it should be done over hot water rather than over direct heat.

Eggs have such a wide range of uses in cooking and such high nutritive value, that the need cannot be overemphasized of short cooking and gentle heat for mixtures containing any appreciable amount of egg. This applies equally to sponge cake, to custards, to omelet, to scrambled or poached eggs. In the country home the problem is not the securing of good eggs so much as more variety in their preparation. Yolk and white beaten separately and combined with a white sauce and some grated cheese, or shredded fish or chopped meat, makes a most palatable and nourishing dish which the French call a soufflé, recipés for which can be found in any reliable cook book.

USE OF "LEFT-OVERS."

Right here let me speak of that substance known as white sauce or cream sauce, for I know of no other mixture which enters so largely into the preparation of made dishes as does this substance. It is made of milk, flour, salt, pepper and butter. It is made thick or thin by varying the amount of flour. It is made more or less rich by using more or less butter; two tablespoons each of butter and flour to one cup of milk makes an average sauce for vegetables or meat or fish. The method of combining the materials is

to melt the butter, add the dry ingredients and then the milk gradually, then stir over the direct heat until the mixture thickens. A very thin sauce of this sort is the foundation of cream soups, such as potato, tomato and corn soup. A somewhat thicker sauce (the one mentioned above in fact) is served with vegetables or fish, while this same sauce with left-overs of meat or fish or vegetables added may be baked as a scallop for breakfast or supper. A very thick sauce may have chopped meat or fish added, may be shaped into cylinders coated with egg and dried bread crumbs, fried in deep fat and called croquettes. In such ways as these the economy of cooking becomes very apparent.

COOKING OF VEGETABLES.

All foods that contain starch such as beans and cereals must have long, slow cooking by moist heat to burst the starch grains and make the food digestible. A large amount of liquid is needed in the cooking of all such foods. Rice and macaroni should be cooked uncovered in a large amount of boiling salted water.

Vegetables need careful cooking to preserve their best flavors. Either steaming or baking is a better method for squash than boiling. The quickest possible cooking in rapidly boiling water, and immediate draining when tender, and then proper seasoning and serving hot, are the essentials of successful vegetable cookery. Cabbage, lettuce and celery when served in salads must be made crisp by standing in cold water before use.

BAKING POWDER MIXTURES.

In the cooking of mixtures made light by soda or baking powder, the things that make for a good finished product are:

(1) Cold materials.
(2) The smallest possible amount of handling.
(3) Quick work — no delays in mixing.
(4) Immediate baking in a hot oven.

The heat of the oven acts upon the moistened baking powder causing it to give off a gas. This gas in trying to escape through the doughy mass puffs it up. Before it has time to fall the heat of the oven stiffens and cooks the dough. From this it may readily be seen why biscuit or muffins cooked in a too slow oven are apt to be soggy.

SCIENCE OF BREAD-MAKING.

The process of making bread has enough of history, science and art about it to furnish material for a whole lecture. Suffice it to say here that bread is made light by the gas given off by the action of yeast upon a kind of sugar found in moist flour. Exactly the same process goes on when bread is rising as when fruit juice is fermenting and the same products alcohol and carbonic acid gas are the results. The gas in trying to escape puffs up the dough. We know fermented fruit eventually turns sour if exposed to the air. So, if

the action of the yeast on the dough is not stopped by kneading and cooking, an acid takes the place of the alcohol and the bread is sour.

We knead the dough to distribute the gas bubbles and make it fine grained, to knead in air for the growth of the yeast, to make the dough elastic. We bake the dough:

(1) To stop the action of the yeast.
(2) To drive off the alcohol.
(3) To make the food in the bread digestible.
(4) To make it appetizing and of good appearance.

FRYING IN FAT.

The method of cooking foods in a small amount of fat in a frying-pan is not to be recommended for digestive reasons. Cooking in deep fat, when enough is used to float the food is an excellent, but rather expensive manner of cooking. If, however, we consider that a pot of deep fat can be used sixteen or seventeen times, and that even then what is left can be made up into a good soap for cleaning purposes, the expense of it need not keep us from having croquettes and other fried foods whenever we want them. Any mixture fried in fat must be dipped with egg and crumbs before frying to form a coating for the prevention of fat entering the food. We know that the common use of the modern steel range revolutionized the cooking processes of people used to cooking in an open fireplace. The new things now are the fireless cooker and paper bag cookery.

FIRELESS COOKERS.

The first fireless cookers were rather crude homemade affairs, and a very useful and effective one can be manufactured at home for $3.00. (See B. C. Bulletin "Preparation of Food.") They are made on the principle that food raised in temperature to the boiling point, and surrounded with non-conductors of heat, will, if kept closely covered, cook itself as it were. The factory-made varieties have soapstone disks, which when heated very hot and placed in these cookers with meat, will roast it to a turn. As a means of cooking beans, cereals, soups, stews and the tough cuts of meat, fireless cookery is ideal.

It must be very apparent that it would save fuel. Then the facts that the food needs no attention after the first heating, that an hour more in the cooker than the food really requires does not affect the quality of the food, that there can be no escape of juice or flavor, that all the work of preparing noon or evening dinner can be done early in the day, must recommend themselves to all. The housekeeper can attend her Women's Institute meeting, go to church, call on a friend, or entertain a visitor, without a thought about her dinner once it is placed in the cooker. Its disadvantage is, of course, the length of time such cooking requires.

PAPER BAG COOKERY.

Of paper bag cookery, brought to its highest perfection by an English cook, called Sayer, it is my experience that the bags are too expensive for very general use. They vary in price from twenty

to fifty-five cents per dozen. For cooking fish they are excellent, as they retain the best flavors, the fish does not become broken and the unpleasantness of pans smelling of fish is eliminated.

I know it is not necessary to say anything to you about the necessity for scrupulous cleanliness in cooking. Always dirt has been an arch enemy of the thrifty housewife. This matter will be dealt with more fully in a subsequent lecture.

HOME ECONOMICS IN RELATION TO COOKERY.

We are glad that the scales are being removed from the eyes of those who depreciated the true value and dignity of the art of cooking.

We rejoice that the economics of this subject includes the saving of the time and energy of the cook herself by means of scientific methods and labour saving devices, but chiefly do we give thanks for those housekeepers who walk in the spirit of Stradivarius when he proclaimed that "not God himself could make Antonio Stradivarius violins without Antonio."

It is the special province of Women's Institutes, of Household Arts Instruction in the schools, of all education in any brands of woman's work in the home, to both disseminate knowledge and cherish this spirit. To the less fortunate than ourselves in the matter of home life or outlook we must hear the message that Home Economics stand for:

"The ideal home life for today unhampered by the traditions of the past.

The utilization of the resources of modern science to improve home life.

The freedom of the home from the dominance of things; and their due subordination to ideals.

The simplicity in material surroundings which will most free the spirit for the more important and permanent interests of the home and of society."