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Native American Medicine

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Batsaikhan, O., & Miller, C. (Eds.). (2022). Native American Medicine. https://cornerstone.lib.mnsu.edu/all/157/CC BY 4.0



BULLETIN

OF THE

PUBLIC MUSEUM OF THE CITY OF MILWAUKEE

Vol. 4, No. 3, Pp. 327-525, Plates 46-77

May 2, 1932

Ethnobotany of the Ojibwe Indians

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Title: Ethnobotany of the Ojibwe Indians

Author: Huron H. Smith

Release Date: July 26, 2015 [EBook #49527]

Language: English

*** START OF THIS PROJECT GUTENBERG EBOOK ETHNOBOTANY OF THE OJIBWE INDIANS ***

Produced by Betsie Bush, David Edwards, Raymond Bush, and the Online Distributed Proofreading Team at http://www.pgdp.net

TRANSCRIBER'S NOTE: Minor typographical errors have been addressed, but standardisation of the differing spelling of Ojibwe words has not been attempted.

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By Huron H. Smith

MILWAUKEE, WIS., U. S. A.

Published by Order of the Board of Trustees

Printed by the AETNA PRESS, INC. Milwaukee, Wis.

Engravings by the SCHROEDER ENGRAVING COMPANY Milwaukee, Wis.

Ethnobotany of the Ojibwe Indians

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FOREWORD

This bulletin is the third in a series of six, recounting the field work done among Wisconsin Indians to discover their present uses of native or introduced plants and, insofar as is possible, the history of these plant uses by their ancestors. As far back as 1888 Hoffman^[85] reported that the medicinal lore of the Ojibwe would soon be gone. But thirty-two years later, it is still partially recalled and practised among the more primitive bands of these people. How long it will persist is problematical. The Ojibwe are the most numerous of any of our tribes and as long as they live in the northern forest and lake district of Wisconsin, so long will the older Indians continue to explain the natural history of their environment to the young men and women of the tribe.

The writer deplores the brevity of the time that could be devoted to each tribe, and applauds the similar study reported by Miss Frances Densmore^[86] in her fifteen years of research among the Ojibwe. Necessarily the most valuable information comes from the oldest Indians, and many informants have died since this study was made.

Three trips were made, usually of six weeks duration. The first was made in June, 1923 to the Lac du Flambeau Reservation, in Vilas County, Wisconsin. The same region was visited again later in the fall. During the spring of 1924 one trip was made to Leech Lake, Minnesota, where the remnant of the Pillager Band of the Ojibwe live on Bear Island, (Plate 60, fig. 1), and the surrounding mainland. Since then, trips have been made to Redcliff, Bayfield County, to Odanah, Iron County, to Lac Court Oreilles, Clark County, and to scattered bands in various sections of northern Wisconsin. The principal work was done at Lac du Flambeau and Leech Lake. The Leech Lake trip checked results obtained at Lac du Flambeau.

The writer thanks those officials and private citizens who assisted by introductions to Indians and by making his stay among them comfortable. Mr. James W. Balmer, Indian Agent, then at Lac du Flambeau, now at Pipestone, Minnesota, and his chief clerk, Mr. Walter H. Shawnee, a Shawnee Indian, still in service at Lac du Flambeau, and Mr. John Allen,

Ojibwe Indian and school disciplinarian all gave valued advice and quartered us at their Teacher's Club. Mr. Edward Rogers, of Walker, Minnesota, a very successful Ojibwe attorney, and the Noble brothers, Mr. John W. Noble and Mr. E. W. ("Van") Noble, proprietor of Forest View Lodge, directly across from Bear Island, rendered valuable assistance with the Pillager band of Ojibwe.

The writer collected every plant he could find in each region because he had been informed that the Ojibwe differ from other Wisconsin Indians in that they believe that every plant that grows is some kind of medicine or useful for something. The only plants discovered for which they had no name or use were adventive plants, and one could fairly well establish the date of their appearance in the state, because the Indians pay much more attention to our native flora than do the whites.

Most of our informants were men, because they found it easier to talk to the writer than the women. It was easy to get the women to talk of old time methods of preparing aboriginal foods. The Ojibwe had a large number of hunting medicines used as charms. These were accompanied by drawings on the ground designating what they hoped to accomplish in killing game for their larder. About sixty-five per cent of their medicinal plants were actually valuable medicinally, the remainder being employed in a shamanistic or superstitious manner. The writer concludes that their great knowledge of plants has been achieved through long periods of time by a process of trial and error, basing this belief upon their fear of mushrooms. Both men and women pointed out plants in their native habitat and were willing to explain their uses. They are the real ones to thank for the facts discovered and without their cooperation such a study would be impossible. A list of them follows.

In conformity with previous bulletins, the plants will be listed (1) under their various uses and (2) under each of these captions, alphabetically by their families. Where possible, the literal translation of the Indian name is given.^[87]

INFORMANTS

In the course of this work many informants have assisted the author, among whom the following residents of Lac du Flambeau, Wisconsin, should be noted:

Jas. W. Balmer, Indian Agent; Walter H. Shawnee, Chief Clerk; Charley Burns, Cagkecci, Indian Policeman; John Allen, Indian Disciplinarian; Anawabi (Exalted One) Village Chief; Jack Doud, Kêkêk (Sparrow-hawk) Captain in Civil War; Bert Skye, Anawabi's Son; Mrs. Bert Skye; Bear Skin, Mûkwean (Bearskin) Medicine Man; Jack Patterson, Sîkurtz, of Sand Lake; Long John Bear of Pelican Lake; John White Feather, Wabacki gane 'bi, of Flambeau Lake; Mrs. John White Feather; Webujuonokwe, of Flambeau village; Amîkons (Young Beaver) of Flambeau village.

We also received information from the following residents of Leech Lake, Minnesota, Ga-saga'skwadji'mêkag:

Ben Smith, Pcikci (Deer) of Boy Lake, Minnesota; Edward Rogers of Walker, Minnesota; John Peper, Jigwa'be of Bear Island; Pi'awantagi'nûm, Peper's mother; White Cloud, Wabacka'nakwad (White Cloud) of Bear Island; Inwapi'kwe, White Cloud's wife; Wasawana'kwît, White Cloud's son of Federal Dam, Minnesota; John Smith, Ajo'vbêne'sa of Bear Island; Mowîcga'wûs of Bear Island; Ed Coming, Getaki'bînes, of Brevick, Minnesota.

Mici'mîn (Apple), Chief, and John Goslin, Wabacki'gane'bi, of Lac Court Oreilles, Wisconsin, also contributed information.

PHONETIC KEY

The Ojibwe have written their language for a longer time than any other Algonquin tribe and, while they employ a syllabary^[88] in corresponding with absent members of the tribe, it has little value to the ethnologist. The writer has two books printed in English and Ojibwe. One is "A collection of Chippeway and English Hymns", translated by Peter Jones, Indian Missionary, the second edition of which was printed by the Methodist Book Concern in 1847. This was given to the writer by Mr. Henry Ritchie, an Ojibwe, of Laona, Wisconsin. The other is "A Dictionary of the Otchipwe Language", explained in English, Part 1, English-Otchipwe, by R.R. Bishop Baraga, published by Beauchemin and Valois, Montreal, in 1878. This was given to the writer by Capt. John Valentine Satterlee, of the Menomini tribe, Keshena, Wisconsin. With the aid of either of them one experiences little difficulty in pronouncing Ojibwe words.

In this bulletin, the following phonetic system will be used.

VOWELS

a as in art
ä as in flat
e as in prey
ê as in met
i as in police
î as in bit
o as in go
û as in luck
u as in rule
w, y and h as in English
ai as in aisle

CONSONANTS

	Post-Pal	Medio-Pal	Pre-Pal	Dental	Bilabial	
Stop	k, g		d t	t	b p	
Spirant			сj	SZ		
Affricative		dj	tc	f v		
Nasal	ñ		n		m	
s as in since						
g as in give						
z as in zeal						
c as sound of sh						
j as sound of zh						
te as sound of te in witch						
dj as sound of j in jug						

While the writer is not a linguist, Indian pronunciation came easily to him and he was able to pronounce all plant names in an intelligible manner to Ojibwe people whom he had never seen before.

INTRODUCTION

The subjects of this bulletin, the Ojibwe Indians, have probably been designated by more different spellings of their name than any other tribe in the country. The anglicized version is Chippewa, an adaptation of the Ojibway of Longfellow. Ojibway means "to roast till puckered up," referring to the puckered seams on their moccasins, from "Ojib", "to pucker up", "ub-way", "to roast". In historic literature some of the more common ways of spelling their name have been: Achipoes, Chepeways, Chipaways, Odjibwag, Otchipwe, Uchipweys. Less familiar names applied to them have been: Baouichtigouin, Bawichtigouek, Dewakanha, Dshipowehaga, Estiaghicks, Hahatwawne, Khahkhahtons, Neayaog, Ninniwas, Saulteur, Santeaux, Wahkahtowah and at least fifty others.

The Ojibwe is one of the largest tribes in the United States and Canada, and lived originally along both shores of the Great Lakes as far west as the Turtle Mountains, North Dakota. They are of Algonkian stock and in the north are closely related to the Cree and Maskegon tribes. In the south, through Michigan, Wisconsin and Minnesota they have always been closely associated with the Ottawa and Pottawatomi. These three have been recently called the Three Fires Confederacy. Their languages were even similar, and Pottawatomi have often told the writer that their tongue was an abbreviated Ojibwe language,—"like it was a nickname".

This numerous people lived far away from the frontiers of the colonial war period, hence are not often mentioned in the early history of the United States. The original habitation of the Ojibwe in Wisconsin is supposed to have been at La Pointe, a town no longer in existence, in Ashland County, near Lake Superior. The first reference to them in history is in the Jesuit Relation of 1640 when they resided at Sault Ste. Marie. It is thought that Nicolet met them either in 1634 or 1639. Father Allouez found them at Superior, Wisconsin, in 1665-67. According to Perrot, [89] in 1670-99 those Ojibwe on the Lake Superior shore of Wisconsin cultivated corn and were living peaceably with their neighbors, the Sioux. About this time they first obtained fire-arms, and pushed their way westward fighting with the Sioux

and the Meskwaki. The French established a trading post at Shangawawmikong, afterwards La Pointe, in 1692, which was the most important Ojibwe settlement in Wisconsin.

In the early years of the eighteenth century, the Ojibwe succeeded in driving the Meskwaki from northern Wisconsin, when the Meskwaki joined forces with the Sauk Indians. The Ojibwe then turned their attention to the Sioux, driving them across the Mississippi and as far as the Turtle Mountains in North Dakota. The Ojibwe took part in frontier settlement wars up to the close of the war of 1812. Those living within the United States made a treaty with the Government in 1815 and have since remained peaceful, with the exception of a minor uprising among the Pillager Band of Ojibwe on Leech Lake, Minnesota. Most of them live on reservations or allotted land in Michigan, Wisconsin, Minnesota and North Dakota. There was a small band of Swan Creek and Black River Ojibwe who sold their lands in Michigan in 1836 and went to live with the Munsee, in Franklin County, Kansas.

It was represented to the writer that the Pillager Band of Ojibwe should be quite interesting and primitive since they were the only unsubdued Indians left in the United States. They are supposed to have revolted during the Civil War, when Government attention was concentrated on determining whether or not, the Union should be preserved. They pillaged a small town, killed the inhabitants, took all of the food stores and fled to Bear Island in Leech Lake, Minnesota, shown in plate 60, fig. 1. Again, while the United States was at war with Spain in 1898, the Ojibwe complained bitterly about certain irregularities in regard to the disposal of the dead and fallen timber on Leech Lake Reservation. They accused white speculators of firing the woods to create a class of timber known as dead and down timber, thus depriving them of their winter livelihood in logging operations. [90]

Rather indiscriminate arrests of the Pillager Indians by United States marshals caused resentment and the actual warfare was caused by the attempt of a deputy marshal to arrest certain Indians accused of selling whiskey on the reservation. On September 15, 1898, two Indians were arrested by deputy marshals and rescued by their comrades. Warrants were issued for the arrest of the more than twenty Indians who had assisted in the rescue. Since the marshals feared the Indians, they asked for the assistance of troops. It was thought that a show of force by regular troops would be

sufficient. Twenty men of the Third Regiment U. S. Infantry were sent, but since the Indians showed no sign of yielding eighty more left Fort Snelling for Walker, Minnesota. Major M. C. Wilkinson and General J. M. Bacon were in charge.

Two small lake steamers and a barge took the troops to Bear Island, and they anchored in shoal water just across from the island, proceeding by barge to the mainland. The battle took place at the house of Bujonegicig, who died only a few years ago. The troops were fired upon from the woods and Major Wilkinson, Sergeant Butler and four privates were killed. Ten were wounded. On October 6, 1898, 214 more troops came to assist, but no further firing was encountered and the uprising was over. The Commissioner of Indian Affairs, W. A. Jones, arrived from Washington, October 10. The next morning he and Father Aloysius, a priest with great influence over the Indians, held a long and friendly conference with the Pillager chiefs investigating and settling the timber complaints. Troops flooded that country and persuaded the Bear Islanders to respond to the warrants. They were duly tried, sentenced and fined, but the fines were remitted and after two months imprisonment the sentences were commuted and pardons granted.

The writer found but few who remembered the battle, for while there were over a hundred men able to bear arms in 1898, the Ojibwe could not successfully fight the influenza attack of 1919 and the present population consists of only fourteen persons: John Peper, wife, daughter and mother; White Cloud, shown in plate 59, fig. 2, wife and son; Moîcka'wus and wife; John Smith, Frank Marshall, wife and two children. John Peper's mother was said to be 106 years old and looked the part, as shown in plate 59, fig. 1. John, her youngest boy was past 70 years of age. Another very old resident, John Smith, had died the year before the writer arrived. His age was said to be 138 years. His recollections are said to have included George Washington as President of the United States.

All of our Ojibwe residents in Wisconsin and those in Michigan and Minnesota were forest Indians and, as such, great hunters, although they cultivated maize in a small way. They made very superior birch bark canoes and were at home on the many lakes of the northland, subsisting largely on fish and game. While at the present time, they dress themselves to satisfy the pre-conceived ideas of tourists, in the early days, their headdress

consisted of otter skin caps, often embellished with eagle feathers, one for each enemy slain in battle and consequently for each scalp secured. The great feathered bonnet was not of their culture, but has been more recently borrowed from the Plains Indians. They never used the tepee of the Plains Indians, such as is shown in plate 46, fig. 2, and in plate 58, fig. 2, but built a wigwam. The wigwam was easily constructed in a half-day's time. Poles were thrust into the ground in a circle of from twelve to twenty feet, their tips bent and securely tied in the center with basswood bark cord to form a hemisphere, about eight feet in height at the center. The whole was then covered with bark of balsam, or woven cat-tail mats, such as the one shown in plate 46, fig. 2, and roofed with birch bark. An entrance and smoke hole were left and mats thrown upon the ground. It was much warmer than a tepee and better adapted to the heavy snow fall of the north, and to low temperatures. All of their storage houses and their smaller sweat lodges were similarly made. Their medicine lodges followed the same construction though they were much longer: being eighty, a hundred and even a hundred and fifty feet in length.

We had occasion to see the medicine lodge in use several times during our stay at Lac du Flambeau. This lodge was in the old Flambeau village, just at the edge of the woods. It was a huge affair, about one hundred and fifty feet long, with a stout framework of saplings joined together and arched over at a height of eight feet. The framework was rigidly held together with other horizontal saplings secured by basswood bark cord at every junction of poles. It stood as a framework for several years. During use, the sides of this framework are covered with cat-tail mats and the top with sewed birch bark, as shown in figure 21, of the Museum's 1923 Yearbook. By using a bone needle and nettle string the cat-tail mats are sewed together with an invisible stitch, that makes a windproof cover.

Down the center of the lodge is a long ellipse where countless dance steps have bared the earth of this otherwise grassy plot. The entrance of the lodge faces the east, and there is an exit to the west. A fire is usually burning just inside the eastern entrance, the smoke ascending through a smoke hole left in the roof. The medicine men are gathered to the left of the fire on the north while the patient is usually seated to the right of the fire on the south. The medicine drum in use during a treatment for healing is smaller than the dream dance drum, usually seen by tourists, and of a

different shape. It is about eight inches in diameter and sixteen inches high. The buckskin stretched over the end is moistened from time to time by reversing the drum which contains water, and rubbing the skin to permit it to take up the liquid. The tone and volume are greatly enhanced by this procedure.

The medicine lodge members sit in groups around the lodge starting at the north side, and proceeding down to the west and back along the south side toward the east again. Every song and march around the lodge is repeated four times, this being their sacred number. The time needed in effecting a cure is varied but the writer has seen a woman carried in on a litter, recover in three hours time and take part in the dancing.

The Indian Service in the past has wished to discourage treatment by medicine men and on larger reservations has supplied a resident physician. It is a constant competition between the two, for naturally a white physician cannot cure every case any more than a medicine man can, and when the medicine man apparently effects cures after the physician has given up or appeared to produce no improvement, the credulous patients are going to continue to believe in the medicine men. Christianity has had but little effect upon the Ojibwe so far as the writer has been able to observe, largely because of the reputation of the medicine men among them.

According to the late Dr. William Jones, the ethnologist mentioned in "Ethnobotany of the Meskwaki Indians", Part 2 of this volume, the Pillager Band of Bear Island occasionally practiced cannibalism ceremonially, and even as late as 1902 ate human flesh on the Rainy River during a famine. He cites the fact in 1905 that polygamy was once common and even still occurred among wandering bands.

Many visitors to the northland think of the country in terms of sand, and consider it unfit for use agriculturally. While sandy soil is common, it is also easy to find very good productive soil and in some cases even clay. The Indian settlements and homesteads were never extensive and four or five acres of land seem to suffice them for growing hay and garden crops. The agency Indian farmer maintains demonstration garden plots, such as the one shown in plate 46, fig. 1, and also more extensive farms, and constantly advises with those who are trying to farm. The Indian women even grow some cultivated flowers. At Lac du Flambeau, the Ojibwe take great pride

in their annual Indian fair and display farm animals, horticultural products, and native arts and crafts for premiums. It is a pity that more do not follow agriculture because they have sufficient farming land and have also good examples to follow. Most of them like the quick returns made in selling Indian art work, or made acting as guides for fishing and hunting parties. The easy money is too soon spent and they suffer considerably before the winter is over.

The native flora is about the same at both Lac du Flambeau and Leech Lake, and the species are by no means as varied as on the Menomonie Reservation. They make full use of everything that occurs with them except the adventive or introduced plants. They recognize regular types of soil as sources of their medicinal plants. Sandy meadows, sandy wastes, lakes, still ponds, swamps, upland swamps, rocky openings in the forest, evergreen forests, and hardwood forests all are searched for distinctive plants. The greatest number of species of native plants are found in the composite family and we find the Ojibwe making more use of these than any other tribe. The heath family contributes many species and is important to them. Grasses and sedges, while numerous in species are not so well known to them, although here again they use more species than the neighboring tribes.

John Whitefeather, of the Couderay Ojibwe, who adopted the writer into their tribe, related their origin myth. Briefly it is as follows: There has always been a controversy among the whites as to whether such an Indian as Hiawatha ever lived. Hiawatha is the name that Henry Wadsworth Longfellow gave to their cultural hero, Winabojo. Hiawatha or Winabojo was never seen by man, although sometimes both names have been used for proper names among the Ojibwe. Their great spirit or ruler of the universe was named Dzhe Manido.

According to Whitefeather, Winabojo was the one who caused the deluge that covered the world and was responsible for building it again. Winabojo was sitting at the mouth of a big river and noticed a stick bobbing up and down near the middle of the stream. He thought it was curious that it was not carried on down stream to the big lake and further thought that it would be fun to sit on the stick. So he swam out and sat on it. Dzhe Manido had told him two phrases, one of which he might sing to himself, which is translated "Lake must close in" and the other was "Lake should spread out",

and he must not say that. Winabojo became curious to see what would happen if he repeated the second of these phrases. He said it. Immediately the stick sank and he fell under. He swam back to the top but could discover no land. Other animals were swimming around, so he requested muskrat to dive down and get him some mud from the bottom of the lake. Muskrat dived down but it was too far and he drowned. The martin tried it and drowned. The otter tried it and drowned. Then beaver tried it and obtained some mud, but died as he reached the surface. Winabojo took the mud that remained between the claws of beaver and rolled it into a little ball. Winabojo made this ball grow as he rolled it around in his hands, while the animals swam around him. Finally the ball grew large enough for the fox to jump upon it and run around. Then it grew larger until all the animals could get upon it.

So Winabojo and the animals were the first inhabitants and Winabojo put the plants upon the world. Winabojo lived in a little valley with his grandmother, Nokomis. Against her wishes, he went on a voyage of exploration, leaving his valley to climb a hill. In the next valley he saw a lot of people all dancing and he wanted to dance with them. So he went down and danced all day, though none of them spoke to him or said a word to each other. When the wind died down at sunset, he discovered them to be only cattails, so he started back home. On his way he was approached by Cumpa. No one knows who sent Cumpa there, but we think that it was Dzhe Manido. Nokomis had told him that there were inhabitants somewhere on the earth. Winabojo sat down with Cumpa and they talked over the matter of how to regulate the world. In their conference they developed the medicine lodge idea and the Ojibwe count Winabojo as its founder. The painted post that they erect in their medicine lodge represents Winabojo. It is carved to resemble a human form, but not too closely, as they wish it to be understood that Winabojo is a god and not a human being.

Winabojo started during the month of July to hunt for the inhabitants of the earth and finally found them in the latter part of December or early January. Then he stayed with them for several months, teaching them the secrets of the medicine lodge. He told them how they must gather roots and what songs they must sing. A specimen song and its meaning is here given.

Nin ba ba odji bîke

I go to gather roots;

o'o'we'dasa'ssema *here is tobacco;*

mînode ni nowi nîmîcîn *Give me direct guidance,*

gi wedji'bîkei'en *You,-maker of roots*

da mino wi dji'bîkei'an.

That I may get the proper roots.

Their story of creation is the common one among the northern Algonkians. They believe that all objects, both animate and inanimate possess some mysterious power, and speak of that power as the manido that dwells in it. On the Lac du Flambeau Reservation, the writer saw two or three large stones, shown in plate 48, fig. 2, that were thought to be spirit rocks. They also believed that the spirit of the departed brave often returns to the grave, as long as the body has not turned to dust. They often buried the body in a sitting position facing west, or in a shallow grave on its back or side, making a mound, over which bark, birch poles or boards were erected, to form a little grave house, as shown in plate 51, fig. 2. This, they believe to be often inhabited by the spirit of the departed one which they occasionally feed with wild rice or dried jerky (deer meat) through a small opening. According to McKenney, [91] the Ojibwe of Fond du Lac, Wisconsin, buried their dead in a box which was elevated upon a platform of poles. Mourning for the departed usually lasted a year, unless some medicine man shortened the time, or a relative performed some notable feat in war.

Their religion was the teachings of their Grand Medicine society or midewiwin. The Ojibwe are probably the strictest disciples of this society of any of our Wisconsin Indians and the part played by plants is the greatest of any factor. Things other than plants were used, such as rattlesnake meat, duck bones, clay and feathers, but these were so far in the minority that they are scarcely worth mentioning. According to the Ojibwe, every plant is

medicine; if not to your particular informant, then to some other medicine man or woman. It was a matter of finding the proper informant to get the correct name and use. Consequently, in the field we gathered every tree, shrub, perennial or annual, herb or grass we encountered. All of these being medicinal plants were thus sacred to them and must be secured with the proper mide ceremony. This consisted of an explanatory song, and the offering of tobacco to grandmother, the earth, and Winabojo, their cultural hero.

The constant effort of the Government to educate the Indian is resulting in the gradual discarding of the medicine lodge ceremonies. The Ojibwe, who have stayed on the frontier of civilization, are among the last to change, and have clung tenaciously to their medicine society. As with other Wisconsin Indians, the Ojibwe love their children dearly and are rarely harsh to them. The children are taught to dance at an early age and while subsequent education may make them forget the names and uses of medicinal plants, they never forget the dance tunes and steps. It is a common conception among white men that it is useless to educate an Indian. Too many have agreed with Mark Twain that "the only good Indian is a dead one." Stories are related concerning Indian college graduates that revert to the tepee and to the dog feast. Some of these may be true, but according to Indian psychology, there is nothing disgraceful about this. It is the fallacy of the white man in trying to impose his culture on other peoples and in always assuming that it is superior to any other way of living. We are prone to point to the exceptional fall from grace, and forget about the many who have made a success of their life according to our standards. There are many full-blooded Indian men and women in Milwaukee, who are useful citizens. Many Milwaukee men and women are proud of the Indian strain in their blood. Education has been of great assistance to the Ojibwe, who have many times proven that they have the same capabilities as their white brothers. The Indian has the same anatomical characteristics as the Caucasian race and is capable of going far along the road of education.

Since the field work among the Ojibwe was completed in 1923 and 1924, some scattering members of the tribe have adopted the peyote lodge. The Ojibwe are fond of visiting and, in the summer time, some are always away on visits to other tribes in Wisconsin, Iowa, Minnesota, the Dakotas, Kansas or Oklahoma. The old idea of fighting other tribes was forgotten long ago

and they feel that all red men are their brothers. Those Ojibwe who have visited the Winnebago Indians in Wisconsin have been especially influenced to adopt the peyote cult. This rarely happens where the Ojibwe live in close contact with their tribesmen on reservations. But several live as isolated families on the shores of our northern lakes, and when they adopt the peyote religion they throw overboard all of their medicine lodge paraphernalia and beliefs.

The members of the peyote cult, chew and swallow the peyote buttons which are the button-shaped branches of a cactus (*Lophophora williamsii*) found in Texas, New Mexico and Old Mexico. The practice is said to have originated among the Indians of old Mexico. Under its narcotic influence the peyote Indian claims to see in a vision and to commune with Jesus Christ, who gives him the rule of conduct for his life. The Indians justify their use of peyote by comparing it to the sacramental wine of the white man. However, peyote carries a governmental disapproval and the Indian police are supposed to be vigilantly alert for peyote. A jail sentence, as well as confiscation of the supply of peyote, is meted out to any member they can detect using it.

Another type of ceremonial dance used by the Ojibwe, and in fact by all of the forest Indians of Wisconsin, is the dream dance, such as is shown in plate 47, fig. 1. While this is sacred, it is not performed in secret, and the white people are often invited to come and witness these dances. They do come from many miles away to see the Indian dances and games. At the Lac du Flambeau Reservation, they perform several kinds of dances, such as the corn dance, the warrior dance, the prisoner dance, the deer hunt dance, and many others.

One dance in particular was brought back from Oklahoma by Anawabi. It is called the "Squaw Dance." In it men and women dance together, as shown in figure 20 of the Museum's Yearbook for 1923. Anawabi, the medicine man, was credited with powers of witchcraft as well as healing. A young Ojibwe boy sick with pneumonia, told his parents in a delirium that Anawabi had come and was taking his breath away. His parents believed him, and he eventually died, but before he did, some friend hastened to Anawabi and Anawabi stood not on the order of his going, but left at once for Oklahoma where he stayed two years. He probably witnessed the modern two step among the Oklahoma Indians, which they called the

"Squaw Dance." It is distinctly opposed to the Indian way of dancing. It has always been the custom for women to remain in the background at any of the old time dances, dancing by themselves, outside and back of the circle or group of the men. For them to take an equal part in a dance seems out of place. This caused a rift in the tribe, and the older residents at the old Flambeau village will have nothing to do with such dances.

The participants in the dream dance usually dress in all of their native finery and nowadays wear many ornaments that are not of Ojibwe origin. While under the spell of the singing and drumming, the dancers assume a smiling face and are usually oblivious to the presence of any spectators.

The Ojibwe use two types of drums. One is the large dream-dance drum, about two feet in diameter and fourteen inches deep. The other is a tambourine-shaped drum of rawhide only a couple of inches thick and possibly ten inches in diameter, suspended by a loop of sinew, decorated with human figures, and beaten with the hands or a smaller bone drum stick. This drum is used in games and the songs differ considerably for the various games. La Crosse, the woman's shinny game, the bowl and dice game, the moccasin game and others are all announced by preliminary songs from the chief, who accompanies himself on the game drum.

In writing this bulletin, the system adopted in previous bulletins will be followed. Plants not found to be of use are included in this list, as other investigators may find that they were used. The listing of each plant will be by family and English names, followed by the Latin binomial according to Gray's Manual of Botany, then the Ojibwe name and its literal translation, if that be known. Following this will be the uses, methods of use, supposed properties, its value as an official or eclectic drug by the whites, and any known myth connected with it. The same procedure will be followed in the other subheadings under investigation, viz.: foods, fibers, dyes, and plants of miscellaneous uses such as utility, good luck charms, love potions and so on.

OJIBWE MEDICINES

The Ojibwe are probably the best informed and the strictest observers of the medicine lodge ceremonies in the country. Their knowledge of plants both in their own environment and far away is probably the best of any group of Indians. While their flora is not so rich in species as that of Indians farther south, they make trips far away from their home to obtain necessary plants.

As among the white people, one plant may bear several common names, according to different individuals in different sections of the country, and again, one name may be given to several plants, as in the case of plants used as "revivers". Yet, there is an agreement in names of Lac du Flambeau and Leech Lake Ojibwe, that well checks information received. The name is usually descriptive, just as their names for animals usually are either descriptive or representative of the cry or note uttered by the animal, like "ko-ko-ko-o", the hoot owl, or "ka-ka-ka", the raven or crow. The medicine name usually tells what the plant looks like, where it may be found, some peculiar taste or property, or its chief use. Often a termination is added signifying the plural of a noun or the part of the plant used, such as the wood, the leaf, the flower, the root, or the berry or fruit.

It is worth noting that they understand the proper time to gather the plant part. At times, the medicinal qualities are inert, undeveloped or dispersed by being too old. Much of the knowledge of white men originated from studying the Indian plant uses, in the early days. Eclectic practitioners sought the Indian herbs and observed carefully what parts of the plant were used. This mass of early information was sifted scientifically by the students of medicine, and finally tested physiologically on animals. Perhaps sixty-five per cent of their remedies were found to be potent and are included in our pharmacopoeas; the other thirty-five per cent were discovered to be valueless medicinally. All of the references to uses of the plants by white men were obtained from the 1916 edition of the National Standard Dispensatory, by Hare, Caspari & Rusby.

The medicine man depended largely upon his reputation and often cured fancied diseases by shamanistic suggestions. His peculiar incantations to the patient to inspire confidence and induce the patient to think he was getting well, often worked, as it works in the case of quack doctors and credulous white men. The young man who had the proper dream following the period of fasting in his youth, predicting his predilection towards the medicine man's profession, was taken through a rigorous course of training. Individual knowledge was handed down through the family. Instruction to boys and girls usually comes from the uncle or aunt, and if they have no natural uncle or aunt, then one is assigned to them. This is considered the closest relationship among Wisconsin Indians, and when one is adopted into the tribe and given a medicine bag, it will be through the sponsorship of an uncle for his nephew. Among the Ojibwe, both at Lac du Flambeau and at Lac Court Oreilles, the writer is known as Shagashkandawe "Flying Squirrel," which they say was the name of a famous old chief and medicine man.

The Ojibwe still use the songs essential to digging medicine roots. Jack Doud, the old scout captain of the Civil War, of the old Flambeau village, told the writer that Winabojo, their deity, had received the seeds of all plants from Dzhe Manido, the creator of the universe, and that Winabojo had given them to Nokomis, grandmother, the Earth, to keep in her bosom, for the use of the Indians. Jack Doud also said that Winabojo took some of the native foods from his own body. He said that Winabojo pulled out a little pinch of flesh and threw it on the ground telling it to grow there as *mandamin* or corn for the Indians. Another pinch yielded squash, another beans and so on until Winabojo had very little flesh left on his body. In other words, the Indians did not know the sources of their cultivated crops, and had invented this tradition to attempt to explain their presence.

As with other Algonkians, the Ojibwe place tobacco in the cavity from which they dig the root, as an offering to Grandmother Earth, to Winabojo, and to Dzhe Manido, praying in song to these deities to make their chosen medicine potent. The medicine man or woman is usually distinguished by two long braids of hair over either shoulder. They are usually shrewd diagnosticians, and depend upon their senses for discovering the ailment. They feel the pulse rate, look at the pupils of the eyes, at the condition of the tongue, at the complexion variation, feel the body temperature and

inquire where the pain is felt. From these symptoms they diagnose the disease. Usually they want time to dream over the case, and drink a draught of their own dream-inducing medicine before going to sleep. In a vision or dream, they are directed to the proper medicine to use, and concoct it the following day. External afflictions are treated with lotions or poultices, while internal troubles are almost invariably treated with a medicinal tea. The ingredients are steeped in lukewarm water, and copious draughts are prescribed several times a day. The writer has taken such draughts of various medicines and finds them not unpleasant to the taste. Bitter and nauseous ingredients are usually disguised by "seasoners" which they add to make them taste good. The time alloted for a cure is usually four days, their sacred number, and unless there is marked improvement in the patient at the end of that period, the medicine man will change the treatment.

Some of the medicine men have "tattooing outfits", which are not really tattooing outfits as we understand the term, but rather blood-letting instruments. Sharp fish teeth are mounted at the end of a four or five-inch stick, and with a quick stroke on the upper side of the elbow or near the collar bone the blood is caused to gush out. The patient holds the arm out tensely while lying down and when the artery is tapped the blood spurts out rapidly. A tourniquet is applied to the upper arm when the medicine man thinks enough blood has flowed and the medicine man then sucks out the residue. The wound is then bandaged and the tourniquet removed. It is the thought of the medicine man that it is necessary to let out a certain amount of bad blood, so that the remaining blood in the patient's body can be more easily purified by his heart and his breathing.

The Ojibwe also believe that the medicine man can make bad medicine as well as good, and can prescribe certain medicines from his medicine bundle that will enable him to get the better of his enemies. They had many hunting charms which were supposed to help them get game. The hunter in using these would often trace the outline of the desired game upon the ground drawing a line to its heart. He would then pierce the heart with the line and put the proper medicine on the heart puncture indicated. A similar procedure might be followed against human enemies. Such practices were always kept a deep secret, becoming valueless should anyone see the perpetrator making the figure. They were likewise deprecated and resented by the tribe and punishment was apt to follow anyone caught in such a

practice, which all agreed was a perversion of the grand medicine society teachings. Most of the remedies of the medicine men were kept tied in little bits of cloth, compounded and ready to steep for use. Combinations of nine to twelve herbs are common. These have been ground with a mortar and pestle until it would be difficult to identify the ingredients of the prepared medicines. Even if one knew all of the ingredients, the amounts of each herb would be difficult to ascertain. Often, as in the case of Sweet Flag (*Acorus calamus*), the amount must be very limited since the medicinal effect is so severe.

The medicine men are taught that their medicines have a great value and will not be efficacious if disposed of cheaply. Since money is not so plentiful they are quite willing to accept pay in valuable goods. This may be a pony, so many blankets, so much wild rice or whatever the patient has of value. The patient usually calls the medicine man for ailments that have not responded to his own individual treatment. When the patient pays what the medicine man thinks is proper, then he may be told what was used to effect the cure, and how and when to gather the ingredients and how to administer the remedy. The recipient is admonished to see that he does not impart the knowledge unless he is well paid for it, as he paid the medicine man. This explains the difficulty one encounters when he tries to get medicinal information. Only by completely securing the confidence of the Indians, can a white man get this information without pay, and then it must be thoroughly understood that the investigator is not copying their medicines to take commercial advantage of this knowledge. The Indian is quick to appreciate favors and to acknowledge the respect that is given to him by the white man, and becomes quite confident when he realizes that his confidence is not abused.

OJIBWE MEDICINAL MATERIALS

While the Ojibwe use a few remedies outside the plant kingdom, they are not of such great importance as among some other tribes. These are here considered first, the plants following under the proper families alphabetically.

OTHER THAN PLANTS

REPTILES

Rattlesnake, "jicigwe". The flesh of the rattlesnake commonly known as the massasauga rattler, is sometimes used in combination with other medicines, for its lubricant effect, similar to Russian mineral oil. The Plains Indians and those farther south in the United States consider rattlesnake meat quite efficient in making childbirth easier.

FISH

Sturgeon, "namê". Fine teeth of the sturgeon were said to be used to make the "tattooing" tool employed by the medicine man in blood-letting. Large fish bladders, "pîkwadj", were sometimes used as syringes; a hollow duck bone bound with sinew in the end of it, being used for anal applications.

MINERALS

White Clay, "waba'bîgan". White clay was sometimes mixed with medicinal powders to make them into pellets or pills, and the clay was supposed to be a medicine, too, but for what purpose we were unable to discover. Red Clay "osa'man" was also used in fabricating poultices and was supposed to help draw out the inflammation.

MAMMALS

Bear, "mûkwo". Bear's fat was used in several compounds. Melted alone and swallowed it became a drastic physic. Buds of the Balsam Poplar (*Populus balsamifera*) and the Large-toothed Poplar (*Populus grandidentata*) stewed in bear fat, yielded an aromatic salve that was used in curing ear-ache, soothing boils, and healing wounds and ulcers.

OJIBWE MEDICINAL PLANTS

ACERACEAE (MAPLE FAMILY)

Box Elder (*Acer negundo* L.), "adjagobi mûk", shown in plate 68, fig. 2. The Pillager Band of Ojibwe reported that the inner bark of the box-elder is steeped to make an emetic. There is no record of its use by the whites.

Red Maple (*Acer rubrum* L.) "cicigîme'wîc", shown in plate 65, fig. 1. The Flambeau Ojibwe boil the bark of the red maple to obtain a tea with which to wash and cure sore eyes. There is no record of its use by the whites.

Mountain Maple (*Acer spicatum* Lam.) "cacagobi mûk" [emetic bark]. The Pillager Ojibwe extract the pith of the twig and pinch off small particles which are put into the eye like flax seed to remove foreign matter. It becomes sticky and holds foreign matter which can then be removed with the pith. The pith is also soaked in water to make a lotion for treating sore eyes. Among the whites, Mountain Maple bark is often gathered and sold for Cramp Bark (*Viburnum opulus* L. var. *americanum* [Mill.] Ait.) In fact, it has often been wholly substituted for it, and seems about as effective as a uterine sedative and preventative of abortion.

ALISMACEAE (WATER-PLANTAIN FAMILY)

Arum-leaved Arrowhead (Sagittaria arifolia Nutt.) "wabasi pîn" [white potato]. [92] Upon short lateral rootlets, amongst the mass of fibrous roots of the arrowhead, firm corms develop, pinkish-white and bulb-shaped, but solid and composed of a sweetish, starchy texture. These are the choice Indian potatoes. These corms break away from the root mass very easily so that the utmost care is necessary in digging to get them *in situ*. Muskrats are very fond of them, as are beavers, and sometimes store up large covered caches, which the Indian recognizes and appropriates. They will also dig for them, if they cannot be more easily obtained. While they are chiefly prized for food, they are also taken to be a remedy for indigestion among the Pillager Ojibwe.

ANACARDIACEAE (SUMAC FAMILY)

Smooth Sumac (*Rhus glabra* L.) "bakwa' nak" [binding tree]. According to Jack Doud and other Flambeau Ojibwe all parts of the Smooth Sumac are suitable for medicine, the root bark, trunk bark, twig bark,

leaves, flowers and fruit. The root bark tea is used as a hemostatic. Trunk and twig innerbark are used in combination with other medicine for their astringent qualities. Blossoms are sometimes steeped for sore eyes, leaves are used in poultices, and the fruit is considered a throat cleanser as well as being the basis of a beverage. Eclectic practitioners, or the old time herbalists, used the berries of *Rhus glabra* because of the malic acid in the skin, claiming it to be a good gargle in acute throat inflammation.

Staghorn Sumac (*Rhus typhina* L.) "bakwana' tîg" [binding tree]. ^[93] The Staghorn Sumac was absent from the Flambeau Ojibwe territory, but plentiful around Leech Lake, Minnesota, while the Smooth Sumac was not found near Leech Lake. The Pillager Ojibwe only used the root as a medicine to stop a hemorrhage. They suggested that they had heard of it being used in medicinal combinations but did not know how to make or use them.

Poison Ivy (*Rhus toxicodendron* L.) "anîmîki'bûg" [cloud], shown in plate 68, fig. 1. Mukwean (Bearskin), Flambeau medicine man, called this a poison to the skin and said that the Ojibwe have no distinctive name for it. John Peper, one of the Bear Island Pillager Indians, gave us the Indian name and said that no one now alive there knew how to use it. Since Kepeosatok, Meskwaki medicine man, at Tama, Iowa, used it in a certain manner for poulticing some kinds of swellings, the writer thinks this may be the use to which John Peper referred.

APOCYNACEAE (DOGBANE FAMILY)

Spreading Dogbane (*Apocynum androsaemifolium* L.) "wesa' wûckwûn" [nearly blue flowers] or "magosîñe' cnakwûk" [needle-like]. [94] Bearskin, Flambeau medicine man, said that the stalk and root of this plant are steeped to make a tea for women to drink. It keeps the kidneys free during pregnancy. Other Flambeau Ojibwe agreed with the use but cited the second name as more correct for it. Under the Ojibwe name of "mîdewîdji 'bîk" [medicine lodge root], the Pillager Ojibwe declared it to be one of the sacred roots that is eaten during the medicine lodge ceremony. They use it also for throat trouble. When one has a coated tongue and is afflicted with headache, the root is also used. In the case of headache, the root is placed upon live coals and the incense is inhaled.

AQUIFOLIACEAE (HOLLY FAMILY)

Winterberry (*Ilex verticillata* [L.] Gray), "awe'nîsibûg" [wintergreen leaf], and "anîmû'cîmînûn" [dog berry]. The bark of this native holly is medicine among the Flambeau Ojibwe, but the use could not be discovered, other than that it might be used for diarrhea. Winterberry has been employed by eclectic practitioners as a tonic and astringent. It has been substituted for quinine in the treatment of periodical fevers, and also used in the treatment of diarrhea. The eclectic practitioner has also used it in treating malignant ulcers and chronic skin eruptions.

Mountain Holly (*Nemopanthus mucronata* [L.] Trel.), "mîckimînû" nîmîc" [red berry tree], shown in plate 65, fig. 2. This bush is very common around the reservation of the Flambeau Ojibwe and the berries are used as medicine, but the writer was unable to discover for what disease or how used. There is no record of its use among the whites.

ARACEAE (ARUM FAMILY)

Sweet Flag (*Acorus calamus* L.) "na' bûgûck" [something flat]. The root of Sweet Flag is a quick acting physic, supposed to act in half a day. Bearskin cautioned the writer that no more than one and a half inches was to be used, as more would make one ill, and even this much is quite harsh. The Pillager Ojibwe recognize the Sweet Flag under the name "we'ke", which is the same word used by another tribe for the Yellow Water-lily, and by another for the Blue Flag. John Peper said that the root was used for curing a cold in the throat or for curing a cramp in the stomach. In earlier days, among the whites, slices were candied to create a more popular form of medication. It was formerly used among the white men as a tonic for dyspepsia and for correcting flatulent colic. It was also supposed to be beneficial as a mild stimulant in typhoid cases.

Indian Turnip (*Arisaema triphyllum* [L.] Schott.), "caca' gomîn." [95] The root of Indian Turnip was said by John Peper, Bear Island Ojibwe, to be used in treating sore eyes, but he did not know how to use it. One wonders if the calcium oxalate crystals so firefull to the mouth lining were equally so to the delicate membranes of the eye.

Small doses of the partially dried root have been used by the white man in the treatment of chronic bronchitis, asthma, flatulent colic and rheumatism, certainly widely different maladies. The juice of the fresh corm in lard has been used by the white man as a local application to cure ringworm.

ARALIACEAE (GINSENG FAMILY)

Wild Sarsaparilla (Aralia nudicaulis L.) "bebamabi' k" [root runs far through the ground]. The Flambeau Ojibwe recognize the root of this plant as a strong medicine, but do not steep it to make tea. The fresh root is pounded and applied as a poultice to bring a boil to a head or to cure a carbuncle. Among the Pillager Ojibwe, the writer found two names applied to this, one of which he thinks to be a case of mistaken identification by the informant. "O kadak" [wild carrot] is more likely to refer to Aralia racemosa though no specimens were found there. They used it under this name as a special squaw remedy for blood purification during pregnancy. The root was pounded in a mortar, then boiled in hot water. Under their name "wabo' s ûskwe" [rabbit] the root was prepared the same way and the tea was used to cure a cough.

Among the white men, this root has the same properties and uses as the Indian Spikenard (*Aralia racemosa*); namely, stimulant, diaphoretic, and alterative.

Ginseng (Panax quinquefolium L.) "jîssê ns." Evidently the word they used was an attempt to pronounce the white man's term for it. The writer was unable to discover any medical use made of it by the Ojibwe, though they gathered it assiduously for sale to the traders. Their method of gathering was a thoughtful one. Although they undoubtedly recognized it in any stage of growth, they only gathered the root when the red berries were mature, but before they were ready to drop. Into the hole from whence the root came, they would thrust the whole fruiting top, and carefully firm the soil upon it. Knowing the location well, they would revisit the place in three to five years and find more roots than they harvested in the first instance.

According to our pharmacopoeia, the medicinal value of ginseng is almost nothing, but there is a great market for it in China, where it is worshipped as a sort of fetish, and is acclaimed as a panacea for sexual impotency, nervousness, vomiting and dyspepsia. The more nearly the root approximates the human torso, the more valuable it is to the Chinese. Thus one root in a six hundred-pound bale may be worth many times the entire remainder of the bale, and when ten dollars a pound is the price, one can realize the extreme value of such a piece.

ARISTOLOCHIACEAE (BIRTHWORT FAMILY)

Wild Ginger (*Asarum canadense* L. var. *acuminatum* Ashe.) "name' pîn" [sturgeon potato]. [96] The Pillager Ojibwe called this a potato for sick people. They are supposed to chew the root, and then they can eat anything they desire.

The white man calls this Canada Snakeroot in his dispensatories, considering it a feeble remedy with tonic, aromatic and diuretic properties. Cases of convalescent acute febrile infections are sometimes given the extract of wild ginger root.

ASCLEPIADACEAE (MILKWEED FAMILY)

Common Milkweed (*Asclepias syriaca* L.) "cabo' sîkûn" [milk] or "înîni'wûnj" [Indian plant], according to Flambeau Ojibwe. [97] Although the Pillager Ojibwe used this chiefly for food, the root was also used as a female remedy, but for what phase of illness, we were not able to discover.

Eclectic practitioners have used the roots as counter-irritants or internally as stomachics, carminatives, or anti-spasmodics of the stimulating class.

BALSAMINACEAE (TOUCH-ME-NOT FAMILY)

Spotted Touch-me-not (*Impatiens biflora* Walt.) "wesa' wûs ga'skonêk" [yellow light]. Bearskin, Flambeau medicine man said that the fresh juice of this plant rubbed on the head would cure a headache. The leaves are steeped for a medicinal tea, but the ailment was undiscovered.

The herbage of this plant, under the name Wild Celadine, has been largely employed by homoeopathic physicians and eclectics. The chemical constituents are not known though the leaves apparently contain tannin. The medicinal value is questionable, though fresh applications of the juice appear to relieve skin irritations of various kinds, especially that of Poison Ivy.

BERBERIDACEAE (BARBERRY FAMILY)

Blue Cohosh (Caulophyllum thalictroides [L.] Michx). "oci' gîmîc". [98] The Pillager Ojibwe use the root for female troubles especially for cramps in the stomach during painful menstruation. The fine roots are also boiled to make a tea for emetic purposes. White people seldom use it. Eclectics have used it in the treatment of hysteria and uterine diseases. They have claimed that it will prevent abortion, by causing uterine contraction when uterine inertia is present.

BETULACEAE (BIRCH FAMILY)

Speckled Alder (*Alnus incana* [L.] Moench.) "wado' bîn" [root to sew a canoe]. The Flambeau Ojibwe use the root for its hemostatic qualities. When one passes blood in his stools, the root tea will act as an astringent and coagulant.

The white man has also used alder bark for its mild astringent properties. The eclectic practitioner in the United States and Canada employed it in a powdered condition for dusting upon chafed body surfaces.

Paper Birch (*Betula alba* [L.] var. *papyrifera* [Marsh.] Spach.) "wîgwas". From "wîgwas" comes the word "wigwam" or house, because birch bark was used in covering the house, furnishing a waterproof roof. The root of the Paper Birch was used in medicines as a seasoner. Its sweetish, aromatic, wintergreen flavor disguised less pleasant doses. The root bark and maple sugar cooked together made a soothing syrup to alleviate cramps in the stomach. The white man has employed only the leaves medicinally as a diuretic.

Low Birch (Betula pumila L. var. glandulifera Regel.) "bîne' mîcins" [partridge tips]. Among the Pillager Ojibwe, the Low Birch is a valued source of medicine. Although it is plentiful around the Flambeau Reservation, none of them seemed to consider it medicine, although their name agreed, "bîne' mîc", without the diminutive. The Pillager Ojibwe use the tiny cones upon a plate of coals as an incense to cure catarrh. No doubt the resinous covering of the twigs and cones in this variety causes the aromatic incense. Also a tea made from the cones is drunk by women in their menses. Such tea is also accounted strengthening when the patient is enfeebled by childbirth. The leaves probably possess diuretic properties as do other species of Betula. No record of its use by white men has been discovered.

Hazelnut (*Corylus americana* Walt.) "mûkwobaga' nak" [bear nut]. [99] Bearskin said that the bark of the hazelnut bush is medicine. It is boiled and used as a poultice on cuts to close and heal them. No record of its medical use by white men has been discovered.

Beaked Hazelnut (*Corylus rostrata* Ait.), "baga'n" or "baga'nak" [nut] Flambeau names, and "baga'namijic" [nut tree], Pillager name. Bearskin assigned the same properties and uses to the bark of the Beaked Hazelnut as to the Hazelnut. The Pillager Ojibwe used only the hairs of the hazelnut husk as a medicine to expel worms. Eclectic practitioners have used it in the same manner as an anthelmintic, depending probably on the irritant effect of the tiny stickers.

BORAGINACEAE (BORAGE FAMILY)

Hound's Tongue (*Cynoglossum boreale* Fernald), "masa'n". Three terms are used to denote the action of such plants as this, which are burned upon

live coals that the patient may inhale the fumes. They are: "aba' bûson",—to revive or "head standing by smoke"; "sasa' bîkwat",—to snuff it; and "nokwe' sîkûn",—"smell as it comes". They are used interchangeably in designating the use of the plant. Hound's Tongue is specifically fumed to cure a headache.

Among the whites, Hound's Tongue has been recommended as a sedative and demulcent in the treatment of bronchial and pulmonary affections. It is said to be of value also in dysentery. The fresh leaves are used locally as a remedy for superficial burns and abraded surfaces.

CAMPANULACEAE (BELLFLOWER FAMILY)

Marsh Bellflower (*Campanula aparinoides* Pursh.) Although plentiful around the Lac du Flambeau region, our informants said that this is not used.

Harebell (*Campanula rotundifolia* L.) "adota gons" [little bell]. The Pillager Ojibwe use the root of the Harebell combined with three other unnamed roots for lung troubles. There is no record of its use by whites.

CAPRIFOLIACEAE (HONEYSUCKLE FAMILY)

Bush Honeysuckle (*Diervilla lonicera* Mill.), "osawa' skanet" [yellow fluid]. The Flambeau Ojibwe use the root together with other plants such as the Ground Pine, for their most valued urinary remedy. It is also known among white men as a diuretic and a remedy to relieve itching.

Red Elderberry (*Sambucus racemosa* L.), "papaskatcîksi gana tîg" [popgun wood]. According to the Pillager Ojibwe, this bark is an emetic or a purgative, depending upon how it is prepared for use. It is a last resort purgative to be used when other remedies for the same complaint are of no avail. It may be said that the Ojibwe have more plants for physic than for any other purpose, thus the Red Elder will be seen to be their most important one.

Four internodes of the stalk are taken, because four is their magic number. These sections are measured carefully from the point of the ulna to the point of the humerus. The inner bark is secured by peeling downward. This is steeped and boiled, and the resulting liquid is drunk for constipation. It is supposed to thus save the life of one threatened with serious constipation. It is reserved for extreme cases, because of the many other physics they employ, and they consider it drastic and dangerous otherwise. If these same four sticks had been peeled upwards and the resulting tea drunk, then it would have acted as a powerful emetic. The writer can testify to its strength, but notes that it works both ways at once, no matter how prepared, so that the method of preparation is doubtless superstitious.

Among the whites only the elder flowers are recognized in the New Formulary, but the inner bark has been known to produce death in children, a short time after being eaten, with symptoms similar to Poison Hemlock (*Cicuta*). In moderate doses, it is also known to produce vomiting and purging. The active alkaloid evidently works only in the fresh state, as it loses its potency in a dried state.

Snowberry (*Symphoricarpos racemosus* Michx.) "anîgomiji mînaga 'wûnj" [little crow bush]. Among the Pillager Ojibwe, the root of the Snowberry is used to make a tea to clear up the afterbirth, and enable quicker convalescence. Among the Meskwaki Indians the same use is ascribed to the Wolfberry (*Symphoricarpos occidentalis*). There is no record of its use by white men.

Nannyberry (*Viburnum lentago* L.), "atîte' tamînûn" or "atîte' tamînaga 'wûnj." The Pillager Ojibwe collect the inner bark of the trunk, down low next to the ground, to yield a tea which is used as a diuretic.

Among the white men, Nannyberry is often sold as *Viburnum prunifolium* which is official in our pharmacopoeia. The virtues assigned to this class of medicine are as feeble as they are numerous. It has been used as a nervine, astringent, tonic, diuretic and has been said to have value as an uterine sedative and preventive of abortion.

Highbush Cranberry (*Viburnum opulus* L. var. *americanum* [Mill.] Ait.) "a'nibîmî'nûga'wûck" [anib means elm, berries, bush]. [101] The Pillager Ojibwe used the inner bark as a physic, and also drank the tea to cure cramps in the stomach.

Among the white men, *Viburnum opulus* is considered to be the same as *Viburnum prunifolium*, only less potent. It is recommended as an

antispasmodic in asthma, hysteria, puerperal convulsions, and dysmenorrhea.

CARYOPHYLLACEAE (PINK FAMILY)

White Campion (*Lychnis alba* Mill.) "basi' bûgûk" [small leaf]. The Flambeau Ojibwe use the root of this for a tea to physic a patient. There is no record of its use by white men.

CELASTRACEAE (STAFF TREE FAMILY)

Climbing Bittersweet (*Celastrus scandens* L.) "manîdobima' kwît" [spirit-twisted]. The Pillager Ojibwe use the red berries of this plant for stomach trouble.

The white man uses the berries for decorative purposes, and has used the bark for emetic, diaphoretic and antisyphilitic purposes.

COMPOSITAE (COMPOSITE FAMILY)

The composite family is represented by many species in northern Wisconsin and also in northern Minnesota. There are probably three times as many plants in this family as in any other, hence it furnishes numerous medicines.

Woolly Yarrow (*Achillea lanulosa* Nutt.), "wa' bîgwûn" [white-flower]. The Flambeau Ojibwe, under the name given, use the leaves of this plant as a poultice to cure the bite of a spider. The dried flowering heads are smoked in mixture with other things, much as kinnikinnik, not for pleasure, but more for ceremonial purposes.

It has not been distinguished by the eclectic practitioner from the Common Yarrow, which was used for its bitter and aromatic principles. It was used as an emmenagogue and for various ailments of the reproductive organs. It was sometimes used to cure diseased conditions of the entire gastro-intestinal tract.

Yarrow (*Achillea millefolium* L.), "adjidamo' anûk" [squirrel tail]. [102] The Pillager Ojibwe used the florets in ceremonial smoking and placed

them on a bed of coals inhaling the smoke to break a fever.

Yarrow has always been a home remedy of the white man, and the Germans still use the dried flowers in a tea, called "schafesgarbetee", to break a fever. Other uses are the same as above.

Pearly Everlasting (*Anaphalis margaritacea* [L.] B. & H.), "basi' bagûk" [small leaf]. The Flambeau Ojibwe use the flowers of this plant, calling attention to the fact that it smells like acorns, reducing them to a powder which is sprinkled on live coals as a "nokwe' sîgûn" or perfume. This is inhaled by a party who has had a stroke of paralysis and is said to revive him.

The Pearly Everlasting has never been properly analyzed by white men, but the flowers have been locally used by them as soothing expectorants and are known to have more or less marked stomachic properties.

Lesser Cat's-Foot (*Antennaria neodioica* Greene) "gagîge' bûg" [everlasting leaf]. The Flambeau Ojibwe use the whole herb as a valued remedy to make a tea to be given to the mother after child birth. It is to purge the afterbirth and heal them internally.

Eclectic practitioners have used this plant as a hemostatic.

Common Burdock (*Arctium minus* Bernh.), "gi' masan" [big stickers]. The Flambeau Ojibwe use the root of burdock as one of the ingredients of a medicine for pain in the stomach. It is also supposed to have a tonic effect.

Burdock root has quite a reputation among home practitioners among the white men as a diaphoretic, diuretic, alterative, aperient and depurative. It has been used for rheumatism, gout, pulmonary catarrh, chronic skin diseases such as scrofula and syphilis, and to dissolve urinary deposits. Externally it has been used as a salve or wash for eruptions, burns, wounds, hemorrhoids and swelling.

White Sage (*Artemisia ludoviciana* Nutt.) "îmbjî'goa" according to White Cloud, Bear Island Ojibwe, but "wîngûskw" or "bebeji'goga'nji" [horse medicine] by John Peper, another Bear Islander. Peper said the Pillager Ojibwe used it as a horse medicine, but the Sioux smoked it.

Miners and frontiersmen prized it in their treatment of "mountain fevers."

Large-leaved Aster (*Aster macrophyllus* L.), "naskosi îcûs". The Flambeau Ojibwe consider this a feeble remedy but also good as a charm in hunting. Young roots were used to make a tea to bathe the head for headache. The informant giving this latter use called it "megîsi bûg" [eagle leaf]. There is no record of its use by the whites.

Ox-eye Daisy (*Chrysanthemum leucanthemum* L.). The Flambeau Ojibwe had no name for this, as they said it was from the south, and they do not use it.

Canada Thistle (*Cirsium arvense* [L.] Scop.) "masa' nûck" [prickly]. The Flambeau Ojibwe use the plant for a bowel tonic. Canada Thistle is one of the worst American weeds, and white men have used the dried plant for a diuretic and tonic.

Common Thistle (*Cirsium lanceolatum* [L.] Hill), "ji' masa'nûck". The Flambeau Ojibwe use the root of this for alleviating stomach cramps in both men and women. The dried plant has been used by the whites as a diuretic and tonic.

Philadelphia Fleabane (*Erigeron philadelphicus* L.) "mîcao gacan" [odor of deer hoof]. The Pillager Ojibwe use the flowers to make a tea to break fevers. The smoke of the dried flowers is inhaled to cure a cold in the head. The disk flowers, pulverized, were snuffed up the nostrils to cause the patient to sneeze and thus loosen a cold in the head. The whites have used the Canada Fleabane as a remedy in the pharmacopoeia, and also have used the Philadelphia Fleabane locally, but for different purposes. It is diuretic rather than astringent.

Daisy Fleabane (*Erigeron ramosus* [Walt.] BSP). The Flambeau Ojibwe do not assign this plant a special name but class it as a "nokwe' sîgûn" or perfume for curing sick headache. Several species of *Erigeron* have been substituted by white men for the Canada Fleabane, which is used as a diaphoretic and expectorant.

Joe-Pye Weed (*Eupatorium purpureum* L.), "bû' gîsowe" [bathing]. The Flambeau Ojibwe make a strong solution of the root, with which to wash a papoose up till the time he is six years old. This is supposed to strengthen him.

Joe-Pye is officinal but not official among white men. Official designates that it is authorized by the U. S. Pharmacopoeia while officinal means that it is regularly kept for sale in drug stores. Officinal remedies are much used by eclectic practitioners. The root has the odor of old hay and is diuretic, stimulant, astringent and tonic. It has been used in chronic urinary disorders, gout, rheumatism, and hematuria.

Tall Blue Lettuce (*Lactuca spicata* [Lam.] Hitchc.), "dadoca'bo" [milk]. The Flambeau Ojibwe employ the plant to make a tea given to women with caked breasts to render lactation easier. A dog whisker hair is used to pierce the teat. Among white men *Lactuca* was formerly employed as a soporific and sedative.

White Lettuce (*Prenanthus alba* L.), "weca' wûs wa' ckwînêsk" [yellow light]. The Flambeau Ojibwe use the milk of the White Lettuce as a diuretic, especially in female diseases. The root is also used as a female remedy.

White men have used the root decoction internally for dysentery. Old time herb doctors gave the milk of the plant internally, and used the leaves, steeped in hot water, as a poultice for the bite of a snake.

Black-eyed Susan (*Rudbeckia hirta* L.). The Flambeau Ojibwe claim that this plant is adventive from the south and have no name or use for it. It has been used by the white men as a diuretic.

Golden Ragwort (Senecio aureus L.).

Entire-leaved Groundsel (*Senecio integerrimus* Nutt.) Both of these plants are considered adventive by the Pillager Ojibwe and neither was named nor used.

Under the name squaw weed, white men have exploited the Golden Ragwort as a female regulator, claiming diuretic, pectoral, diaphoretic and tonic properties. It is also said to be useful in treating gravel and other urinary affections.

Indian Cup Plant (Silphium perfoliatum L.), "asasa' weskûk" [square stem]. According to John White Feather, of the Flambeau Ojibwe, this root was carried from Iowa and transplanted on the Lac du Flambeau Ojibwe Reservation. They all accept it as great medicine. A tea is made from the root for lumbago and some other kinds of rheumatic pains in the back. John

Peper, Pillager Ojibwe, gave it the same Indian name and said that an old Indian had brought it to Bear Island from Iowa a hundred years ago, and had planted it in his field, whence it escaped to the south end of the island. He said they use it for stomach trouble, and hemorrhage. White men have used the Indian Cup Plant root for its tonic, diaphoretic and alterative properties. It has also been used in intermittent fevers, ulcers, liver affections and debility. The resinous gum collected from the stem has been used by the whites as a stimulant and antispasmodic.

Fragrant Golden-rod (*Solidago graminifolia* [L.] Salisb.), "wasa' waskwûne'k" [yellow light]. Besides being of use in hunting medicine, the flowers in infusion were used by the Flambeau Ojibwe for a pain in the chest.

Golden-rod leaves and flowers have at times held a rather important place in materia medica, for their carminative, and antispasmodic properties. They have also been used as an intestinal astringent.

Tansy (*Tanacetum vulgare* L.) "muckiki wît" [medicine]. The Flambeau Ojibwe have no distinctive name for this plant, claiming it came from the south and they were told it was good for fevers.

Among white men, it is deemed tonic, emmenagogue and diaphoretic. It has been used in a cold infusion in convalescence from exhausting diseases, dyspepsia, hysteria and jaundice.

Dandelion (*Taraxacum officinale* Weber) "wesa'usakwûnek" [yellow light]. [103] While the Flambeau Ojibwe do not use this plant, the Pillager Ojibwe give it a name and use the root for a tea for heartburn. It was found growing at the north end of Bear Island in Leech Lake, Minnesota.

Among the whites, the virtues of the root are much overrated. The dried root is steeped in boiling water and is used as a stomachic and tonic, with slight diuretic and aperient action.

Cocklebur (*Xanthium commune* Britton), "sakati'komûk" [stickers]. Although giving it a name, the Flambeau Ojibwe did not use it. It has been used by white men in intermittent fevers, also as a diuretic, diaphoretic and sialagogue.

Alternate-leaved Dogwood (*Cornus alternifolia* L. f.) "moso mîc" [moose tree]. [104] The Pillager Ojibwe use the inner bark for an emetic. Although other species of *Cornus* are officinal with white men, there is no record of the use of this species.

Bunchberry (*Cornus canadensis* L.) "ode' imînîdji' bîk" [strawberry root, or heart-berry root]. The Bunchberry or Dwarf Cornel somewhat resembles the Wild Strawberry. The Flambeau Ojibwe make a tea from the root, which is used to cure babies of colic. There is no record of its medicinal use by the whites, though it has been eaten by them.

Panicled Dogwood (*Cornus paniculata* L'Her.), "meskwabi' mîc" [red bush]. It is peculiar that the Flambeau Ojibwe would call this a red bush, for the branches are distinctly gray. Only the fruit stalks or pedicels are bright red. The bark is used as a tea for flux. An aggregate of this bark compressed into a stopper shape is forced into the anus as a treatment for piles. There is no record of its use by the whites.

CRUCIFERAE (MUSTARD FAMILY)

Tower Mustard (*Arabis glabra* [L.] Bernh.), "misodjidamo' anûk" [black squirrel tail]. Although the Pillager Ojibwe have a name for this plant, they say it is from the south, and they do not use it. There is no record of its use by white men.

Marsh Cress (*Radicula palustris* [L.] var. *hispida* [Desv.] Robinson), "wabîgwûn" [yellow flower]. The Flambeau Ojibwe name for Marsh Cress is not very distinctive although it does have yellowish flowers. They have no use for the plant as it came in from the south, according to them. Neither have white men.

Tansy-mustard (*Sisymbrium canescens* Nutt.) The Pillager Ojibwe do not know this plant, which they consider to be adventive from the south and do not use it. Aside from the fact that the seeds have a volatile oil similar to mustard seed, the whites do not use it.

CUCURBITACEAE (GOURD FAMILY)

Squash (*Cucurbita maxima* Duchesne.) "ogwîssi maun o wasokwûne k" [threads like hair; yellow light]. The Flambeau Ojibwe used the seed tea as a diuretic. There is no distinctive medicinal use of squash among the whites.

Wild Balsam-apple (*Echinocystis lobata* [Michx.] T. & G.) "nîgîtîni' gûnûk" or "mîtcigi' mênûk" [man in the ground], shown in plate 69, fig. 1. The Flambeau Ojibwe use the root tea as a bitter medicine for stomach troubles and as a tonic. The root is certainly bitter enough. On the west coast, the root has been employed by white men as a simple bitter.

CYPERACEAE (SEDGE FAMILY)

Hare's Tail (*Eriophorum callitrix* Cham.) "bîwee' ckînûk" [fuzz of fruit]. The Flambeau Ojibwe use the matted fuzz as a hemostatic. Under the name "mesadi' wackons" [little catkins from popple], the Pillager Ojibwe refer to it, but none of them knew any use for it. There has been a limited use of its tannic properties as an astringent by white men.

EQUISETACEAE (HORSETAIL FAMILY)

Field Horsetail (*Equisetum arvense* L.) "gîji' bînûsk," [duck round].^[105] The Pillager Ojibwe use the whole plant to make a tea to cure the dropsy. The plant has been used indefinitely chiefly in domestic practice by the whites.

Wood Horsetail (*Equisetum sylvaticum* L.), "siba' mûckûn". The Pillager Ojibwe use the whole plant to make a tea to cure kidney trouble and dropsy. It has not been much used by the whites, except as a domestic remedy for gravel.

ERICACEAE (HEATH FAMILY)

Bog Rosemary (*Andromeda glaucophylla* Link.), "bîne' mîkci" [swamp partridge berry]. The plant was found on the Flambeau Ojibwe Reservation, but was not used medicinally. Among the whites, it is credited with poisonous properties.

Prince's Pine (*Chimaphila umbellata* [L.] Nutt.), "ga' gîge'bûg" [everlasting leaf]. [106] The Flambeau Ojibwe pronounce the name of Prince's Pine nearly the same as the Menomini Indians, and use it for the same purposes, namely a tea for treating stomach troubles. *Chimaphila* is official with white men as a tonic and diuretic. It stimulates the mucous membrane of the genito-urinary tract, and has been used in renal dropsy, scrofulous conditions, chronic ulcers and skin lesions. It is employed both internally and as an embrocation.

Wintergreen (Gaultheria procumbens L.), "wînîsi" bûgûd", [dirty leaves], shown in plate 75, fig. 2. The Flambeau Ojibwe use the leaves to brew a tea to cure rheumatism and "to make one feel good." The white man discovered the properties of this plant from the Indians, and originally wintergreen was the chief source of methyl salicylate. Aspirin is synthetically the same thing. Birch twigs were later used as a source and finally it was made from coal tar dye. Like other volatile oils, methyl salicylate was used as an antiseptic, analgesic, carminative and flavoring agent. It was added to liniments for rubbing muscular rheumatism, and similar complaints. Overdoses of the pure oil on the skin produce drowsiness, congestion and delirium.

Cranberry (*Vaccinium oxycoccus* L.) "mûcki' mînaga' wûnj" [swamp berry bush]. A tea for a person who is slightly ill with nausea. White men have used the bitter, astringent leaves in diarrhea and diabetes and for purifying the blood.

Blueberry (*Vaccinium pennsylvanicum* Lam.), "minûga' wûnj" [berry bush]. The Flambeau Ojibwe use the leaves of this common blueberry for a medicinal tea as a blood purifier. White men have employed it in the same manner.

EUPHORBIACEAE (SPURGE FAMILY)

Flowering Spurge (*Euphorbia corollata* L.), "cabosî' kûn" [milky bitter root]. The Flambeau Ojibwe use the root for a physic. A half inch of the root is pounded and steeped in a cup of water, which is drunk before eating. The resinous, milky juice of the root has been employed by eclectic practitioners as an emetic, but its use has been practically abandoned because of its irritant and uncertain qualities.

FAGACEAE (BEECH FAMILY)

Bur Oak (*Quercus macrocarpa* Michx.), "mîtîgo' mîc" [wooden tree], shown in plate 64, fig. 1. The bark is an astringent medicine to the Pillager Ojibwe. They also use it to bandage a broken foot or leg. All oaks are noted among the whites for their astringent properties. Eclectic practitioners used it for gargles in cases of inflammation of the tonsils and pharynx. It was also used in treating leucorrhea and piles.

Red Oak (*Quercus rubra* L.), "mîtîgo' mîc", [wooden tree], shown in plate 64, fig. 2. The bark,—"mîtîgo' mîc wena' gêk". The bark is a medicine for heart troubles and bronchial affections among the Flambeau Ojibwe. Its use by white men was approximately the same as Bur Oak.

FUMARIACEAE (FUMITORY FAMILY)

Golden Corydalis (*Corydalis aurea* Willd.), "tîpotîe' kwason," [looks like pants]. The Pillager Ojibwe place the root on coals and inhale the smoke for clearing the head and reviving the patient. There is no record of its use by white men.

FUNGI

The Ojibwe have evidently had disastrous experiences with mushrooms in the past and do not use them as a food. The children often gather the common brackets (*Fomes applanatus*) and draw pictures on them, using them as toys.

Giant Puffball (*Calvatia craniiformis* Schw.) shown in plate 61, fig. 2, "oskwe'tûk". This is kept on hand in the mature stage. The inner part has an organized mass of threads and does not break down entirely into spores as do the smaller puffballs. The substance is snuffed up the nose to stop nose bleed.

The Ojibwe also made use of an unidentified fungus matte material, found in the windshake spaces of down timber. This is the matted vegetating mycelium of some timber fungus, such as *Fomes*, *Trametes*, *Polyporus* or *Pholiota*. This made a good tinder for use in the fire base block, and when the fire stick was rapidly twirled against this material, it

caught fire and was blown into a blaze that became the basis of their fire. In all medicine lodge ceremonials, the fire was kindled in this manner and thus deemed a sacred fire. Things cooked over this fire were ceremonial, and the calumet or pipe used in the ceremonies was always lighted from a coal of the sacred fire.

GERANIACEAE (GERANIUM FAMILY)

Wild Geranium (Geranium maculatum L.), "o' sawaskwîni' s" [yellow light]. [107] The Pillager Ojibwe use the astringent root for the treatment of flux, and also for healing a sore mouth. Eclectic practitioners have also used it as a mild internal astringent, useful for infants and people who have a delicate stomach, because it is not irritating. It is valuable in serious diarrheas. It has also been used by white men for rectal and vaginal injections to tone up weak muscles.

GRAMINEAE (GRASS FAMILY)

Rattlesnake Grass (*Glyceria canadensis* [Michx.] Trin.), "anagone' wûck" [fern]. The Flambeau Ojibwe use the roots of this as a female remedy, but it is difficult to understand why they call it a fern. There is no record of its use by white men.

HYDROPHYLLACEAE (WATERLEAF FAMILY)

Virginia Waterleaf (*Hydrophyllum virginianum* L.),^[108] "ne' bîneankwe 'ûk" according to the Pillager Ojibwe White Cloud on Bear Island, Leech Lake, Minnesota, but "anîmûcîde' bîgons" [dog feet medicine], according to John Peper, of the same island. It furnishes a root that may be used to keep flux in check. He states that it is good for man, woman or child. It was used for the same purpose among the Meskwaki Indians, but there is no record of its use by whites.

IRIDACEAE (IRIS FAMILY)

Blue Flag (*Iris versicolor* L.), "na' bûkûck". [109] The Flambeau Ojibwe use a half inch of the root boiled in water as a quick physic. Under the name

"cabo sîkûn" [milk root], the Pillager Ojibwe use a little piece of the root in boiling water, drinking a tablespoonful and a half as an emetic and physic.

Blue Flag root has been accounted one of the most valuable remedies by the eclectic practitioner. It is alterative, cathartic, sialagogue, vermifuge and diuretic. It has been used in scrofula and syphilis, chronic hepatic, renal and splenitic affections.

LABIATAE (MINT FAMILY)

Wild Mint (Mentha arvensis L. var. canadensis [L.] Briquet), "name' wûckons" [little sturgeon plant]. [110] Among the Flambeau Ojibwe a tea is brewed from the entire plant, to be taken as a blood remedy. It is also used by them in the sweat bath, "akûskati". John Peper, Pillager Ojibwe, made an especial trip to find this on the lake shore but calls it "andego' bîgons" [little crow leaf] and says that they use it as a tea to break fevers. This species of mint was rarely used by white men for carminative, stimulant and anodyne affects.

Wild Bergamot (*Monarda fistulosa* L.), "weca' wûs wackwî' nek" [yellow light]. The Flambeau Ojibwe gather and dry the whole plant, boiling it in a vessel to obtain the volatile oil to inhale to cure catarrh and bronchial affections. In some sections, the whites use it as a domestic antiperiodic and diaphoretic.

Catnip (Nepeta cataria L.) "tci' name' wûck" [big sturgeon plant]. [112] The Flambeau Ojibwe brew a tea of catnip leaves for a blood purifier. The mint water obtained by steeping the herb in lukewarm water is used to bathe a patient, to raise the body temperature. The plant is employed by the whites as an emmenagogue and antispasmodic. It has been used as a carminative to allay flatulent colic in infants, and is supposed to be useful in allaying hysteria.

Heal-all (*Prunella vulgaris* L.), "basi' bûgûk" [partridge leaf]. The root is used by the Flambeau Ojibwe in combination with others for a female remedy. It has been used by eclectic practitioners as a pungent and bitter tonic and antispasmodic. It has vermifuge properties and is slightly diuretic. It has also been used for obstructions of the liver, cramps and fits.

Marsh Skullcap (*Scutellaria galericulata* L.), "teatcabonû' ksîk" [refers to the way the stem comes up through the leaves]. The Flambeau Ojibwe use this for medicine, having something to do with heart trouble, but we could get no definite information upon it. There is no record of its use by white men, although a similar species, *S. lateriflora* has been used as a nervine, tonic and antispasmodic in chorea, convulsions, fits, delirium tremens and all nervous affections.

LEGUMINOSAE (PULSE FAMILY)

Creamy Vetchling (*Lathyrus ochroleucus* Hook.) "bûgwa' dj ûk pîni' k mîne' bûg" [unusual potato, berry, leaf]. John Peper, Pillager Ojibwe, said that the foliage was fed to a pony to make him lively for a race. The Flambeau Ojibwe call it "basi' bûgûk" [partridge leaf], in common with several other plants, and say that the Creamy Vetch is used for stomach trouble. By the white men, it is considered one of the loco weeds, bad for horses.

Marsh Vetchling (*Lathyrus palustris* L.), "bebejîgoga nji macki ki" [horse medicine]. The Pillager Ojibwe feed this to a pony that is sick and claim it will make him fat. There is no record of its use as medicine by white men.

White Sweet Clover (*Melilotus alba* Desr.). The Flambeau Ojibwe claim that this plant is adventive and so they do not use it. There is no record of its use as medicine by white men.

LICHENS

Reindeer Moss (Cladonia rangiferina [L.] Hoffm.) "asa' gûniñk'" [moss].

The Ojibwe boil this moss and use the water to wash a new born baby. They declare it is the same as if you were putting salt into the water. So far as is known, it has never been utilized as a medicine by the white man.

LILIACEAE (LILY FAMILY)

Northern Clintonia (*Clintonia borealis* [Ait.] Raf.), "gînose' wibûg" [muskellunge leaf]. [113] The Flambeau Ojibwe use the root tea as a remedy to help parturition. John Peper, Pillager Ojibwe called it "adota'gons" [little bell] and said that the dogs use it to poison their teeth so that they can kill their prey. Should they bite a person, then it would be necessary to procure the same root and put it on the bite to draw out the poison. This curious superstition was also encountered in another tribe,—the Menomini. There is no record of its medicinal use by white men.

Canada Mayflower (Maianthemum canadense Desf.), "agoñgosi' mînûn" [chipmunk berries], shown in plate 71, fig. 1. The Flambeau Ojibwe recognize that this is somewhat different from Spikenard (Smilacina racemosa), but give it the same name and uses, namely to keep the kidneys open during pregnancy, to cure sore throat and headaches. It is also used to make smoke for inhaling. The Pillager Ojibwe do not know or use it.

Small Solomon's Seal (*Polygonatum biflorum* [Walt.] Ell.) "nanîbîte'ode 'kîn", [grows in a row], shown in plate 72, fig. 2. The Pillager Ojibwe use the root as a physic and it is also cooked to yield a tea to treat a cough. White men have used it as a substitute for *Convallaria* for the same purposes, namely the treatment of dropsy.

False Spikenard (*Smilacina racemosa* [L.] Desf.), "agoñgo' sîmînûn" [chipmunk berries], shown in plate 71, fig. 2. The Flambeau Ojibwe use this root in combination with Spreading Dogbane (*Apocynum androsaemifolium*) to keep the kidneys open during pregnancy, to cure sore throat and headache. It is also used as a reviver, "aba'bûsûn". Convallarin is the important constituent of Spikenard and it is classed the same as Solomon's Seal and Canada Mayflower.

Star-flowered Solomon's Seal (*Smilacina stellata* [L.] Desf.) The Pillager Ojibwe have no name nor use for this root.

Carrion-flower (*Smilax herbacea* L.), "gîne' bîgomînaga'wûnj" [snake berry bush], shown in plate 73, fig. 2. The root of this plant was used in lung troubles according to the Pillager Ojibwe. It has been used by eclectic practitioners as an alterative.

Twisted Stalk (*Streptopus roseus* Michx.), "nanibîte' ode' kîn", [grows in a row], shown in plate 72, fig. 1. This plant is called by the same name as

Polygonatum biflorum among the Pillager Ojibwe, but this particular one is always referred to as the squaw, while *Polygonatum* has always been called the man. It is used for a physic or to make tea for a cough. There is no record of its medicinal use by white men.

Large Flowered Bellwort (*Uvularia grandiflora* Sm.), "wesawabi' kwonêk" [yellow light]^[114], the name applied to the plant, but the root is called "wabûckadji' bîk" [white root]. The Pillager Ojibwe use the root for stomach trouble. The trouble is described as a pain in the solar plexus, which may mean pleurisy. It has been used by eclectic practitioners for erysipelas, ulcerated mouth, etc.

LYCOPODIACEAE (CLUB MOSS FAMILY)

Ground Pine (*Lycopodium complanatum* L.), "gîji'k gando' gûng" [cedar-like]. The dried leaves are used by the Flambeau Ojibwe as a "nokwe'sîkûn" or reviver. *Lycopodium* spores are used by the white man as a surgical dusting powder.

Ground Pine (*Lycopodium obscurum* L. var. dendroideum [Michx.] D. C. Eaton) "cigona' gan" [evergreen], shown in plate 61, fig. 1. The Flambeau Ojibwe use this plant in combination with Bush Honeysuckle roots (*Diervilla lonicera*) as a diuretic. The spores are the only part used by the white man for medicine. They are an antiseptic dusting powder.

MENISPERMACEAE (MOONSEED FAMILY)

Canada Moonseed (*Menispermum canadense* L.), "bîma' kwît wa' bîgons" [twisted pod or stick]. White Cloud, Pillager Ojibwe of Bear Island, did not know the use of this root, but assured the writer that other Ojibwe knew it and used it. Moonseed root is used by eclectic practitioners as a tonic and alterative, and has been employed as a substitute for Sarsaparilla.

MYRICACEAE (BAYBERRY FAMILY)

Sweet Fern (*Myrica asplenifolia* L.), "gibaime' nûna'gwûs" [coverer]. Sweet fern is called "a coverer," because it is used to line the blueberry pails and cover the berries to keep them from spoiling. The word is almost

Ojibwe consider the leaves too strong for a beverage tea, but make a medicinal tea to cure the flux and cramps in the stomach. The white man uses Sweet Fern as a stimulant and astringent; sometimes using it to relieve colic and check diarrhea. It has also been used in a fomentation to relieve rheumatic pains.

NYCTAGINACEAE (FOUR-O'CLOCK FAMILY)

Heart-leaved Umbrella-wort (*Oxybaphus nyctagineus* [Michx.] Sweet) "goko' coadji' bîk" (pig root). The Pillager Ojibwe say that the pig is fond of the roots of this plant because they are large and succulent, hence call it "pig root". The root is used by them to reduce sprains and swellings. There is no record of its use among the whites.

NYMPHAEACEAE (WATER LILY FAMILY)

Sweet White Water Lily (*Castalia odorata* [Ait.] Woodville & Wood.), "odîte abûg wa' bîgwûn" [flat heart leaf, white flower]. The Flambeau Ojibwe use the root as a cough medicine for those who have tuberculosis. The roots have been used by white men in the treatment of diarrhea, dysentery and leucorrhea.

Yellow Water Lily (Nymphaea advena Ait.), "oga' da mûn" [standing on legs]. The Flambeau Ojibwe word is a bit different in spelling but means the same as the Menomini word for this plant. The Ojibwe call the leaves, "odîte'abûg" [flat heart leaf]. The root is the only medicinal part and is grated to make a poultice for sores. Other ingredients such as Skunk Cabbage root are added to this poultice. The Ojibwe gather goodly quantities of the large underwater stems; which we are prone to call roots, dry them and reduce them to powder. The powder alone is supposed to heal cuts and swellings. The roots have been used by white men in the treatment of diarrhea, dysentery and leucorrhea.

OLEACEAE (OLIVE FAMILY)

Red Ash (*Fraxinus pennsylvanica* Marsh), "a' gîma'k" [snow-shoe wood]. The Pillager Ojibwe use the inner bark in combination with other

things for a tonic. The inner bark is official with white men as a bitter tonic and astringent. It is also said to be valuable as an antiperiodic.

ONAGRACEAE (EVENING PRIMROSE FAMILY)

Great Willow-herb (*Epilobium angustifolium* L.), "o' ca cadji' bîkes" [slippery or soap root], shown in plate 69, fig. 2. The Flambeau Ojibwe say that the outer rind of this root lathers in water and they pound it to make a poultice. This is used to draw out inflammation from a boil or a carbuncle. With white men, it is a demulcent, tonic and astringent. It has been used internally for its tonic effect on mucous surfaces and its value in intestinal disorders.

Evening Primrose (*Oenothera biennis* L.) While the Flambeau Ojibwe have no Indian name for this, still they use the whole plant soaked in warm water to make a poultice to heal bruises. Because of its antispasmodic properties, the white man has used it internally in the treatment of whooping cough, hiccough and spasmodic asthma.

OPHIOGLOSSACEAE (ADDER'S TONGUE FAMILY)

Virginia Grape Fern (Botrychium virginianum [L.] Sw.), "gîckênsîne" namûkûk" [man, squaw and baby], shown in plate 66, fig. 2. John Peper, Pillager Ojibwe, hunted a long time for this plant around Leech Lake, Minnesota, because his mother said it was good for lung trouble and consumption. He called attention to the fact that one always finds two stems together in the proper plant to use, which he described as the man and squaw, with the little one or fruiting frond, in the center. There is no record of its use by white men.

ORCHIDACEAE (ORCHIS FAMILY)

Yellow Ladies' Slipper (*Cypripedium parviflorum* Salisb. var. *pubescens* [Willd.] Knight), "ma' kasîn" [moccasin]. [115] Among the Pillager Ojibwe, the root of this species is said to be a good remedy for female troubles of all kinds. The white man has used it as a gentle tonic for the nerves, a stimulant and antispasmodic, similar to Valerian, only less powerful.

Rein Orchis (*Habenaria bracteata* [Willd.] R. Br.), "goko'cgûnda mînêskwe' mîn" [pig-woman enticer root]. The Ojibwe Pillager would smuggle this into food as an aphrodisiac, which they considered a bad use and not to be talked about or countenanced. There is no record of its use by the white men.

Adder's Mouth (*Microstylis unifolia* [Michx.] BSP.) "aîa' nîkotci' mîn" [twisted berry]. The Flambeau Ojibwe use the tiny root of this plant to mix with Bush Honeysuckle bark (*Diervilla lonicera*) as a diuretic. There is no record of its use by white men.

PAPAVERACEAE (POPPY FAMILY)

Bloodroot (Sanguinaria canadensis L.)^[116] "meskwa' dji' bîkûk" [red root]. The Pillager Ojibwe use the orange-red juice of the Bloodroot to cure sore throat. The juice is squeezed out on a lump of maple sugar, and this is retained in the mouth until it has melted away. They also use the juice to paint the face for the medicine lodge ceremony or when on the warpath.

Sanguinaria is official only in the U. S. Pharmacopoeia, and in small doses it produces a sense of warmth in the stomach and stimulates gastric secretion. It is given as an expectorant and in larger doses as an emetic.

PINACEAE (PINE FAMILY)

Balsam Fir (*Abies balsamea* [L.] Mill), "jîngo' b" [any kind of fir tree name], shown in plate 62, fig. 1. While the Flambeau Ojibwe call the tree "jîngo' b" as a short term, the full name of the Balsam Fir according to them is "jîngo' b pîkewa' ndag". They claim that the liquid balsam is used direct from the bark blister upon the eyes, for sore eyes. The leaves are a reviver or "aba' bûsûn" and are also used in combinations as a wash. The Pillager Ojibwe call it "jîngo' bandag", and use the balsam gum for colds and to heal sores. This corresponds to the way the Hudson Bay Indians use the bark. The needle-like leaves are placed upon live coals and the smoke is inhaled for colds. They are also used as a part of the medicine for the sweat bath.

The sweat bath is taken in a small hemispherical wigwam, like the regular abode, but entirely covered with mats or nowadays with canvas. The

medicines are coiled into wreaths to fit into large iron kettles. Water is added and finally hot rocks which cause steam. The Indian taking the sweat bath may be taking it for ceremonial reasons, for cleansing, but most likely as a medicated steam bath. He sits naked within until there is no more steam and his body is entirely dried again. He then puts on all clean clothes and will not wear the discarded clothes until they have all been thoroughly washed. The candidate for degrees in the medicine lodge, must undergo the sweat bath in a ceremonial way. Usual plants employed to medicate the steam are White Pine leaves, Hemlock leaves, Arbor Vitae leaves, Wild Bergamot plant, Balsam needles, Peppermint plants, and the like. They are undoubtedly very beneficial to the health. Canada balsam is accounted the same medicinally as turpentine, but its principal value to the white man today is its perfect transparency and peculiar optical properties, which fit it for use in mounting microscopic specimens.

Tamarack (*Larix laricina* [Du Roi] Koch), "mûckîgwa' tîg" [swamp tree], shown in plate 60, fig. 2. The Flambeau Ojibwe use the dried leaves as an inhalant and fumigator, "nokwe'sîkûn". Larch bark has been highly valued in the past in chronic bronchitis with profuse expectoration, in chronic inflammation of the urinary passages, and in phases of hemorrhage.

White Spruce (*Picea canadensis* [Mill.] BSP.), "gawa' ndag", shown in plate 62, fig. 2. The leaves of White Spruce are used in the same manner as Larch, as a "nokwe'sîkûn", an inhalant or fumigator. The needle oil is considered about the same as turpentine, by white men.

Black Spruce (*Picea mariana* [Mill.] BSP.), "jingwûp". If the bark is meant as a medicinal salt, then its name is "jingwû' p gawa' ndag" but if the leaves are the part meant for a reviver, "aba busun", then it carries only the name "jingwup". The needle oil is used by white men the same as turpentine.

Jack Pine (*Pinus banksiana* Lamb.), "gîga' ndag". The leaves are used as a reviver,—"nokwe' sîkûn" according to the Flambeau Ojibwe. There is no record of its medicinal use by the white men.

Norway Pine (*Pinus resinosa* Ait.), "abakwanûg i mûg" [bark in plates], shown in plate 63, fig. 2. The Norway Pine is used in all particulars by the Flambeau Ojibwe, just as the White Pine.

White Pine (*Pinus strobus* L.), "jîngwak kweseskwe' tûk" according to Bearskin of the Flambeau Ojibwe, shown in plate 63, fig. 1, "jîngwak waceskwe'do" according to Charley Burns of the Flambeau Ojibwe. The bark medicine is, "jîngwak ona' gêk" and is gathered in the same manner as by the Menomini, with a song to grandmother Earth, and the placing of tobacco on the ground. The cones, when boiled and likewise the bark of the young tree trunk yield a pitch which is medicine, called "jîngwak bûgîo." The dried leaves are powdered and used as a reviver or inhalant. There are three names referring to this sort of treatment, as said before,—"nokwe' sîkûn", "sasa' bîkwat" and "aba' bûsûn". Of these three terms, "sasa' bîkwat" is the proper one to use when White Pine needles are employed in this manner. White Pine is a very valuable remedy with all Ojibwe, but Norway Pine is sometimes substituted for it. White Pine bark is used in making cough syrup, by white men, but it possesses only feeble properties as an expectorant.

Arbor Vitae (*Thuja occidentalis* L.), "gi' jîkandag" [sky or cedar tree]. [117] The Flambeau Ojibwe use the leaves as a perfume, "aba' bûsûn" and also as a tea for headache. During ceremonies of the medicine lodge, it is necessary to purify sacred objects and the hands and persons of participants. A plate of live coals is used and dried Arbor Vitae leaves placed upon them. The servitor wafts the incense over sacred objects by fanning the smoke with his hands. Others hold their hands over and in the smoke, waving it upon their persons.

The Pillager Ojibwe call it by the simple name "gi' jîk" [sky or cedar]. They also use it as a purifying incense, and as an ingredient for the sweat bath with White Pine, Balsam, Hemlock and other plants. They drink the boiled leaves claiming that the steam goes through the blood and purifies it. This treatment cures coughs.

The U. S. Pharmacopoeia formerly required that leaves for medicinal use be in a fresh state but the new formulary only requires them to be recently dried and leafy. Internally it has been used for an emmenagogue, for fevers, bronchial catarrh, rheumatism and to remove intestinal worms. Externally it is applied in ointment to treat ulcers, warts and cancerous growths.

Hemlock (*Tsuga canadensis* [L.] Carr.), "gagagi' wîc" [raven tree]. The Flambeau Ojibwe medicine man puts the leaves in his medicinal tea to

disguise the taste. The bark is used for healing cuts and wounds, and for stopping the flow of blood from a wound. The bark is rich in tannin and naturally quite astringent. White men have used the bark and its resulting pitch as substitutes for burgundy pitch in making plasters. These have been used as external remedies for lumbago, chronic rheumatic pains, chronic bronchitis and pleurisy.

PLANTAGINACEAE (PLANTAIN FAMILY)

Common Plantain (*Plantago major* L.), "ceca' gûski' bûge sînk" [leaves grow up and also lie flat on the ground]. The Flambeau Ojibwe soak the leaves in warm water then bind them on bruises, sprains or sores as a poultice. It is also a healing and soothing remedy for burns, scalds, bee stings, and snake bites. The Flambeau Ojibwe also refer to it as "pakwan". The Pillager Ojibwe use it in the same manner but call it "jimûcki' gobûg" [sort of swamp leaf]. Although plantain is a feeble remedy, it has been ascribed potency in many diseases by eclectic practitioners. They still use it to some extent in treating inflammation of the skin, malignant ulcers, intermittent fevers, etc. The leaves are of some value in arresting hemorrhages when applied to the bleeding surfaces. The writer cured a badly swollen and lacerated hand, which swelled to three times its normal size, probably because dirt from a sewer was ground into it, with the simple leaf bound upon the hand.

POLYGONACEAE (BUCKWHEAT FAMILY)

Carey's Persicaria (*Polygonum careyi* Olney). The Ojibwe have no name or use for this, nor have white men.

Swamp Persicaria (*Polygonum muhlenbergii* [Meisn.] Wats.), "agoñgo' simînûn" [chipmunk berries]. The Flambeau Ojibwe use this plant for a tea to cure a pain in the stomach. It is also hunting medicine. Several of the polygonums have been used by eclectic practitioners for their astringent properties.

Curled Dock (*Rumex crispus* L.) "ci'obûg" [twisted leaf]. The Flambeau Ojibwe use the root, which contains considerable tannin, for closing and healing cuts. White men have used it for its astringent properties.

POLYPODIACEAE (FERN FAMILY)

Shield Fern (*Aspidium cristatum* [L.] Sw.), "ana' ganûck" [fern]. The Flambeau Ojibwe use the root tea for stomach trouble. Among the white men, this fern has been found to have almost the same value as Male Fern as a teniafuge. Great care is exercised in the size of the dose and to see that no part of the drug remains in the system after it has performed its task of killing intestinal worms, as fatalities have been known to occur.

Female Fern (*Asplenium filix-femina* [L.] Bernh.), "ana' ganûck" [fern]. The Flambeau Ojibwe grate the dry root into a powder which is used as a healing powder for sores. The Pillager Ojibwe call it "nokomi' skînûn" [grandmother?]. The root is made into a tea to cause milk flow in patients with caked breast. There is a record of its medicinal use by white men to alleviate backache.

Sensitive Fern (*Onoclea sensibilis* L.), "a' nana' ganûck" [fern]. The Pillager Ojibwe powder the dry root, and make a tea to give the patient whose breasts are caked, to stimulate the flow of milk. There is no record of its medicinal use by white men.

Brake (*Pteris aquilina* L.), "ana' ganûck" [general fern name]. This is the general name of the bracken fern, where used for food. When used for medicine, it is called by the Flambeau Ojibwe—"makate' wa ana' ganûck" [black fern], and the root is made into tea to alleviate cramps in the stomach. It is only used by the women for this purpose. The dried leaves are smoked upon live coals to relieve a headache. Under the name "a' nanagana 'wûck" the root is used by the Pillager Ojibwe in the same manner as by the Flambeau Ojibwe. White men have considered this root to be pectoral, demulcent, purgative and anthelmintic. A syrup solution is used in pulmonary and hepatic diseases. A strong decoction is used to expel worms.

PRIMULACEAE (PRIMROSE FAMILY)

So far as is known, none of the Primrose family is used by the Ojibwe for medicine. The Pillager Ojibwe did not know the Tufted Loosestrife (*Lysimachia thyrsiflora* L.).

RANUNCULACEAE (CROWFOOT FAMILY)

Red Baneberry (Actaea rubra [Ait.] Willd.), "wîckobidji bîk" [sweet root], shown in plate 76, fig. 1. The Pillager Ojibwe make a tea from the root, to be drunk by women after childbirth. It is to clear up the system. A man also eats the root for stomach troubles. White men use the root as a substitute for Black Cohosh (Cimicifuga racemosa), which it resembles in appearances and properties. It has been used in treating ovarian neuralgia, uterine tenderness, subinvolution, and amenorrhea. It has also been used as a substitute for digitalis in fatty or irritable heart, but only after other remedies have failed. Headache due to eyestrain has also been cured by this root.

Canada Anemone (Anemone canadensis L.), "mîdewidji bîk" [medicine lodge root], shown in plate 74, fig. 2. The Pillager Ojibwe eat the root of this plant to clear the throat so they can sing well in the medicine lodge ceremony,—a sort of throat lozenge. Most of the anemones have been substituted for *Pulsatilla* and used for the same host of diseases by eclectic practitioners. Included in these ailments are: cataract, paralysis, rheumatism, melancholia, syphilis, dysmenorrhea, and many other morbid conditions.

Thimble-weed (*Anemone cylindrica* Gray.), "gande gwa' soninke' cînagwûk" [looks like tumble-weed]. The Flambeau Ojibwe use the root for making a tea to relieve lung congestion and tuberculosis. Among the white men it has the same uses as Canada Anemone.

Wild Columbine (Aquilegia canadensis L.), shown in plate 74, fig. 1. The Pillager Ojibwe have no name for this plant, but the root is considered a good medicine for stomach trouble. Eclectic practitioners consider it a diuretic, diaphoretic, and antiscorbutic, using it in jaundice, in smallpox to promote eruption, and in scurvy.

Goldthread (*Coptis trifolia* [L.] Salisb.), "wesa wa' nikwe'ak" [yellow?] and "wesa wadji'bîkwe'ak" [yellow root], shown in plate 75, fig. 1. The Flambeau Ojibwe use the decoction of the root to soothe and heal the baby's gums while it is teething. It is also used as a mouth wash for adults when their mouths are sore. This use has been adopted by white men, who also use it in dyspepsia and chronic inflammation of the stomach.

Bristly Crowfoot (*Ranunculus pennsylvanicus* L. f.), "manwe' gons". The seeds are a hunting medicine with the Flambeau Ojibwe. Several of the

Ranunculaceae have been used as counter-irritants by the white men.

Cursed Crowfoot (*Ranunculus sceleratus* L.). The Pillager Ojibwe do not know this plant, and have no name for it. Eclectic practitioners have used it as a counter-irritant.

Purple Meadow Rue (*Thalictrum dasycarpum* Fisch. & Lall.), shown in plate 73, fig. 1. The Pillager Ojibwe have no Indian name for this, but use the root to make a tea to reduce fever. The properties of this root are considered almost identical with *Berberis*, which is used by white men as a tonic, stimulant and antiperiodic.

ROSACEAE (ROSE FAMILY)

Agrimony (*Agrimonia gryposepala* Wallr.), "saga' tîgans" [seeds stick], shown in plate 77, fig. 1. The Flambeau Ojibwe use the root with other ingredients as a medicine for urinary troubles. It is not much valued now by white men, although it has been used for its bitter astringent properties.

Smooth Juneberry (*Amelanchier laevis* Wiegand), "goziga gominaga 'wûnj" [thorny wood]^[119] according to John Whitefeather, Flambeau Ojibwe, and "bîsega gomînaga wûnj" according to Charley Burns, another Flambeau Ojibwe who said that the bark was used for medicine, but he did not know what it was to treat. The Pillager Ojibwe call it "goziga gomînûk" and say that the bark is to make a tea for the expectant mother. There is no record of its medicinal use by white men.

Hawthorn (*Crataegus* sp.), "mînesaga' wûnj" [berries and thorn bush], shown in plate 77, fig. 2. The Flambeau Ojibwe use both the fruit and the bark for medicine, a kind not made now, other than for women. Eclectic practitioners have used the berries for their astringent and reputed cardiac properties.

Wild Strawberry (Fragaria virginiana Duchesne), "ode' imînîdji' bîk," [heart berry root]. [120] The root of the common Wild Strawberry is used to make a tea good for the stomach-ache, and especially for babies. The white man uses the herb as an astringent and tonic for convalescents and especially for children having bowel and bladder weakness.

Large-leaved Avens (*Geum macrophyllum* Willd.), "wica'wasa' konek" [yellow light]. The Flambeau Ojibwe use this for a female remedy. Eclectic practitioners consider the root tonic and astringent.

Rough Cinquefoil (*Potentilla monspeliensis* L.), "tcode' imînaga' wûnj" [like a strawberry]. This plant seemed to be known to all the Pillager Ojibwe, even the eight-year-old girls, as a physic. There is no record of its use as a medicine by white men.

Marsh Five-finger (*Potentilla palustris* [L.] Scop.), "beba' akwûndek" [floats about]. This was dug from the water by John Whitefeather's wife, Flambeau Ojibwe, who said it was a cure for cramps in the stomach, and is used alone as one medicine. Under the Pillager Ojibwe name of "mûcki' godji'bîk" [swamp root], John Peper said that it was medicine with them, but he did not know how to use it. There is no record of its use as medicine by white men.

Pin Cherry (*Prunus pennsylvanica* L. f.), "bae'wimînûn". The inner bark is a valued remedy for coughs. Most of the species of cherry have been used by white men for the bitter principle contained, which suits it for use as a stomachic and bitter tonic in gastric atony and general debility. The syrup of wild cherry has been used as a pleasant vehicle for other drugs.

Wild Cherry (*Prunus serotina* Ehrh.) "okwe' mîn" [worm out of a fly's egg; refers to the little worms in a cherry when it is ripe]. [121] The Flambeau Ojibwe value the bark of this species to make a tea as a remedy for coughs and colds. It is used the same as Pin Cherry by white men.

Choke Cherry (*Prunus virginiana* L.), "a' sasawe' mînaga' wûnj." [122] The Pillager Ojibwe make a tea for lung trouble from the inner bark. This is the official bark in the pharmacopoeia, which is used as a stomachic and bitter tonic useful in gastric atony and general debility. Wild cherry syrup is used to mask other unpleasant drugs.

Smooth Rose (*Rosa blanda* Ait.), "ogîne' mînaga' ons" [rose berries]. [123] The Pillager Ojibwe use the skin of the fruit or "rose hip" for stomach trouble. The Flambeau Ojibwe call it "ogîni" or "ogîni' gawûnj" [rose berries]. They dry and powder the flowers for use in relieving heartburn. The skin of the rose hips is a medicine for indigestion. Rose hips are described by white men as refrigerant and astringent, but are only used in

medicine to prepare the confection of hips. Roses are used almost wholly today to impart their pleasant odor to pharmaceutical preparations.

High Bush Blackberry (*Rubus allegheniensis* Porter), "o'dataga' gomîc" [its name]. [124] The Flambeau Ojibwe boil the canes to obtain a tea that is used as a diuretic. The roots furnish a tea for arresting flux. Blackberry and Dewberry root are official in the U. S. Pharmacopoeia because of their tonic and astringent properties. They are favorite household remedies among white men in the treatment of summer diarrhea of children and adults. Blackberry cordial is often used for the same purpose.

Red Raspberry (*Rubus idaeus* L. *aculeatissimus* [C. A. Mey] Regel & Tiling) "meskwa' mînaga' wûnj" [red bush berry]. The Flambeau Ojibwe value the berries as a seasoner for their medicines. That is, the flavor is used to disguise less pleasant ingredients. The root bark makes a tea for healing sore eyes. Under the name Rubi Idei Fructus, N. F. white men use the berries for making an agreeable syrup as a vehicle for less pleasant tasting medicines. When the Red Raspberry is not readily available the Black Cap Raspberry is used in the same manner.

Meadow-sweet (*Spiraea salicifolia* L.), "wabûckîki' bug" [rabbit leaf]. The Flambeau Ojibwe use the root as a trapping medicine. There is no record of its use by the white man.

Steeple Bush (*Spiraea tomentosa* L.), "memîsgwû'nagûg" [squaws' drink]. The Flambeau Ojibwe make a tea from the leaves and flowers of the Steeple Bush to drink for the sickness of pregnancy and to act as an easy parturient. The whites have used the root and the leaves as an astringent and tonic, in diarrhea, hemorrhages, gonorrhea, ulcers, etc.

RUBIACEAE (MADDER FAMILY)

Goose Grass (Galium aparine L.), "sakate' bwi" [stickers]. The whole plant is used by the Pillager Ojibwe to make a tea used for a diuretic, in kidney trouble, gravel, stoppage of urine, and allied ailments. Other species are used in much the same way and for the same purposes. White men have recognized it as a valuable refrigerant and diuretic, and have found it useful in diseases of the urinary organs. It is not recommended for diseases of a passive character, on account of its refrigerant and sedative effects, but is used freely in fevers and all acute diseases.

Small Cleaver (*Galium tinctorium* L.), "waboskîki mînûn" [rabbit swamp berries]. The Flambeau Ojibwe make a medicinal tea from the whole plant, for its beneficial effect upon the respiratory organs. Eclectic practitioners have used it for its nervine, antispasmodic, expectorant and diaphoretic properties. It has been successfully used in asthma, cough, and chronic bronchitis. The plant has a pungent, aromatic, pleasant, persistent taste.

Small Bedstraw (*Galium trifidum* L.), "ojîbwe' owe' cûwûn", [ojibwe male genitalia]. The Pillager Ojibwe make a medicinal tea of this species for skin diseases such as eczema, ringworm and scrofula. White men undoubtedly use it in much the same way as the preceding species through error in identifying it correctly.

RUTACEAE (RUE FAMILY)

Prickly Ash (*Zanthoxylum americanum* Mill.), "gawa' kumîc", [125] [its name]. Both Flambeau and Pillager Ojibwe make trips further south to get this bark, since none of the trees grow near them. They want it for treating quinsy and sore throat. They say that even the berries are good for a hot tea to treat sore throat, and also to use as a spray on the chest to cool and relieve congestion in bronchitis. Among the white men, it is considered a stimulant, tonic, alterative and sialagogue and is used for chronic rheumatism, colic, syphilis, and hepatic derangements.

SALICACEAE (WILLOW FAMILY)

Balsam Poplar (*Populus balsamifera* L.), "manasa' di" [perfume poplar]. The Pillager Ojibwe cook the buds of the Balsam Poplar in lard or bear fat, and use the cold product for a salve on cuts, wounds or bruises. They also rub it on the inside of the nostrils, so that the balsamic odors can course through the respiratory passages and open them in case of congestion from cold, catarrh or bronchitis. Poplar buds are also official with white men who use them as a stimulating expectorant, and in the form of an ointment in treating sluggish ulcers and sores. Eclectic practitioners have used tinctures of the buds for stomach and kidney treatment and in scurvy and rheumatism, and sometimes, apply it to the chest. The bark is

used by white men for a tonic and cathartic, of service in gout and rheumatism.

Large-toothed Aspen (*Populus grandidentata* Michx.), "asadi" [bitter bark]. The Flambeau Ojibwe use the young roots of this tree in a tea as a hemostatic. There is no record of its use by the whites.

Quaking Aspen (Populus tremuloides Michx.), "asadi" [poplar]. The Flambeau Ojibwe give this tree the same name as the Large-toothed Aspen. They use the bark of a young trunk for poulticing cuts and wounds. The astringent salacin in the inner bark undoubtedly draws the cuts together and causes healing. The Pillager Ojibwe distinguish the tree with a slightly different name, "asadins", the diminutive of "asadi", meaning "little poplar". They use the inner bark for poulticing a sore arm or leg, and make the inner layer of their splints of the inner bark so that a broken limb may heal healthily. Eclectic practitioners use both bark and leaves in treating acute rheumatism, also to lower the temperature in fevers, to relieve pain and reduce arterial swellings, colds, hay fever, influenza, neuralgia and diabetes. Externally the whites have used it as a wash for gangrenous wounds, eczema, cancer, burns, and body odor.

Crack Willow (Salix fragilis L.), "sizigo' bimîc" [willow name]. This tree has escaped from cultivation around the water-courses of the Flambeau Reservation and has been accepted by the Ojibwe there as efficacious along with the native willows. The bark is astringent from its salacin content and is used as a styptic and poultice for sores. Willow bark was formerly employed by physicians among the whites as a stomachic and antiperiodic in the treatment of intermittents, but is rarely used today.

Shining Willow (Salix lucida Muhl.), "zigo' bamîc". The Pillager Ojibwe use the bark of this species as an external remedy for sores. The Ojibwe do not generally distinguish any particular willow with any other name, but Whitefeather, Flambeau Ojibwe, called this species "mûckigo' bamîc" [swamp tree] and said it was used on a cut to stop the bleeding, and that the bark was also a poultice material for sores. Other Flambeau Ojibwe called it "sizigo' bamîc", but it was generally noticed that in that latitude the Shining Willow was invariably found in swamps, and not along streams, so there is justification for Whitefeather's name. Among the whites, this bark was used formerly as a stomachic and antiperiodic.

Bog Willow (*Salix pedicellaris* Pursh.), "sizigo' bamîc". This is a species of the cold bogs and meadows found far up toward the Arctic Circle. While the Pillager Ojibwe did not give it a distinctive name, they said it was not used for bark to smoke, but for bark to treat stomach trouble. There is no record of its use by whites.

SARRACENIACEAE (PITCHER-PLANT FAMILY)

Pitcher-plant (*Sarracenia purpurea* L.), "o' makaki' wîdass" [frog's leggins], as shown in plate 67, fig. 1. Bearskin, Flambeau Ojibwe medicine man had a slight variant in pronouncing this—"o' makaki' odass". He said that the root is used to make a tea to help a woman accomplish parturition. Eclectic practitioners used the whole plant to make a tea for a tonic, stimulant, diuretic and laxative.

SAXIFRAGACEAE (SAXIFRAGE FAMILY)

Wild Red Currant (*Ribes triste* Pall.), "mîci' tcimînûk." The Flambeau Ojibwe use the leaves as some sort of a female remedy. There is no record of its use by the whites.

SCROPHULARIACEAE (FIGWORT FAMILY)

Butter and Eggs (*Linaria vulgaris* Hill.), "owacawa' skwûneg" [yellow light]. The whole plant is dried by the Flambeau Ojibwe and used in the kettle with other foliage and twigs as a bronchial inhalant in the sweat lodge. The Ojibwe name for medicine to be inhaled is "nokwe'sîkûn" which sounds much like the Menomini Indian name for the same thing, —"na' sîkon". The eclectic practitioners claimed that the plant is diuretic, and cathartic, using it in dropsy, jaundice, and cutaneous eruptions. The fresh plant was sometimes used as a poultice for hemorrhoidal tumors, and an ointment was made of the fresh flowers for the same purpose and to use locally in diseases of the skin. In Germany, the flowers were used for a yellow dye.

Cow Wheat (*Melampyrum lineare* Lam.), "agoñgasi' mînûk" [chipmunk berries]. The Flambeau Ojibwe say that this plant is made into a tea, which

is a "little medicine for the eyes". There is no record of its medicinal use by the whites.

Wood Betony (*Pedicularis canadensis* L.), "mandamî' nîodji' bîkîns" [little corn root]. According to John Peper, Pillager Ojibwe, this root was a bad kind of medicine, an aphrodisiac, when cut fine and placed in some dish of food without the knowledge of those who were going to eat it. There is no record of its medicinal use by the whites.

Mullein (*Verbascum thapsus* L.). The Flambeau Ojibwe have no name for this since it has come into their territory from the south and they do not use it. The writer has gathered this for his grandmother who smoked the leaves for relieving asthma and bronchitis. The flowers are supposed to have diuretic properties and have been used in the treatment of tuberculosis.

THYMELEACEAE (MEZEREUM FAMILY)

Moosewood (*Dirca palustris* L.), "djibe' gûb" [djibe means a dead person, or ghost or spirit]. The bark of Moosewood is very soft, strong and elastic, so that twigs can be tied into knots. The Pillager Ojibwe say that all their people use it as a tea for a diuretic. The bark is sometimes substituted for Mezereum bark, which is official in the U. S. pharmacopoeia. It is usually used in a compound decoction with sarsaparilla for chronic skin diseases, and syphilitic, rheumatic and scrofulous conditions. As an external ointment, it was used for a stimulant to foul or ill-conditioned ulcers.

TYPHACEAE (CAT-TAIL FAMILY)

Cat-tail (*Typha latifolia* L.), "bebamasû'n" [it flies around]. The Flambeau Ojibwe used the fuzz of the fruit for a war medicine. They claim that the fuzz thrown into an enemy's face will blind him.

UMBELLIFERAE (PARSLEY FAMILY)

Musquash Root (*Cicuta maculata* L.), "apagwasî gons". The Pillager Ojibwe say that this root is used a little in their medicine, but did not know just how. It was smoked in hunting.

Cow Parsnip (Heracleum lanatum Michx.) "pi' pîgwe' wanûck" [flute stem]. [126] The Pillager Ojibwe pound the fresh root and apply it as a poultice to cure sores. The fresh leaves and root are known to produce vesication or blisters by the whites, and therefore have been used by them as counter-irritants. The root has been used by eclectic practitioners to cure epilepsy. In infusions, it is thought to cure dyspeptic disorders.

Sweet Cicely (*Osmorhiza longistylis* [Torr.] D. C.), "osaga' tîkûm" [interlaced twigs]. The same name was applied by the Pillager Ojibwe to *O. claytoni*, and evidently they did not distinguish between the two species. A tea for making parturition easier is prepared from the roots. The liquorice flavor of the tea is said to be good for a sore throat.

Wild Parsnip (Pastinaca sativa L.), "pigwe'wûnûsk" [flute stem]. The Pillager Ojibwe are quite cautious in using this poisonous root. They claim that a little bit is very powerful, while much is poisonous. They use a very minute quantity mixed with four other kinds of roots to make a medicinal tea for female troubles. There is no record of its medicinal use by the whites.

Black Snakeroot (Sanicula marilandica L.), "masan" [from the woods]. The Flambeau Ojibwe use the root pounded as a poultice to cure rattlesnake bite or any snake bite. Bearskin, chief Flambeau medicine man said that if this root be chewed, it would cause eruptions on the epithelial lining of the mouth. They consider it a very potent remedy. The Pillager Ojibwe call it "gîne'bîg odji' bîk" [snake root] and make a root tea that is used to cure fevers of various kinds. Eclectic practitioners have accredited it with active aromatic, bitter principles. They have used it in intermittent fevers, sore throat, erysipelas and cutaneous affections. It has been also used for St. Vitus dance and other nervous affections.

URTICACEAE (NETTLE FAMILY)

Hop (*Humulus lupulus* L.), "jiwî cgoni bûg". The Pillager Ojibwe use the common hop to make a tea which acts like saleratus on the system, increasing the excresence of urine and reducing its acidity. It is official in the U. S. pharmacopoeia as a tonic, diuretic, sedative and somewhat anaphrodisiac.

Wood Nettle (*Laportea canadensis* [L.] Gaud.), "masa natîk" [forest wood]. The Pillager Ojibwe use the root to make a medicinal tea for its diuretic properties. It is said to cure various urinary ailments. Eclectic practitioners have considered it tonic, astringent and diuretic. They use both roots and leaves. The seeds and flowers are given in wine for the ague.

Slippery Elm (*Ulmus fulva* Michx.), "anib". The Pillager Ojibwe use the slippery inner bark for sore throat, especially when the throat is apt to be dry. Slippery Elm is official in the U. S. pharmacopoeia as a demulcent, emollient and nutritive. It is considered useful internally for dysentery, diarrhea and bronchitis. Pounded bark for poultices has been used for boils and inflammations, and in compounding suppositories.

Lyall's Nettle (*Urtica lyallii* Wats.), "masan" [woods]. The Flambeau Ojibwe use only the leaves as medicine. These are soaked in warm water and used as a poultice for heat rashes. It is something like fighting fire with fire. Among the whites, nettles are known for their powerful and peculiar diuretic properties.

VIOLACEAE (VIOLET FAMILY)

Canada Violet (Viola canadensis L.) Although a common violet in the territory of the Pillager Ojibwe, they claimed to have no name or use for it. It was formerly used by eclectic practitioners as a blood purifier and as a remedy in chronic affections of the lungs, and in skin diseases, but is no longer used.

American Dog Violet (*Viola conspersa* Reichenb.), "wewaîe' bûgûg". The whole plant is used by the Flambeau Ojibwe to make a tea for heart trouble. The whole plants have been used among the whites as alterative and expectorant remedies. They were said to be useful in skin diseases, scrofula, syphilis and bronchitis.

VITACEAE (VINE FAMILY)

River-bank Grape (*Vitis vulpina* L.), "ci'wî mînûn" or "ciwî mînaga wûnj", shown in plate 70, fig. 2. The Pillager Ojibwe used a tea of boiled twigs for women to drink to clear up afterbirth and enable it to pass easily. They use the sap as a medicine for stomach and bowel trouble. Among the

whites, the tender branchlets and leaves were sometimes employed for their agreeable acidulous flavor.	

OJIBWE VEGETAL FOODS

The Ojibwe have always lived far from the haunts of civilization. They were too far in the back country to participate in the colonial and precolonial wars. They have always preferred to live where game is abundant, and even today they are still able to subsist partly on deer and fish. The products of the hunt were very important to them, and they possess a very large number of hunting charms, which are roots, seeds or blossoms that are used as good luck omens or actual lures in trapping and fishing.

They have always made the greatest use of the edible plants of their environment, but did not progress very far in an agricultural way until the last quarter century, when each reservation was furnished with an Indian or white farmer, preferably an Indian. He has used the school children to cultivate demonstration farms, and his example is persisting in some of his former pupils. The older people had a few simple products from prehistoric days and have not allowed them to completely run out. The garden patch was always small, and the caretaker was invariably the woman of the household. Among the cultivated crops were: Cranberry pole beans, maize or Indian corn, potatoes of an early variety, squash and tobacco. The last crop has not been grown by them in fifty years, as they now depend upon the white men for their source of supply. At the present time, they raise any of the crops, that the white men raise. In their gardens, one will find lettuce and onions, radishes, carrots, parsnips, beets, turnips, cabbage, potatoes of standard varieties, beans and peas, and any other crop one will find in an up-to-date garden. Stranger still, one may find garden flowers, and the lady of the house will be quite proud of them, and usually a little jealous, if her neighbor has some flowers that she has not.

Some of the wild crops they gather possess considerable commercial value, such as blueberries and wild rice. The laborious work of preparing wild rice for table use has boosted the price to \$1.05 a pound, which those "in the know" gladly pay. Blueberries yield a goodly part of their cash income, for the berries usually sell for about twenty cents a quart, and it is easy for an Indian family to pick eighty quarts in a day. They do not pick

them like the white man does, but comb the bushes with their fingers, removing the leaves and twigs later.

The Ojibwe are fond of their native foods, and since they regard all plants as the gift of their deities, and sacred to their uses, they feel that their native foods are medicine to keep them in health as well as foods. While they know nothing about vitamins or chemical constituents, they think that there are some salts or minerals in their native foods that keep them well. We know that they are correct in that. They ascribe many of their present diseases to the abandonment of their native foods and the adoption of white men's foods. They think that the early failure of their teeth is due to using too much white flour for bread.

From the middle of July to the middle of September, one will find the women busily caring for the various food harvests. Maize will be drying on cloth screens, and blueberries will be drying to tough, inky pellets. Raspberries and dewberries are cooked into jams, cranberries are cooked with maple sugar into a jelly, and circles of squash are strung on a basswood bark string. Men and women are busy at the shallow lake harvesting wild rice, and all are very active. Sundays they will stop for a pow-wow or dream dance, but not if it is the wild rice harvest time. The food plants are listed alphabetically by families.

OJIBWE FOOD PLANTS

ACERACEAE (MAPLE FAMILY)

Box Elder (*Acer negundo* L.), "adjagobi' mûk". The Pillager Ojibwe collect the sap of the Box Elder and mix it with the sap of the regular Sugar Maple to drink as a beverage.

Sugar Maple (*Acer saccharum* Marsh.), "înena' tîg" [Indian tree] and "adjagobi' mîn". Both names came from the Pillager Ojibwe, ^[127] and although the trees were scarce on the Flambeau Reservation, they also call it "înena' tîg", and gather quantities of the sap somewhere south of the reservation. Maple sugar is one of their most important foods and is used in almost every kind of cookery. Maple sap is saved to drink as it comes from the tree, sometimes with the added sap of the Box Elder or Yellow Birch.

Again it is allowed to become sour to make a vinegar "cîwa'bo" used in their cookery of venison, which, when afterwards sweetened with maple sugar, corresponds to the German fashion of sweet-sour meat. Before they had the salt of the white man, maple sugar took its place and still does when they can get it. All kinds of meats were seasoned with it. There are many interesting legends about the tree, its discovery and sugar making, as related in Mr. Alanson Skinner's "Material Culture of the Menomini".[128] The Ojibwe garner their sugar crop much the same way as they did years ago, except that they have used large iron kettles since the coming of the white man. The sugar camps are rather permanent affairs, and the framework of the boiling house with its upright poles around the fire place to hold the kettles is left intact. A bark-covered wigwam is used to store the tools of sugar sap gathering, and granulation. Most of the sap vessels and storage vessels are made of birch bark, sewed with boiled basswood fiber or the core of the Jack Pine root. The vessels are rendered waterproof by the application of pitch secured by boiling Jack Pine cones.

In early April, the Ojibwe visit their camps, the men to repair the camps and the storage vats of hollowed logs, and to cut fire wood, the women to see that the sap buckets and mokoks are scrupulously clean and watertight. If some can not be repaired, rolls of birchbark are there to make new ones. The whole family then move to the camp and live in the large wigwam, while they make sugar for a month. During the sap flow, a man can chop holes and set taps into from two to three hundred trees in a day. The first flow of sap is the best, and it gets to be of a rather poor quality by the end of the flow. The Ojibwe will not use the night flow of the sap, which they say is bitter, so they cease collecting an hour before dark. Gathered sap is stored in hollowed basswood log vats, and covered over with birch bark to keep it clean. Boiling in the iron kettles is done much as the white man does it, except that foam is dissipated by stirring with a fresh brush of a spruce branch. The syrup is strained through a cloth and recooked in two or three quart quantities until it is ready to sugar. Then, while still warm, it is poured into a wooden trough, where it is pounded and crushed with a heavy wooden paddle as it hardens. It is stored in covered birch bark baskets called mokoks, of from twenty-five to seventy-five pounds capacity. The sugar is graded according to its whiteness and stored away. Sap is often added to the dregs in the kettles and a second grade sugar is secured. To waste or spill any of the sap is considered an affront to their deities, who punish such an act by causing the sugar to shrink after it is made.

ALISMACEAE (WATER-PLANTAIN FAMILY)

Arum-leaved Arrowhead (Sagittaria arifolia Nutt.) "wabasi pîn" [white potato].[129] Both the Flambeau and the Pillager Ojibwe call this by the same name and use it exactly alike as far as its food value is concerned. The Pillager Ojibwe also use it as a medicine for man and horse. The Flambeau Ojibwe recognize that it is also a favorite food of ducks and geese. A similar species found in California is used by the Indians there as a potato under the name "wappate" or "wapatoo", and is called by the whites there "Tule root." [130] The corms are a most valued food source to the Ojibwe. They will dig them if they cannot get them more easily. Muskrat and beavers store them in large caches, which the Indians have learned to recognize and appropriate. It is difficult to dig them out still attached to the plant, because the connection between the roots and the corm is so fragile and small. The round corms are attached by a tiny rootlet to the main mass of fibrous roots, and are capable of reproducing the plant in a vegetative manner, just as the Irish Potato does. They are from one-half to an inch and a half in diameter and about three-quarters to two inches long. They are pure white inside, sweet and quite starchy. The Indian does not differentiate between this species and the Broad-leaved Arrowhead. For winter use, the potato is boiled, then sliced and strung on a piece of basswood bark fiber and hung up overhead for storage. They also use the fresh corms, cooking them with deer meat, and maple sugar. Some of the potatoes are kept over after cooking and the maple sugar is thickened until they might almost be called candied sweet potatoes.

ANACARDIACEAE (SUMAC FAMILY)

Smooth Sumac (*Rhus glabra* L.), "bakwa' nak" [binding tree]. The Flambeau Ojibwe gather the berries to make a pleasant beverage much like lemonade. The berries are tart and are sweetened with maple sugar, soaked in water until required for use. They also gather and dry them for winter

use. The dried berries are cooked in water with maple sugar, and form a hot drink, instead of a cooling one, as used in the summer and fall.

Staghorn Sumac (*Rhus typhina* L.), "bakwa' natîg" [binding tree]. ^[131] The Pillager Ojibwe use the berries in the same way as the Flambeau Ojibwe use this species, and under the same name. They also store up the dried seed heads for winter use.

ARISTOLOCHIACEAE (BIRTHWORT FAMILY)

Wild Ginger (*Asarum canadense* L. var. *acuminatum* Ashe), "name' pîn", [sturgeon potato]. The Pillager Ojibwe often use this root in cookery to season the food. They claim it takes away any muddy taste from fish, and will render any meat dish digestible by anyone, even if they are sick. The roots are processed in lye water for cookery on a large scale.

ASCLEPIADACEAE (MILKWEED FAMILY)

Common Milkweed (*Asclepias syriaca* L.), "cabo' sîkûn" [milk], "înîniwûnj" [indian plant] Flambeau name. [133] The Pillager Ojibwe eat the fresh flowers and tips of the shoots in soups. They are usually cooked with some kind of meat and become somewhat mucilaginous like okra, when cooked. They also gather and dry the flowers for refreshening in the winter time, to make into soup.

BETULACEAE (BIRCH FAMILY)

Yellow Birch (*Betula lutea* Michx. f.), "wi'nîsîk". The Flambeau and Couderay Ojibwe tap the Yellow Birch for sap to add to maple sap for a pleasant beverage drink.

Hazelnut (*Corylus americana* Walt.), "mûkwobaga' nak" [bear nut]. [134] The Flambeau Indians use the hazel nut as a food and are especially fond of the newly gathered nuts before the kernel has hardened. The name is often shortened to "baga' nak".

Beaked Hazelnut (*Corylus rostrata* Ait.), "ba' gana' mîc" [nut tree]. The Pillager Ojibwe also use the Beaked Hazelnut. The Flambeau Ojibwe also recognize it as "baga' nak" [nut] and use it as a food.

CAPRIFOLIACEAE (HONEYSUCKLE FAMILY)

Nannyberry (*Viburnum lentago* L.), "atîte' tamîn". [135] The berries are eaten when ripe, fresh from the bush, and are also used in jam with wild grapes.

CELASTRACEAE (STAFF TREE FAMILY)

Climbing Bittersweet (*Celastrus scandens* L.), "manîdobîma' kwît" [spirit twisted]. [136] The Pillager Ojibwe story of this plant is practically the same as that of the Menomini, as given in Museum bulletin Vol. IV, No. 1, pp. 63-64. Bittersweet is fairly abundant around Leech Lake, and is found in dense hardwood forests climbing to tops of trees thirty feet or more in height. When food is unobtainable in the winter, because the snow is too deep and game is scarce, the Ojibwe gather this bark and separate the inner bark to make a thick soup for a meal. While it is not so very palatable, it is sustaining and they may subsist on it for a considerable time, until they are able to get some game, or to go to some relatives and get other foodstuffs. The Ojibwe name refers as does the Menomini name, to the twisted intestines of their cultural hero, Winabojo.

COMPOSITAE (COMPOSITE FAMILY)

Large-leaved Aster (*Aster macrophyllus* L.), "mêgêsi' bûg", [eagle leaf]. The leaves of this aster are eaten when young and tender. The Flambeau Ojibwe declare that they are fine-flavored and good to eat, because they act as medicine at the same time that they are food. Among the Pillager Ojibwe they use the root of this same aster as a soup material, but call it "nêmêgosi' bûg" [trout leaf].

Philadelphia Fleabane (*Erigeron philadelphicus* L.), "micao gacan" [odor of split hoof of doe]. The Pillager Ojibwe say that deer and cows eat

this plant and that they use it in their smoking tobacco or kinnikinnik mixture.

Dandelion (*Taraxacum officinale* Weber) "weca' waskwûne' k" [yellow light]. The Flambeau Ojibwe gather the young leaves in the spring and cook them with pork or venison for greens, using vinegar made from soured maple sap.

CORNACEAE (DOGWOOD FAMILY)

Panicled Dogwood (*Cornus paniculata* L'Her.) "meskwabi' mîc" [red bush]. The Flambeau Ojibwe use this bark in their kinnikinnik or native smoking tobacco. Sometimes real tobacco is mixed with it and sometimes not, as real tobacco is expensive. The twig bark is peeled and toasted over coals on a crude drying fork, then further shredded to carry in their tobacco pouches and smoke in their pipes.

CRUCIFERAE (MUSTARD FAMILY)

Large Toothwort (Dentaria maxima Nutt.), "mûkwopîni'k" [bear potato]. The rootstocks of this cress are very abundant in wet, springy ground in the forest. The white man can only identify this plant in the spring of the year when the flower and leaf are found, but the Ojibwe knows the root and where it grows so gathers it when it has matured. It is a favored wild potato, but has a very pungent acrid taste when freshly dug. They heap the mass of cleaned roots upon a blanket and cover it closely to exclude the air for four or five days. During this time the roots ferment and lose the acrid taste, becoming sweet and palatable. The Ojibwe cook them with corn and deer meat, or with beans and deer meat, and say that, besides being a fine food, they are a good medicine for the stomach.

CUCURBITACEAE (GOURD FAMILY)

Cucumber (*Cucumis sativus* L.), "ecka'damîn" [its name]. The Ojibwe use their cucumbers raw, but sometimes flavor them with a vinegar "cîwa 'bo" made from souring maple sap. They are further flavored with powdered maple sugar.

Ojibwe Squash (*Cucurbita maxima* Duchesne), "ogwî'ssi maun owaso kwone'k" [pumpkin, yellow light]. Their word "ogwissimaun" literally means "tangled hairs", and refers to the strings inside upon which the seeds are borne. The Flambeau Ojibwe cultivate their own variety of squash, although they say that they got it originally from the Iroquois. They dry rings of squash for winter use.

Large Pie Pumpkin (*Cucurbita pepo* L.), "missa' bîgon" [little giant plant]. They have cultivated this original Ojibwe dark yellow pie pumpkin since long before the advent of the white man. They cut it into rings and sun dry it for winter use.

Gourds (*Lagenaria vulgaris* Ser.), "jica'wîgan" [hollow like]. The Ojibwe cultivate the gourds, which they eat when young, before the rind has hardened. They also make use of them for drinking and dipping cups, and for rattles in the medicine lodge. The medicine man, "mîdewag", keeps the rhythm of his songs by shaking them. They are pierced, kernels of corn or shells inserted, and then corked again for use.

EQUISETACEAE (HORSETAIL FAMILY)

Field Horsetail (*Equisetum arvense* L.), "gîji' bînûsk" [duck food]. [137] The Pillager Ojibwe gather this for their domesticated ducks to eat and also to feed their ponies, to make their coats glossy.

ERICACEAE (HEATH FAMILY)

Bog Rosemary (*Andromeda glaucophylla* Link.), "bîne' mîkci" [swamp]. Young, tender leaves and tips of this plant are used by the Flambeau Ojibwe to boil for a beverage tea. While they often pick and use it fresh on the hunting trail, they also gather and dry it for later use. It is not a bad substitute for "store tea."

Leather Leaf (*Chamaedaphne calyculata* [L.] Moench.), "wabackîki' bûg" [rabbit leaf]. This is another beverage tea leaf, prized by the Flambeau Ojibwe. It is used on the trail or dried and saved for future use. The Pillager Ojibwe also use it in the same manner, under the name,—"macki' gobûgons" [little swamp leaf].

Wintergreen (*Gaultheria procumbens* L.), "wînîsi' bûgûd" [dirty leaf], shown in plate 75, fig. 2. While the Flambeau Ojibwe use this as a rheumatic medicine, they also use the leaf tea from the youngest, tenderest leaves as a beverage tea, and especially favor it because it "makes them feel good". They also eat the wintergreen berry which they call "owînîsi' mîn".

Labrador Tea (*Ledum groenlandicum* Oeder.), "waboskîki bûg" [rabbit leaf], shown in plate 76, fig. 2. The Flambeau Ojibwe use the tender leaves of this plant for a beverage tea, and will even eat the leaves in the tea. It is a well known tea to many northern and Canadian Indians.

Cranberry (Vaccinium oxycoccos L.), "mûcki mîn" [swamp berry] shown in plate 67, fig. 2. This is an important wild food of the Flambeau Indians and also of the Pillager Ojibwe, who use a slightly different pronunciation, "mûckîtci mîn" [swamp berry]. The train men that go through that reservation never seem to tire of getting Johnnie Frog to say "cranberry pie" for them in Ojibwe. It sounds so complicated because they really have no word for pie in their language but must say, "swamp berries made into sauce rolled between bread",—"mûcki gimînûn backi mînasîgûn wiwegida sîgûn".

Blueberry (Vaccinium pennsylvanicum Lam.), "mînûn" [berries]. The Flambeau and the Pillager Ojibwe harvest quantities of blueberries both for themselves and to sell. They dry them in large quantities on raised scaffolds of rush mats, like currants, or raisins, which they somewhat resemble. In the winter, they like to cook them with dried sweet corn, sweetened with maple sugar. They also cook them with wild rice, and venison and make a sweet bread with them. They have different names for different varieties of blueberries. The Low Blueberry (V. vacillans Kalm.) is called "gimîne'sît" while the low Black Blueberry (V. nigrum [Wood] Britton) is called "makate' mîn" [black blueberry]. No specimens of the last two were secured, but the names were common among the Ojibwe.

FAGACEAE (BEECH FAMILY)

Beech (*Fagus grandifolia* Ehrh.) "gawe'mîc". All the Ojibwe know and appreciate the sweet nuts of the beech tree. They are never plentiful enough to store for winter, but the Indians like them fresh.

White Oak (*Quercus alba* L.), "mîci mîn" [oak berry]. All Ojibwe encountered told of their former dependence upon acorns for their soup stock. It seems that at least every Algonkian tribe knew and used all species of acorns. They got rid of the bitter tannin taste by soaking the acorns in hot lye. Wood ashes in water, when boiled gave them the lye. A regular woven bark bag held a quantity of acorns and the lye was leached out by washing the whole bagful in several changes of warm water. The acorns were then dried for storage, and when wanted, pounded and ground to a coarse flour which was used to thicken soups or form a sort of mush. Blueberries were often cooked with this mush to give it a good flavor and it was seasoned with maple sugar. White Oak acorns needed no lye treatment.

Bur Oak (*Quercus macrocarpa* Michx.), "mîtîgo' mîc" [wooden tree]. Bur Oak acorns are bitter, but yield to the lye treatment to become as edible as the acorns of the White Oak.

Red Oak (*Quercus rubra* L.), "mîtîgo' mîc" [wooden tree]. Because Red Oak was so abundant in the Ojibwe territory and so large in size, the acorns were one of their most important starchy foods. They leached the tannic acid flavor with lye and brought them to a par with the sweet acorns of White Oak.

Black Oak (*Quercus velutina* Lam.) "tê' komîn". The name is evidently an abbreviation of "mêtîgo' mîn", but probably an intentional one for this tree was always referred to by the abbreviation. Its acorns were equally good as others when the tannin was extracted.

FUNGI

The writer found that none of the Ojibwe eat any of the mushrooms although they have two names for them,—"pîkwa' djîc" and "wajackwe' do" [muskrat]. Probably some remote ancestor had a fatal experience with mushrooms and the news has been handed down. Although the Ojibwe have fanciful stories explaining why they use certain plants, no doubt their knowledge came by a process of trial and error through the centuries and the errors have been duly buried but not entirely forgotten.

GRAMINAE (GRASS FAMILY)

Corn (Zea mays L.), "manda' mîn". Corn is a traditional heritage of the Ojibwe, although none knew a time when they did not have it. Their origin myth is that it was a pinch of flesh taken from the side of their culture hero, Winabojo, by himself and cast upon the ground, to grow and become corn for them. This is the same as acknowledging that they do not know how it came to be here. When mandamin matures, they say that only horses can eat it raw in that condition. They have to soak it in lye water, wash out the lye and then parboil it to prepare it for the table. This is the same as our hominy. Scientists think now that corn originated in Mexico from an accidental crossing of teosinte and gama grass. While the Ojibwe cultivate and grow the approved strains of corn for Wisconsin, they also cling to their own "calico" corn, with all sorts of colors of grains on different cobs. They have two names for sweet corn,—"wîckobi manda mîn" [sweet maize], and "wîckobi' sî'ganûg" [turns sweet in cooking]. Their sweet or soft corns are different from those used by the white man. They roast the ears in the husk and make it into hominy as the white man does. They cut the kernels from their sweet corn and dry them for winter use. It is also boiled in a kettle, and when half-cooked, is cut from the cob and dried for winter use.

They had a name for popcorn, but the writer saw none of it while around them.

Wild Rice (*Zizania palustris* L.), "mano' mîn" [good berry]. The Ojibwe word is their pronunciation of the Menomini term for wild rice. Most Algonkians have the same word for wild rice and it forms a very important part of their food. The writer has often been present at the Ojibwe rice harvests. The largest operation seen was that of the Ojibwe at Mole Lake in Forest County, Wisconsin. There about twenty families were working at one time and the writer worked at each operation to become familiar with it. Wild rice preparation is the hardest kind of labor, and they earn all they get for it when they sell it. It sells in Milwaukee for \$1.05 a pound, but one can buy it from the Indians at \$.25 to \$.35 a pound. One man reaped 1325 pounds of rice in the harvest time. The Menomini Rice Harvest group in the Public Museum exhibition halls, shows very well most features of the operation.

Various families have definite parts of the lake for their share, while others travel to small lakes and stay there until the harvest is complete. They set up a family camp, while the grain is still in the milk stage and wait

for it to ripen. When this time arrives, having made experimental collections to determine it, they make a ceremonial gathering. Three to a canoe, two women and a man go to the rice beds and gather sufficient rice for a preliminary feast. With a hooked stick, held in a crescent by a string, the women pull the rice over the canoe and beat off the kernels with a stick, into the canoe bed. Sometimes, when the Indians do not want to waste any of the rice, they will go into the beds before it is ripe and tie several heads together to ripen in that manner. The first collection is prepared complete, with songs to their deities and a ceremonial feast is observed. After that all hands fall to in earnest and gather unremittingly until all the rice is harvested.

When the canoe is partly loaded, they pole back to camp, to prepare it. Wild rice grows in a mucky soil which may be quite deep. Ten foot poles, with a wide fork to secure a hold on the grass, are used to propel the canoe through the rice. On the return trip when loaded, the women trample the rice to break off the spiny beards or awns. The next step is roasting or parching. A wash tub is tilted against a large back log and a fire maintained under it. To keep the rice from burning, one must use a forty inch paddle and stir constantly for about three hours. The roasting destroys any weevils that might be present, gives the rice a pleasant flavor, loosens the husks or glumes and hardens the rice so it may be kept indefinitely.

In earlier times, a hole was dug into the ground and carefully lined with buckskin. Nowadays a candy bucket is sunk into the hole. This is the threshing floor. A man with new moccasins steps in to trample and thresh it. [138] He has a couple of poles, slanting near the hole, and supported on a tree with which he balances, while trampling the rice. He gives a circular, twisting pressure to the rice with his feet to grind off the husks. Then the chaff is winnowed away by a woman as shown in the present series, Vol. IV, plate 29, fig. 2. A large shallow birchbark tray is shaken up and down by the woman as she stands in a breeze. If there is no wind, the chaff accumulates on top and is pushed over the edge from time to time. After the winnowing, the rice is washed to clean it of foreign matter and of the smoky flavor of parching. It is then dried and ready to use or store. Wild rice swells more than cultivated rice in cooking. It is often moistened with six times its bulk in water. The kernels are about six times as long as thick and in cooking the ends curl backward to meet in the center, thus differing from

Oryza sativa, the white man's rice. The proper way to cook it Indian fashion is with deer broth and season with maple sugar. Wild rice cooked with wild fowl takes away the muddy or wild taste and is highly prized by those whites who know its qualities.

HYDROPHYLLACEAE (WATERLEAF FAMILY)

Virginia Waterleaf (*Hydrophyllum virginianum* L.), "nebîne nanikwe 'îag" [having hair on only one side]. The Pillager Ojibwe use the root as a feed for ponies to make them fatten rapidly.

JUGLANDACEAE (WALNUT FAMILY)

Shell-bark Hickory (*Carya ovata* [Mill.] K. Koch.), "baga' nako' bagan". Hickory trees are scarce in the north, but the Ojibwe appreciate the edible nuts.

Butternut (*Juglans cinerea* L.), "baga' nag". Butternut is plentiful in the north and in most Ojibwe territory, while the Black Walnut is not to be found. They use the nuts for food and the hulls for dye.

LABIATAE (MINT FAMILY)

Wild Mint (*Mentha arvensis* L. var. *canadensis* [L.] Briquet.) "andego' bîgons" [little crow leaf]. [140] The Pillager Ojibwe use the foliage to make a beverage tea.

Catnip (*Nepeta cataria* L.), "tci' name'wûck" [big sturgeon leaf]. Catnip leaves are used by the Flambeau Ojibwe in making a beverage tea.

LEGUMINOSAE (PULSE FAMILY)

Hog Peanut (*Amphicarpa pitcheri* T. & G.), "bûgwa' dj mîskodi' sîmîn" [unusual red bean]. The Pillager Ojibwe cook the beans and are very fond of the unusual flavor imparted to their cooking in this way. They also cook the roots, although they are really too small to be considered of much importance.

Creamy Vetchling (*Lathyrus ochroleucus* Hook.), "bûgwa'dj pînik" [unusual potato]. The Pillager Ojibwe use the root of this plant as a sort of Indian potato, and store it in deep pits in the garden, as they do their regular potatoes.

Navy Bean (*Phaseolus vulgaris* L.), "wabeni mînesa" [little white berry]. The Ojibwe claim to have always had the sort of beans that the white man uses and while their original Navy Bean is not exactly like that of the white man, still it is near enough to be confused with it.

Lima Bean (*Phaseolus lunatus macrocarpus*), "wabeni mîna" [big white berry]. The Ojibwe also claim to have originally had the Lima Bean, but that is doubtful.

Cranberry Pole Bean (*Phaseolus vulgaris* L.), "mêskodi' mînûn" [red heart berry]. The Red Cranberry Pole Bean is the original source of all our best commercial pole beans. The Indians cultivated it in aboriginal times. They use it alone or in many peculiar combinations.

LICHENS

Tree Lichen (*Sticta glomulifera*), "jîngwakons wakun" [little white pine and row of eggs] or "jîngwa'kwak" [pine egg]. On the bark at the base of an old White Pine, will be found lichens growing from the ground to a height of perhaps three feet. The Ojibwe gather these and boil them until they coagulate or "come together" like scrambled eggs. They say that they taste like eggs "wawîn", but they call them "wakûn", which is a term applied to the roe or eggs of a fish. It is a favorite dish and a very ancient one.

LILIACEAE (LILY FAMILY)

Wild Onion (*Allium cernuum* Roth.), "cîgaga' wûnj" [skunk plant]. Both Pillager and Flambeau Ojibwe like the Wild Onion and Wild Leek in the spring as an article of food.

Wild Leek (*Allium tricoccum* Ait.), "bûgwa' djijîca' gowûnj" [unusual onion] "jîcago" really means skunk, and from this word Chicago was named. This is the larger wild onion and is known as Winabojo's onion, or the one he pointed out for food. It is gathered in the spring when it is round

and plumper than in the fall. It is also gathered and dried for future use. The Wild Leek is somewhat bitter, while the smaller wild onion is sweet.

False Spikenard (*Smilacina racemosa* [L.] Desf.), "agoñgosi' wîdji' bîk" [chipmunk root]. The Pillager Ojibwe use this root added to oats to make a pony grow fat. The Flambeau Ojibwe also prepare and eat the False Spikenard root. It is soaked in lye water and parboiled to get rid of the lye, then cooked like potatoes.

NYMPHAEACEAE (WATER LILY FAMILY)

Sweet White Water Lily (*Castalia odorata* [Ait.] Woodville & Wood), "odîte abûg wabî gwûn" [flat heart-shaped leaf, white flowered]. The Flambeau Ojibwe eat the buds of this water lily before they open.

Yellow Lotus (*Nelumbo lutea* (Willd.) Pers.), "wesawasa' kwune'k odîte 'abûg" [yellow light, flat heart-shaped leaf]. [141] Most of the Wisconsin Ojibwe know about this favored wild potato; and also use the hard chestnut-like seeds to roast and make into a sweet meal. They cut off the terminal shoots, at either end of the underground creeping rootstock and the remainder is their potato. These shoots are similar in shape and size to a banana, and form the starchy storage reservoirs for future growth. They have pores inside, but have more substance to them than the stems. They are cut crosswise and strung upon basswood strings, to hang from the rafters for winter use. They are soaked when needed and then cooked with venison, corn or beans.

OLEACEAE (OLIVE FAMILY)

Red Ash (*Fraxinus pennsylvanica* Marsh.) "a'gîmak" [snow-shoe wood]. The cambium layer of the ash is scraped down in long, fluffy layers and cooked. It is called "sagîma' kwûn", which incorporates the name of the ash with "wûn" or eggs. They say it tastes like eggs. Many other trees are given the same sort of treatment for food purposes.

PINACEAE (PINE FAMILY)

White Pine (*Pinus strobus* L.), "jîngwa' k". In the spring the Ojibwe use the young staminate catkins of the pine to cook for food. It is stewed with meat. One might think this would taste rather like pitch, but they assured the writer that it was sweet and had no pitchy flavor.

Hemlock (*Tsuga canadensis* [L.] Carr.), "gagagi' wîc". The Flambeau Ojibwe use the leaves of Hemlock to make a beverage tea. This sort of tea is oftentimes used by the Indian Medicine man to carry his medicaments and disguise the fact that the patient is taking medicine.

POLYPODIACEAE (FERN FAMILY)

Brake (*Pteris aquilina* L.), "ana 'ganûck" [general fern name]. The Flambeau Ojibwe are fond of young fern sprouts as a soup material. The young fern tips, with coiled fronds, are about like asparagus tips, only not stringy with fibrovascular bundles like asparagus. The tips are thrown into hot water for an hour to rid them of ants, then put into soup stock and thickened with flour. The flavor resembles wild rice. Hunters are very careful to live wholly upon this when stalking does in the spring. The doe feeds upon the fronds and the hunter does also, so that his breath does not betray his presence. He claims to be able to approach within twenty feet without disturbing the deer, from which distance he can easily make a fatal shot with his bow and arrow. After killing the deer, the hunter will eat whatever strikes his fancy.

RANUNCULACEAE (CROWFOOT FAMILY)

Marsh Marigold (*Caltha palustris* L.), "o 'gîte' bûg". The Flambeau Ojibwe use the leaves as a green to cook with pork in the springtime.

ROSACEAE (ROSE FAMILY)

Smooth Juneberry (*Amelanchier laevis* Wiegand), "gozîgago' mînûn" [thorny berry]. According to John Whitefeather, Flambeau Ojibwe, this is the name of the Juneberry, while Charley Burns on the same reservation called it "bîsega' gwomîn". Both knew it only as a food, although some tribes use the bark as a medicine. Juneberries were also dried for winter use,

the Indians often preferring them to blueberries. The Pillager Ojibwe also use them as a food and use the bark as a medicine.

Red Haw Apple (*Crataegus* sp.), "mînesaga' wûnj". The Pillager Ojibwe use the haw apples as a food in the fall of the year.

Wild Strawberry (*Fragaria virginiana* Duchesne), "ode' imîn" [heart berry]. Both Flambeau and Pillager Ojibwe have the same name for the Wild Strawberry, and call it the heart berry from its shape and color. They are very fond of it in season and make preserves of it for winter use.

Wild Plum (*Prunus nigra* Ait.), "bûge' sanatîg". The Pillager Ojibwe find quantities of the Wild Plum in thickets and gather it for food and for preserves.

Pin Cherry (*Prunus pennsylvanica* L.f.), "bae' wimînûn". The Pin Cherry is abundant around the Flambeau Reservation and the Ojibwe are fond of it. It is an education in itself to see a group of Ojibwe women working on mats with a supply of fruit laden branches beside them. With one hand they will start a stream of berries into the mouth and the stream of cherry stones ejected from the other corner of the mouth seems ceaseless. The Pillager Ojibwe also have the tree and use it in the same manner.

Sand Cherry (*Prunus pumila* L.), "sewa'komîn". The Flambeau Ojibwe find plenty of this species on sandy openings in the forest, and gather the fruit for food.

Wild Cherry (*Prunus serotina* Ehrh.), "okwe' mîn" [worm from egg of a fly]. The Flambeau Ojibwe prefer this cherry to all other wild cherries, and dry it for winter use. Some of them also make whiskey from the ripe cherries.

Choke Cherry (*Prunus virginiana* L.), "sawe' mîn". Although the fruit of this cherry is sufficiently acrid to be unsatisfactory to the whites as a food, the Pillager Ojibwe like it, especially after the fruit has been frosted.

High Bush Blackberry (*Rubus allegheniensis* Porter), "odataga' gomîc" [blackberry stem].^[142] The Flambeau Ojibwe relish the Blackberry and also the Dewberry (*Rubus villosus* Ait.) although we found no specimen nor distinctive name for it. They make a jam of the berries for winter use.

Red Raspberry (*Rubus idaeus* L. var. *aculaetissimus* [C. A. Mey.] Regel & Tiling) "meskwa' mîn" [red berry]. This is a favorite fresh fruit of the Flambeau Ojibwe and is also used for making jams for winter use.

SALICACEAE (WILLOW FAMILY)

Large-toothed Aspen (*Populus grandidentata* Michx.), "asadi" [bitter bark]. The Ojibwe scrape the cambium layer to obtain a food which is boiled and is something like eggs. They also scrape the cambium of several other trees for food.

SAXIFRAGACEAE (SAXIFRAGE FAMILY)

Prickly Gooseberry (*Ribes cynosbati* L.), "me' skwacabo' mînûk" [red berries with thorns]. The Flambeau Ojibwe relish these berries when ripe and make them into preserves for winter use.

Wild Black Currant (*Ribes americanum* Mill.), "amî'komîn" [beaver berries], shown in plate 70, fig. 1. The Pillager Ojibwe eat these berries fresh, in jams, and preserves and dry them for winter. In the winter, a favorite dish is wild currants cooked with sweet corn. The Flambeau Indians use them in a like manner, but call them "kagagîtci' mîn" [raven berries].

Wild Red Currant (*Ribes triste* Pall.), "mîcitci' mînûk". The Flambeau Ojibwe gather these currants and use them as they do the Wild Black Currants.

Smooth Gooseberry (*Ribes oxyacanthoides* L.), "cabo' mînûk" [smooth berry]. The Flambeau Ojibwe gather this berry for fresh food, and also make it into preserves for winter use. It is often cooked with sweet corn.

SOLANACEAE (NIGHTSHADE FAMILY)

Ojibwe Potato (*Solanum tuberosum* L.), "opîn" [potato]. [143] The Ojibwe have cultivated this early potato, according to their traditions since aboriginal times, and it surely looks primitive enough. It is round in circumference, about two or three inches long, has purplish flesh, and never

cooks to a mealy consistency. It is much prized for soups and is always firm and crisp when cooked. White Cloud's potato patch on Bear Island, Leech Lake, Minnesota, is shown in plate 58, fig. 1.

URTICACEAE (NETTLE FAMILY)

Hop (*Humulus lupulus* L.) "ji'wîcini' goni' bûg". The Pillager Ojibwe often use the hop fruit as a substitute for baking soda.

VITACEAE (VINE FAMILY)

Virginia Creeper (*Psedera quinquefolia* [L.] Greene), "manîdo' bimakwît" [spirit twisted]. The Pillager Ojibwe say that the root of this vine was cooked and eaten a long time ago by their people and that it had been given as a special food by Winabojo.

River-bank Grape (*Vitis vulpina* L.), "cî' wimînûn". The Pillager Ojibwe use these grapes after they have been frosted, and make them into jelly for winter use.

OJIBWE VEGETAL FIBERS

The Ojibwe Indians have always been far removed from the beaten paths of the white men, and for this reason make good use of their native plant materials. Oft times, it seems to the white man that they bestow considerable labor, upon making cord, string, mats, baskets and similar articles that might as easily be purchased at a store. But money is not plentiful, and many of the things that can be purchased have inferior lasting qualities. Disgust for a poor substitute, pride in their own resourcefulness, and the habit of centuries has kept them constantly proving that they are the master of their environment and continuing to make their products in the good old Ojibwe way.

Outside of yarn sashes, they have not woven textiles for a long time. Perhaps the last of their textile work is in storage bags made from nettle fiber or basswood string. Cedar bark fiber was used long ago for some coarse textiles but not within the past century.

Their bark wigwams are quite comfortable and probably more Ojibwe live in these native houses, shown in plate 46, fig. 2, and plate 58, fig. 2, than in frame houses. Certainly they use more of these than any other Wisconsin tribe. The mats for the benches or beds at the outer rim of the wigwam, or for the floor inside, are skillfully made. They can make their wigwams wind and waterproof with sewed cat-tail mats and birch bark, as shown in plate 46, fig. 2, and can even live very comfortably in their wigwams in sub-zero temperatures.

There are several agency schools scattered about the reservations, where the children may go to school, and happily the teachers usually encourage the children to learn their own Indian arts. The schools are really boarding schools, where the children stay continuously for nine months, being completely clothed by the Indian service. Sometimes boys and girls will escape and run home to hide, but the disciplinarian and Indian policeman usually ferret them out and bring them back, or else seize the father and hold him in jail until the scholar is produced again. Indian children are taught more of the useful arts and household arts than are the white

children, but also have access to a college education through their university or normal schools.

Under the head of vegetal fibers, we also consider their uses of forest trees, since these are so closely related. As before, the plant families are listed alphabetically, and descriptions of uses are made along the same lines as in the preceding divisions of this bulletin.

OJIBWE FIBER PLANTS

ACERACEAE (MAPLE FAMILY)

Red Maple (Acer rubrum L.), "cicigîme'wîc". This leaf is frequently used in the Ojibwe beadwork designs. In fact, many leaves, flowers and fruits furnish designs. Since the plants are sacred to their midewiwin or medicine lodge, it is common for them to use especially valuable remedies in their designs. These may be worked in either porcupine quills or beads. Shell and copper beads were used in the older work, while tiny glass beads obtainable from the whites are now used. Indian women are usually most apt at their own aboriginal designs and do a rather poor job, when they are given a white man's design to copy. In the early days, the Indian men drew outline pictures on birchbark scrolls to remind them of midewiwin rituals, practices and medicines. Indian women experimented with plant materials laid upon birch bark until they found the design that suited them. Deer horns burned in the fire to furnish charcoal or else flour was used to coat the underside of a leaf, which was then pressed upon birch bark to leave its outline as from a carbon copy. The birch bark design would be placed beneath the native bead loom, as shown in plate 48, fig. 1, and the pattern copied in beads. Sashes, anklets, bracelets, kneelets, belts, coats and waists were beaded, also moccasins. The public is not very discerning in choosing real Indian designs, but the ethnologist can quickly pick the originals, even though he may never have seen that tribe of Indians before.

Mountain Maple (*Acer spicatum* Lam.), "cacagobi'mûk" [emetic bark]. The three-lobed leaf of the Mountain Maple is a great favorite with Ojibwe women for design work for beading, and it is more often seen than any other kind of leaf.

Sugar Maple (*Acer saccharum* Marsh.), "înênatîg" [Indian tree].^[144] Paddles for stirring maple sugar or wild rice while scorching or parching it, bowls and many other objects of utility were made by the Ojibwe from this wood.

APOCYNACEAE (DOGBANE FAMILY)

Spreading Dogbane (*Apocynum androsaemifolium* L.), "wesa 'wûskwûn" [nearly blue flowers]. The Flambeau women used to use the outer rind for fine sewing. In the fall, when mature this fiber makes one of the strongest native fibers, stronger even than the cultivated hemp to which it is related.

BETULACEAE (BIRCH FAMILY)

Paper Birch (Betula alba L. var. papyrifera [Marsh.] Spach) "wîgwas". Birch occupies almost as important a position in the life of the Ojibwe as dates do in the life of an Arabian or cocoanuts in the life of a South Sea Islander. The bark is used for buckets, baskets, wigwam covering, and canoes. Patterns for their decorative art were made upon the bark; records of their medicine lodge ritual were kept on its virgin surface. It and cedar form the two most sacred trees of the Ojibwe, both of which are so useful to them. They regard the birch bark as a distinct contribution from Winabojo and point to the fact that it is the last part of the tree to decay. It keeps its form even after the wood has changed to dust and can be readily slipped from the wood in decayed logs. It also has the property of protecting from decay articles stored in it. They claim that a birch is never struck by lightning, hence offers a safe harbor in a thunderstorm.

No birch or cedar is gathered by the Ojibwe without due offering of tobacco to Winabojo and Grandmother Earth. Families make a pilgrimage to birch groves during the latter part of June and in July to gather their supply of birch bark, because it peels most easily at that time. As everyone knows, there are many layers of bark on a birch tree ranging from the thinnest paper to quite heavy pieces that make very durable canoes.

George L. Waite, Honorary Curator of Botany in this museum, made a special series of pictures, thirty in number, detailing every step in the manufacture of their canoes or "tciman" as they call them. Ogabe gijîg [rift in the clouds] and his wife Cawasîno kwe [rays of light from cloud] both 80 years old, about the only old couple at Lac du Flambeau, still remembering the proper Ojibwe method of making a birchbark canoe were engaged to carry on the work. Important steps are shown in plates accompanying this bulletin.

To find a tree with thick bark suitable for canoe-making often necessitates a considerable journey on foot as it did in this case. The trunk should be ten to fifteen inches in diameter, smooth and straight as can be selected. Paper birches are of slow growth and the usual specimen of that diameter will be from fifty to seventy years old. This tree was collected with all the proper ceremony. Into a hole in the ground at the base of the tree, tobacco was placed as an offering. Tobacco was smoked by the man, who saluted the cardinal points of the compass, and likewise heaven and earth. The tree was then cut down. They say that usually it will be left standing on the stump, so that the bark may be undamaged, but for this canoe where the outside of the bark becomes the inside of the canoe, they felled crossed logs to hold it off the ground.

To remove the bark, a long perpendicular slit is made the length desired. From this cut the bark is laid back on either side, with an axe, and peeled from the log as shown in plate 52, fig. 1. To overcome the natural curl of the bark, it is then rolled up with the inner side outmost, in proper lengths and tied with inner bark of the basswood, which is their ready cord material. With a tump-line over the head, as shown in plate 52, fig. 2, the man is ready to carry the bark home, where he will make the canoe.

The framework was made of White Cedar or Arbor Vitae because it is light, elastic, strong and easy to split. In plate 53, fig. 1, Ogabe gijîg is shown splitting the cedar log to obtain the ribs and framework. There are two lengths, sixteen feet for top rails, and six feet for ribs, as shown in plate 53, fig. 2. The curves of the prow and stern are obtained by slitting a stave twelve times so that it may be bent at right angles, tied securely with basswood string, and held in place until dried as shown in plate 54, fig. 1.

A staked form eighteen feet long is next laid out on the ground, as shown in plate 54, fig. 2. The bark is secured between the two stakes so that it cannot slip and is then ready for sewing together. Large rocks are piled inside to overcome any tendency of the bark to curl. The sewing material is the root of Jack Pine. These are especially suitable since they are long and straight. Ogabe gijîg is seen pulling them out of the ground after digging with a grub hoe, in plate 55, fig. 1. The central core is tough and is about the same diameter at the tip as it is close to the main trunk of the tree. It is split into two and coiled, to furnish a very tough flexible cord. The coils are shown with Cawasîno kwe under the Jack Pine tree from whence they came in plate 55, fig. 2. Both cedar sticks and root fiber are sunk in the lake till needed.

Sewing makes awl holes necessary, and a White Oak wood awl is used. Both ends are drawn through the same hole with a lock stitch, like the shoemaker used to use in putting on half soles. All holes must be caulked and made watertight. Pitch is obtained from a Balsam, Norway Pine, or White Pine. Notches made in the tree trunk fill with resin in ten days. This is boiled with tallow in a kettle, as shown in plate 56, fig. 1. The resin is cooked a second time to obtain the pitch and Hemlock or Larch bark is used to furnish the heat, because it produces more steady heat than a wood fire.

Cawasîno'kwe is seen again sewing the canoe into its form in plate 56, figure 2, and is shown applying pitch to the seams in plate 57, figure 1. Decorations are made with native dyes such as blue clay and red ochre. Nowadays white men's colors are used and clan marks painted on each end. Ogabe'gijîg uses a bear picture for his clan mark while Cawasîno'kwe belongs to the chicken clan. The finished canoe is seen in plate 57, fig. 2, as they are launching it upon Flambeau Lake. Very few Ojibwe can still make a real birch bark canoe in this manner and the museum considers this series of photographs a valuable one.

The tree is later salvaged for firewood, but the bark may be used right away as soon as obtained. Emergency trays or buckets may be fashioned at once in the woods, or the bark may be stored for future use. The application of heat is all that is necessary to bend it in any shape desired. Although it is highly inflammable, still buckets of birch bark can be used to cook meats. Where water covers the inside of the vessel, it will not burn. The Ojibwe woman saves scraps of birchbark to kindle or light fires with them. A handy torch which will burn all night can be made by rolling birch bark tightly. It is often used by the Ojibwe in lieu of candles.

Nearly any kitchen utensil common to the white man, can be duplicated in birchbark by the Ojibwe. Even funnels for pouring hot lard are easily made. The mokoks or baskets are made for gathering and storing berries, for storing maple sugar, dried fish, meat, or any food. The birchbark keeps the food from spoiling. Some of the mokoks for gathering berries or carrying maple sap, have bark handles like bucket handles, as shown in plate 49, fig. 1, while larger storage baskets have no handles, but a lid, or sometimes a flap of the basket itself is used to close it tightly. All sorts of

drying trays are made from birch bark. Shallow trays for winnowing wild rice are also made of it.

Sheets of bark are sewed together with basswood string and made into birchbark rolls, used as waterproof roofing for wigwams, as shown in plate 46, fig. 2. Sticks tied across the end of the roll keep it from splitting and tearing. A fine opportunity to see these bark rolls was afforded during the Court of Neptune pageant in 1926 on the lake front in Milwaukee, when the writer brought down over a hundred Ojibwe Indians from Lac Court Oreilles, Wisconsin, and set up a model old time village of eleven wigwams. There they lived for a week demonstrating their former methods of life, jerking meats over open fires, as shown in plate 47, fig. 2, and practicing their native arts and crafts.

Low Birch (*Betula pumila* L. var. *glandulifera* Regel), "bîne mîc" [partridge bush]. The Flambeau Ojibwe use the twigs of this dwarf birch for the ribs of baskets, where sweet grass is the weaving material.

Hazelnut (*Corylus americana* Walt.), "mûkwo'baga'nak".^[145] A crooked stick with an enlarged base such as can often be obtained in a hazel bush makes the favorite drum stick for the Flambeau Ojibwe. The finer twigs are bound into a bundle, with the tips sheared, to serve as a primitive broom or brush to be used on the bare ground in the wigwam. The finer twigs may also be used as ribs in making woven baskets for collecting or storing acorns or hard fruits.

CAPRIFOLIACEAE (HONEYSUCKLE FAMILY)

Downy Arrow-wood (*Viburnum pubescens* [Ait.] Pursh), "wabanwe'ak" [east stick]. The bark of this species furnished one of the ingredients of a Pillager Ojibwe kinnikinnik, which the writer smoked and pronounces good.

COMPOSITAE (COMPOSITE FAMILY)

Woolly Yarrow (*Achillea lanulosa* Nutt.), "wabîgwon" [white flower]. The flower heads are used in the kinnikinnik mixture for smoking by the

Flambeau Ojibwe. This mixture, is not however smoked for pleasure, but in medicine lodge ceremonies for ceremonial purposes.

White Sage (Artemisia ludoviciana Nutt.), "bebeji goganjî wî ngûsk" [horse hollow tube]. While the Pillager Ojibwe use this plant as a horse medicine, they report that their neighbors the Sioux use it in their smoking tobacco.

CORNACEAE (DOGWOOD FAMILY)

Alternate-leaved Dogwood (*Cornus alternifolia* L. f.), "moso mîc" [moose tree]. The bark of this dogwood is used for kinnikinnik, while the twigs are used in thatching and for various purposes by the Pillager Ojibwe.

Panicled Dogwood (*Cornus paniculata* L'Her.), "meskwabi mîc" [red tree]. The Flambeau Ojibwe make kinnikinnik from the bark of this species for smoking.

CYPERACEAE (SEDGE FAMILY)

Wool Grass (*Scirpus cyperinus* [L.] Kunth.), "gaîe'wûckûk". The Flambeau Ojibwe use these small rushes for a certain kind of mat, and formerly used them for woven bags for storage.

Great Bulrush (Scirpus validus Vahl.), "jîka miûskûn". The Pillager Ojibwe use this rush for their best mats. The bleached rushes are shown in plate 51, fig. 1, after they have been immersed in water for a few days and then cleansed. The Flambeau Ojibwe use the same rush in the same way. They select long rushes, with small diameters, so that the pith content is small. When the mat is in service, such a fiber will not crush readily. The rush when gathered is an intense green, white only at the base where it stands in water. All rushes must first be bleached pure white, and afterwards colored as desired. They are pulled, rather than cut, in order to obtain the maximum length. When thoroughly bleached and dried, they dye them with white men's dyes. Formerly they used native dyes, which they really prefer. The writer tried for a long time to secure the proper dyes for Whitefeather, but without success. They had a small quantity of German dye bought in 1914, which was satisfactory, but the six lots sent them were not equal to

the small sample in penetration nor permanence. The bleached rushes preponderate in any rug, and are ivory-white in color. The finished rug or mat is three feet wide and from four to eight feet long, and sells for from \$8 to \$30.^[146] The edge is bound securely with nettle fiber cord. The Flambeau Ojibwe use a more general term in referring to the rushes "ana ganûck" meaning rushes in general.

EQUISETACEAE (HORSETAIL FAMILY)

Scouring Rush (*Equisetum hyemale* L.), "gîji bînûsk" [duck plant]. The Pillager Ojibwe, besides using this for a medicine, employ a handful of the stems to scour their kettles and pans.

FAGACEAE (BEECH FAMILY)

White Oak (*Quercus alba* L.), "mîtî gomîc". The wood is of much value to all the Ojibwe, especially for making awls to punch holes in birch bark as they are sewing it with Jack Pine roots. They use it in making wigwams and for several other things. In fact, all the oaks are used and appreciated.

GRAMINEAE (GRASS FAMILY)

Sweet Grass (*Anthoxanthum odoratum* L.), "wîcko'bimûcko'si" [sweet grass]. While Sweet Grass is scarce around the Flambeau and Pillager reservations, they secure it elsewhere for making baskets, and say that in olden times it was used ceremonially because of its persistent sweet scent.

HYDROPHYLLACEAE (WATERLEAF FAMILY)

Virginia Waterleaf (*Hydrophyllum virginianum* L.), "nebîne nanikwe 'îag." [having hair on only one side]. According to White Cloud, Pillager Ojibwe, this root was chopped up and put into pony feed to make them grow fat and have glossy hair.

JUGLANDACEAE (WALNUT FAMILY)

Shell-bark Hickory (*Carya ovata* [Mill.] K. Koch.), "mîtîgwaba'k" [wooden?]. The Flambeau Ojibwe use the wood for making bows. Some are quite particular about the piece of wood they select, choosing a billet from the tree that includes heart wood on one side and sap wood on the other. The heart wood is the front of the bow in use, while the sap wood is nearest the user. It is likewise a wood of general utility.

JUNCACEAE (RUSH FAMILY)

Dudley's Rush (*Juncus dudleyi* Wiegand), "jîgomi'ûskûn". The Pillager Ojibwe use this tiny rush in their finest mat work, for small pieces.

LEGUMINOSAE (PULSE FAMILY)

Creamy Vetchling (*Lathyrus ochroleucus*, Hook.), "bûgwa'djûk pîni 'kmîne'bûg" [unusual potato, berry leaf]. The leaves and roots of this were used by the Pillager Ojibwe to put spirit into a pony just before they expected to race him.

Marsh Vetchling (*Lathyrus palustris* L.), "bebeji goganji macki ki" [horse medicine or literally "animal with only one hoof" medicine]. The foliage was specially fed to a pony by the Pillager Ojibwe to make it grow fat.

MYRICACEAE (BAYBERRY FAMILY)

Sweet Fern (*Myrica asplenifolia* L.), "gibaime nûnagwûs" [coverer]. This word is almost the same as the Menomini word for Sweet Fern and means the same thing. The Flambeau Ojibwe use the leaves to line their buckets when they pick blueberries and also cover them with the leaves, to keep them from spoiling.

OLEACEAE (OLIVE FAMILY)

Black Ash (*Fraxinus nigra* Marsh). Black Ash is the wood chosen for basketry splints by the Ojibwe. While our Wisconsin Indians are skilled at

basket making, their product is more useful than highly ornamental. If they had the yucca leaves, the devil's claw fiber, the sumac twigs, the bunch grass, and the other splendid basketry fibers of the southwestern Indians, no doubt they would make equally fine baskets. The Wisconsin Indians exercise possibly more ingenuity in gathering and preparing their basketry material. They select a Black Ash log from a swamp and peel it carefully. Then with a butcher knife, they make a cut about a half inch deep and by pounding with an axe head cause it to split up from the log, as seen in plate 50, figure 1. By inserting wedges, and continually pounding ahead of them, they cause the wood to separate along the annual rings. Then a further cut is made in the center of the annual ring and the two halves peeled back leaving a glossy surface. These splints are curled up into coils to be immersed in kettles of dye stuffs. Then they are woven by the women of the household as shown in plate 50, figure 2.

Red Ash (*Fraxinus pennsylvanica* Marsh.), "a'gîmak" [snow-shoe wood]. All ash wood is quite valuable to the Ojibwe, as they use it for bows and arrows, snow-shoe frames, sleds, basketry splints and cradle boards as shown in plate 49, fig. 2. The Red Ash is not used for the basketry splints when they can get Black Ash.

PINACEAE (PINE FAMILY)

Balsam Fir (*Abies balsamea* [L.] Mill.), "jîngo'b" [any kind of fir tree]. More properly "jîngo'b pikewa'ndag" [fir tree that goes up to a peak]. The Ojibwe chop a hole in the trunk and allow the resin to accumulate and harden. When gathered and boiled it becomes a canoe pitch. It is usually boiled a second time with the addition of suet or fat to make a canoe pitch of the proper consistency. Another name given the tree is "jîngo'bandag".

Tamarack (*Larix laricina* [DuRoi] Koch), "mûcki gwatîg" [swamp tree]. Larch roots are also used as a sewing material by the Flambeau and Couderay Ojibwe and they used to sew canoes with them. They also make bags from the root fibers, which are considered especially durable.

Black Spruce (*Picea mariana* [Mill.] BSP.), "jîngwûp" [its name]. The Flambeau and Couderay Ojibwe used these roots to sew canoes, and from

incisions in the bark gathered the resin to be boiled with tallow to make pitch for caulking canoes.

Jack Pine (*Pinus banksiana* Lamb.), "gîga'ndag" [its name]. Jack Pine roots have ever been esteemed by all Ojibwe as fine sewing material for their canoes and other coarse and durable sewing. They dig the roots with a grub hoe as shown in plate 55, fig. 1, and often find them fifty or sixty feet long. These are split lengthwise into two halves starting at the tree end, and are wrapped in coils as shown in plate 55, fig. 2. They are then sunk in the lake which loosens the bark and enables them to be scraped clean, as well as adding to their flexibility. They are an ivory white when used and very tough and flexible. An Ojibwe woman is shown sewing a canoe with them in plate 56, figure 2.

Norway Pine (*Pinus resinosa* Ait.), "abakwanûgi mûg" [bark in plates], shown in plate 63, fig. 2. The Flambeau Ojibwe gather resin from the Norway Pine just as they do from the White Pine, Balsam and Spruce, by chopping a hole into the trunk and collecting the resin as it forms. It is boiled twice, being combined with tallow the second time, to make a serviceable waterproof pitch. This is not only used for caulking canoes, but for mending roof rolls of birch bark and other things. The wood is also utilized.

White Pine (*Pinus strobus* L.), "jîngwa'kwacêskwe'do" [white pine cone], shown in plate 63, fig. 1. The Flambeau Ojibwe use the pitch from the boiled cones, along with the resin that flows from boxed trees, for caulking and waterproofing purposes.

Arbor Vitae (*Thuja occidentalis* L.), "gi'jîg" [cedar or sky]. The Ojibwe worships the Arbor Vitae or White Cedar and the Paper or Canoe Birch, as the two most useful trees in the forest. The pungent fragrance of the leaves and wood of the Arbor Vitae are always an acceptable incense to Winabojo, and the wood is their choice for light, strong straight-grained canoe frames and ribs, as shown in plate 53, figure 2. In earlier times, the tough stringy bark was used in making fiber bags, but these are scarcely ever seen today.

Hemlock (*Tsuga canadensis* [L.] Carr.), "gagagi wîc" [its name]. Hemlock bark was used by the Flambeau Ojibwe for fuel, when boiling their pitch the second time, because the heat from it was more easily regulated than that from a wood fire.

ROSACEAE (ROSE FAMILY)

Hawthorn (*Crataegus* sp.), "mîne'saga'wûnj". The Flambeau Ojibwe women use the sharp thorns for sewing awls on finer work such as buckskin sewing with sinew.

SALICACEAE (WILLOW FAMILY)

Shining Willow (*Salix lucida* Muhl.), "azisi'gobmîc" [its name]. The Flambeau Ojibwe use this bark for their kinnikinnik or native smoking mixture. It is peeled and toasted over a fire and reduced to flakes.

SPHAGNACEAE (SPHAGNUM MOSS FAMILY)

Sphagnum (*Sphagnum dusenii* C. Jens.), "asa'gûmîg" [moss]. The Flambeau and Pillager Ojibwe find Sphagnum Moss, shown in plate 66, fig. 1, readily available. They gather and dry it to make mattresses.

TILIACEAE (BASSWOOD FAMILY)

Basswood (*Tilia americana* L.), "wigub" [its name]. The tough fibrous bark of young basswood trees furnishes all Ojibwe with ready cordage and string in the woods, but it is also prepared by the women for future use. They strip the bark and peel the outer edge from the inner fiber with their teeth. The rolls are then kept in coils or are boiled and kept as coils until needed, being soaked again when used, to make them pliable. While they have countless uses for this cordage perhaps the most important is in tying the poles together for the framework of the wigwam or medicine lodge, as shown in plate 46, figure 2. When these crossings of poles are lashed together with wet bark fiber, it is easy to get a tight knot which shrinks when dry and makes an even tighter joint. The bark of an elm or a balsam, cut into broad strips is then sewed into place on the framework with basswood string. In olden times, an oak wood awl was used to punch holes in the bark, but at Leech Lake when they made the writer's wigwam, as shown in plate 58, figure 2, they used an old file end for an awl. The writer lived in this new wigwam all the time he was among the Pillager Ojibwe and scarcely a night passed without a group of them visiting him and sitting around the campfire, telling old time stories.

TYPHACEAE (CAT-TAIL FAMILY)

Cat-tail (Typha latifolia L.), "abûkwe'skwe" [wigwam cover; that is, the plant leaves]. The Flambeau Ojibwe women use the cat-tail leaves to make wind and rain-proof mats to be placed on the sides of the medicine lodge or any temporary wigwam or sweat lodge. They sew with a bone needle and nettle or basswood fiber with a hidden stitch, and bind the edges securely with their sewing cord. These mats are made quite large to cover the wigwams, and are rolled and carried around with them. They are not quite rain-proof as a roofing material, so birchbark rolls are used for that purpose. The fuzz or seed of the cat-tail is called "bebamasû'n" [it flies around], and is used to make mattresses and sleeping bags. They say the fuzz will blind one if it gets into his eyes. They gather the heads and boil them first, which causes all the bugs to come out of them. Then they dry them and strip the fuzz, to make a mattress, which they claim is as soft as feathers, but very prone to mat together, so that it must be shaken often and thoroughly. They also make a quilt of it, and from the quilt a sleeping bag. This is declared to be soft and warm in the coldest weather.

URTICACEAE (NETTLE FAMILY)

Wood Nettle (*Laportea canadensis* [L.] Gaud.), "masana tîg" [woods fiber]. The Pillager Ojibwe say that their old people used the rind of this nettle as a sewing fiber.

Slippery Elm (*Ulmus fulva* Michx.), "ani'b" [its name]. The Pillager Ojibwe strip this bark to use as a wigwam cover, for the sides of the wigwam.

Lyall's Nettle (*Urtica lyalli* Wats.), "masan" [woods]. In aboriginal times, the Flambeau Ojibwe used the bark or rind of this nettle to give them a fine, stout sewing fiber.

OJIBWE VEGETAL DYES

Some of the old people among all Ojibwe still use vegetable and native dye stuffs, especially upon a mat or piece of material that they expect to keep for their own use. For the tourist trade, they will use "Diamond" dyes or any sort they can get as they are not especially interested in how well the color lasts in that case. John Whitefeather, Flambeau Ojibwe, asked the writer to find a good dye for them, as he had been unable to buy any since 1914. Several lots were sent to him, but none was found that had the penetration and permanence of the German dyes that he had before the war. He had to resort to native dye stuffs to get those qualities, but, of course, could not get the same range of colors in native dye stuffs. That was the main reason he sought more of the white man's dyes.

They boil the material they wish to color in the mixture of plant parts and some earth to set the color. For this they use various clays, the red or black sand that bubbles up in a spring, or stone dust, perhaps with a few, rusty, iron nails thrown in the kettle for good measure. Sometimes the bark of Black Oak (*Quercus velutina* Lam.) was used to set the color.

OJIBWE DYE PLANTS

ANACARDIACEAE (SUMAC FAMILY)

Smooth Sumac (*Rhus glabra* L.), "bakwa'nak" [binding tree]. The Flambeau Ojibwe use the inner bark and the central pith of the stem of the Smooth Sumac, mixed with Bloodroot to obtain an orange color. The material is boiled in the mixture.

Staghorn Sumac (*Rhus typhina* L.), "bakwana'tîg". The Pillager Ojibwe do not have the Smooth Sumac, but use the Staghorn Sumac in the same way as the Flambeau Ojibwe use the other. The writer was unable to discover how they set the color unless it was with some stone dust that accumulated in the base of the kettle.

BALSAMINACEAE (TOUCH-ME-NOT FAMILY)

Spotted Touch-me-not (*Impatiens biflora* Walt.), "o'sawaskodji'bîk" [yellow root]. The whole plant is used by the Pillager Ojibwe to make a yellow dye and the material is boiled in the mixture with a few rusty nails.

BETULACEAE (BIRCH FAMILY)

Speckled Alder (*Alnus incana* [L.] Moench.), "wado'b" [its name]. The Flambeau Ojibwe use the inner bark for dyeing a light yellow, or with other ingredients to get a red, red brown or black. In occasional cases where sweet grass is dyed reddish yellow, the woman chews the inner bark and draws a wisp of sweet grass through her mouth weaving it in for color.

Paper Birch (*Betula alba* L. var. *papyrifera* [Marsh.] Spach), "wîgwas" [birch]. The innermost bark of the White Birch is boiled to extract a reddish dye by the Flambeau Ojibwe.

Hazelnut (*Corylus americana* Walt.), "mûkwo'baga'nak". The Flambeau Ojibwe make use of the seed hulls of the Hazelnut in setting the black color of butternut dye. They are boiled together and the tannic acid of the hull sets the color.

FAGACEAE (BEECH FAMILY)

Bur Oak (*Quercus macrocarpa* Michx.), "mêtî gomîc". The Flambeau Ojibwe use this bark in combination with other materials to set color.

Black Oak (*Quercus velutina* Lam.), "mêtî gomic". The Flambeau Ojibwe use this bark for a reddish yellow dye and it sets its own color.

JUGLANDACEAE (WALNUT FAMILY)

Butternut (*Juglans cinerea* L.), "baga'nag". The Flambeau and Pillager Ojibwe find this one of their best brown dyes, because they can get it from the tree at any time of the year. It is usually used in other combinations for brown and black colors.

MYRICACEAE (BAYBERRY FAMILY)

Sweet Gale (*Myrica gale* L.), "wa'sawasni'mîke" [yellow catkins]. In the fall of the year, the tips of the branches grow into an abortive scale or gall-like structure that is plucked and boiled to yield a brown dye stuff. The Flambeau Ojibwe seem to be the only Ojibwe that know this.

PAPAVERACEAE (POPPY FAMILY)

Bloodroot (*Sanguinaria canadensis* L.), "meskwa'djibîkûk" [red root]. The Ojibwe use this root in four or five combinations in dyeing various materials. It is not necessary to mix it with other materials to set the color and alone it gives a dark yellow or orange color. They use it to paint the face, also, making different clan marks with it. Either the fresh root or dried root may be used.

PINACEAE (PINE FAMILY)

Hemlock (*Tsuga canadensis* [L.] Carr.), "gagagi wîc". The Flambeau Ojibwe use the bark together with a little rock dust to set the color, to dye materials a dark red brown.

RANUNCULACEAE (CROWFOOT FAMILY)

Goldthread (*Coptis trifolia* [L.] Salisb.), "we'sawadji'bîkwe'ak" [yellow root?], shown in plate 75, fig. 1. The Flambeau Ojibwe add the golden-colored roots to other plant dyes to emphasize the yellow color.

Bristly Crowfoot (*Ranunculus pennsylvanicus* L. f.), "manwe'gons". The entire plant is boiled by the Flambeau Ojibwe to yield a red coloring dye. Bur Oak is added to set the color.

ROSACEAE (ROSE FAMILY)

Wild Plum (*Prunus nigra* Ait.), "bûgesana'tîg". The Flambeau Ojibwe use the inner bark as an astringent color fixative in dyeing with other plant

dyes.		

MISCELLANEOUS USES OF PLANTS

John Whitefeather, of the Couderay Ojibwe, in explaining the four degrees of the medicine lodge, told the writer about the many uses of charms or bewitching plants that the initiate learned in the fourth degree. The Mîde who perfected himself in the fourth degree was called a juggler or "Jessakîd". He is supposed to have supernatural powers of magic, and can read the thoughts of others, as well as call forth the ghosts or spirits of the other world. He can give Indians charms or lures which will aid them to do almost anything they have in mind, and he is most feared and respected among the Ojibwe.

These charms are supposed to work without physical contact and are thus different from medicines. They are addressed and prayed over, often with ceremonial tobacco offered to the four points of the compass, to heaven and the earth. They are usually referred to as medicine, and are carried in little buckskin packages about the person of the owner. Much of the contents of the war bundle, hunting bundle or medicine bundle, is composed of such charms. They guarantee a safe journey, the winning of a lacrosse or bowl and dice game, and the ability to find persons lost in the woods or lost articles. They can bewitch a man's wife, win the love of the opposite sex, work evil, and attract game to be shot, or small animals to one's traps. There is no doubt that medicines were often applied with as much faith in their power to charm as belief in the medicinal value of the medicine root for that specific disease. The connection between actual and superstitious remedies was oftentimes close.

Although a juggler or witch doctor had the power to cast these spells or charms, he was also supposed to have the power to dispel them and cure them. John Whitefeather called attention to the frequent wry mouth or twisted side of an Indian's face, and said that it had been caused by some witch doctor, but that it could be corrected by the victim, if he would pay the medicine man more to heal it than the one had paid for bringing on the affliction in the first instance. Many of their people think this unjust and the medicine man who does it may have to leave the village and flee for his

life. This actually happened in the case of Anawabi and the boy who died of pneumonia, the parents claiming that Anawabi took his breath away. Of course, Anawabi was not within miles of the boy and assured the writer that he had nothing at all to do with that case, nor had even thought about it, but he made a hurried trip to Oklahoma and remained a couple of years until the anger of the parents had lessened.

Some plants had been used in various tanning processes a very long time ago by the Ojibwe, but none know anything about it now, so far as the writer could discover.

APOCYNACEAE (DOGBANE FAMILY)

Spreading Dogbane (*Apocynum androsaemifolium* L.), "mago'siñe 'cnakwûk" [needle like]. ^[147] The Pillager Ojibwe say that this is one of the roots the use of which is taught in the fourth degree of the medicine lodge, and that it is not only eaten during the medicine lodge ceremony, but is also chewed to keep the other witch doctors from affecting one with an evil charm.

ARACEAE (ARUM FAMILY)

Sweet Flag (*Acorus calamus* L.), "na bûgûck" [something flat]. The root tea of this is used by Big George, Flambeau Ojibwe, on his gill net to bring him a fine catch of white fish. The net still smelled of the Calamus root after being in the water more than twelve hours, and he caught 121 white fish in one pull of the net in Flambeau Lake. It is combined with the root of Sarsaparilla.

ARALIACEAE (GINSENG FAMILY)

Wild Sarsaparilla (*Aralia nudicaulis* L.), "bebamabi'k" [root runs far through the ground]. This root is mixed with Sweet Flag root to make a tea to soak a gill net before setting it to catch fish during the night. Big George Skye, at Lac du Flambeau, was quite successful in catching them.

ASCLEPIADACEAE (MILKWEED FAMILY)

Common Milkweed (*Asclepias syriaca* L.), "înîni wûnj" [Indian plant]. ^[148] The Pillager Ojibwe use the milk of the Common Milkweed along with the milk of Canada Hawkweed to put on a deer call, thinking that it will better imitate the call of a fawn that is hungry or in distress.

COMPOSITAE (COMPOSITE FAMILY)

Blue Wood Aster (Aster cordifolius L.), "naskosi 'îcûs". A number of the composites as well as plants from other families are used in the Ojibwe hunting charms. The deer carries its scent or spoor in between its toes, and wherever the foot is impressed into the ground, other animals can detect its presence. It is thus dogs track them. It is a peculiar scent and the Ojibwe tries successfully to counterfeit it with roots and herbs. The root of this aster is but one of nineteen that can be used to make a smoke or incense when smoked in a pipe, which attracts the deer near enough to shoot it with a bow and arrow. They say that the white man drives the deer away when he smokes cigarettes or cigars, but the Indians bring them closer.

Large-leaved Aster (*Aster macrophyllus* L.), "naskosi'îcûs". This is one of the Flambeau Ojibwe hunting charms. It is smoked to attract deer.

Horse-weed (*Erigeron canadensis* L.), "wabî'gwûn" [white flower]. This is one of the Flambeau Ojibwe hunting charms. The disk florets are smoked.

Philadelphia Fleabane (*Erigeron philadelphicus* L.), "mîcao gacan" [odor of split hoof of female deer]. The Pillager Ojibwe use the disk florets of this plant to smoke to attract the buck deer. They say that cows and deer eat the blossoms.

Canada Hawkweed (*Hieracium canadense* Michx.) Under the name "wabî'gwûn" [white flower], some of the Flambeau Ojibwe use the flowers to make a hunting lure, and mix it with their other hunting charms. Others call it "mêmîskû'nakûk" and say that they cut off the roots and nibble at them when hunting. The roots are milky like the stem and the hunter wanting a doe will pretend he is a fawn trying to suckle and thus attract a doe close enough to shoot with bow and arrow.

Tall Blue Lettuce (*Lactuca spicata* [Lam.] Hitchc.), "dodoca'bo" [milk]. The Flambeau Ojibwe use this plant in the same manner as they do the

Canada Hawkweed to attract a doe to them for a close shot.

Fragrant Golden-rod (*Solidago graminifolia* [L.] Salisb.), "wa 'sawaskwûne'k" [yellow light]. The Flambeau Ojibwe use the flowers of this golden-rod to add to their hunting medicine, which is smoked to simulate the odor of a deer's hoof.

Tansy (*Tanacetum vulgare* L.), "mûckîki wît" [medicine plant]. The yellow flowers are used by the Flambeau Ojibwe as an addition to their odorous hunting mixture which they smoke to attract deer.

CORNACEAE (DOGWOOD FAMILY)

Alternate-leaved Dogwood (*Cornus alternifolia* L. f.), "moso'mîc" [moose tree]. The root is boiled by the Flambeau Ojibwe to wash a muskrat trap and make it lure the muskrat.

ERICACEAE (HEATH FAMILY)

Shin Leaf (*Pyrola americana* Sweet.), "bîne'bûg" [partridge leaf]. The Flambeau Ojibwe hunter makes a tea from dried leaves of this plant and drinks it as a good luck potion in the morning before he starts to hunt.

IRIDACEAE (IRIS FAMILY)

Blue Flag (*Iris versicolor* L.) "wikê".^[149] Both Flambeau and Pillager Ojibwe use this as a charm against snakes and claim that Indians all over the country use it the same way. When the Ojibwe go out blueberrying all day, every one carries a piece of it in his clothes and will handle it every little while to perpetuate the scent. They believe that snakes will shun them while so protected. They say that the Arizona Indians use it when they hold their snake dances and are never struck as long as their clothes are fumigated with it. They also chew it to get the odor into their mouths, preparatory to taking rattlesnakes into their teeth. The rattlesnake never offers to bite them so long as the scent of the Blue Flag persists.

LABIATAE (MINT FAMILY)

Heal-all (*Prunella vulgaris* L.), "basi'bûgûk". The Flambeau Ojibwe use the root of this plant to make a tea to drink before going hunting. It is supposed to sharpen their powers of observation.

LILIACEAE (LILY FAMILY)

Northern Clintonia (*Clintonia borealis* [Ait.] Raf.), "adota gans" [little bell]. [150] The Pillager Ojibwe claim that dogs chew the roots of this plant to poison their teeth, and if they then bite an animal it will die. A man may protect himself from such a bite by using the same root as a poultice on the wound.

Sessile-leaved Bellwort (*Oakesia sessilifolia* [L.] Wats.), "neweîa 'kwisînk" [one sided]. The Flambeau Ojibwe use the root of this plant as a part of their mîcao gacan hunting medicine to bring a buck deer near the hunter.

ORCHIDACEAE (ORCHIS FAMILY)

Rein Orchis (*Habenaria bracteata* [Willd.] R. Br.), "goko'cgûnda mîneskwe'mîn" [pig does, red root]. This plant is a sort of love charm among the Pillager Ojibwe often put to bad use.

Slender Ladies' Tresses (*Spiranthes gracilis* [Bigel.] Beck), "bîne bûg" [partridge leaf]. The Flambeau Ojibwe use the root as an ingredient of their hunting charm to bring game to them.

PLANTAGINACEAE (PLANTAIN FAMILY)

Common Plantain (*Plantago major* L.), "ceca'gûski bûge'sînk" [leaves grow up and also lie flat on the ground]. The highly colored base and root of this plant appeal to the Flambeau Ojibwe who always carry some of the ground root in their pockets to ward off snakes.

POLYGONACEAE (BUCKWHEAT FAMILY)

Swamp Persicaria (*Polygonum muhlenbergii* [Meisn.] Wats.) "agoñgosi 'mînûn". The Flambeau Ojibwe dry the flower of this plant and then

include it in their hunting medicine, which is smoked to attract deer to the hunter.

Curled Dock (*Rumex crispus* L.), "ciobûg". The dried seeds of this dock are smoked when dried by the Flambeau Ojibwe, as a favorable lure to game when mixed with kinnikinnik.

PRIMULACEAE (PRIMROSE FAMILY)

Starflower (*Trientalis americana* [Pers.] Pursh.), "nawo'bûgûk" [four-leaved clover]. The root of this is mixed with many others to make the smoking scent that attracts the deer to the hunter, according to the Flambeau Ojibwe.

RANUNCULACEAE (CROWFOOT FAMILY)

Bristly Crowfoot (*Ranunculus pennsylvanicus* L. f.), "manwe' gons". The Flambeau Ojibwe smoke the seeds of this in their hunting medicine to lure the buck deer near enough for a shot with bow and arrow.

ROSACEAE (ROSE FAMILY)

Hawthorn (*Crataegus* Sp.), "mînesaga wûnj", shown in plate 77, fig. 2. The bark of the Hawthorn was used by the Flambeau Ojibwe in making up their deer scent for smoking to attract deer while hunting.

SCROPHULARIACEAE (FIGWORT FAMILY)

Wood Betony (*Pedicularis canadensis* L.), "manda mînîodji bîkêns" [little corn root]. This is a sort of love charm according to John Peper, Pillager Ojibwe, who said that the root was chopped up and put into some dish of food that was cooking, without the knowledge of the people who were going to eat it, and if they had been quarrelsome, then they became lovers again. However, he said it was too often put to bad uses.

TYPHACEAE (CAT-TAIL FAMILY)

Cat-tail (*Typha latifolia* L.) "beba'masûn" [it flies around]. The Flambeau Ojibwe used to throw the fuzz of the fruit into the eyes of their enemies, the Sioux, claiming that it blinded them.

UMBELLIFERAE (PARSLEY FAMILY)

Musquash Root (*Cicuta maculata* L.), "abagwasî gans". The root of this is used in making a hunting medicine to be smoked to attract the buck deer near enough to shoot with bow and arrow.

Cow Parsnip (Heracleum lanatum Michx.) "pipigwe'wanûck" [flute reed]. According to the Flambeau Ojibwe, there is a bad spirit "sokênau", who is always present trying to steal away one's luck in hunting game. He must be driven away from the camp of the hunter by smudging a fire with the roots of the Cow Parsnip. This gets into Sokênau's eyes and he cannot see the hunter leave the camp, so naturally does not follow and bother him. Other Flambeau Ojibwe call it "acawe'skûk" but use it in the same way. The Pillager Ojibwe have the same name for the plant, but put the seed of the plant on a fire to drive away Sokênau. They boil the root to sprinkle their fishing nets and lure fish.

Water Parsnip (Sium cicutaefolium Schrank.), "wane mîgons". The seed of this is smoked over a fire by the Flambeau Ojibwe to drive away and blind Sokênau, the evil spirit that steals away one's hunting luck.

Yellow Pimpernel (*Taenidia integerrima* [L.] Drude), "manwe'gons" or "manwe'kos". The Flambeau Ojibwe declare that the seeds of this plant are very good for smoking in a pipe when one goes hunting for they will bring him luck.

CONCLUSION

The Ojibwe will always be interesting, because they prefer to live in the backwoods, and because they cling so closely to their traditions. A further reason is that they are more numerous than any other Wisconsin tribe. They are good friends of the white people and find it hard to keep to a strictly commercial basis, when hired as guides for fishing and hunting. Many Milwaukee sportsmen have much appreciated friends among the Ojibwe, who have ever been strict and upright in their dealings with them.

There remains a considerable amount of folk lore or ethnology to be studied and recorded, and since it is easy to find well educated men and women among them, who still recall the traditions and stories of their early life, it should prove a fertile field of investigation for some student. The writer is satisfied that he has only touched the surface in their ethnobotanical uses, knowing that three or four months are really too short a time to get this lore from them. But he wishes to close by saying that the Ojibwe are one of the most interesting people he has ever met.

FOOTNOTES:

- [85] Walter J. Hoffman. "The Midewiwin or 'Grand Medicine Society' of the Ojibwa." In the 7th Annual Report of Bur. of Ethnol. 1891, pp. 143-299.
- [86] Miss Frances Densmore. "Use of Plants by the Chippewa Indians." In 44th Ann. Rept. Bur. Am. Ethnol., 1928, pp. 275-397.
- [87] Field work is completed upon the ethnobotany of the Forest Pottawatomi, Winnebago and Oneida Indians, and bulletins will appear upon their ethnobotany at a future date. All will follow the same general plan.

[88] OJIBWE SYLLABARY

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ba be bi bo
ka ke ki ko
sa se si so
wa we wi we
sha she shi sho
ya ye yi yo
na ne ni no
a e i o
ma me mi mo
da de di do
ta te ti to
ga ge gi go
tta tte tti tto
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The letters all have the English value except tta and ga, which are pronounced cha and kwa. A, e, i, and o when pronounced alone become ha, he, hi, ho. Extra characters are Ji, pronounced zhi, and di, pronounced dzhi.

- [89] "The Indian tribes of the Upper Mississippi Valley and region of the Great Lakes" By Nicolas Perrot, translated by E. H. Blair, 1911, Vol. 1, p. 109.
- [90] "The last Indian uprising in the U.S." Louis H. Roddis, Minn. Hist. Bull. Vol. 3, No. 5, pp. 273-290.
- [91] "Sketches of a tour of the Lakes, of the character and customs of the Chippeway Indians, and of the incidents connected with the treaty of Fond du Lac," Thos. L. McKenney, (Balto. 1827).
 - [92] Present Series, Vol. IV, pl. 31, fig. 3
 - [93] Present Series, Vol. IV, pl. 31, fig. 4
 - [94] Present Series, Vol. IV, pl. 35, fig. 4.
 - [95] Present Series, Vol. IV, pl. 15, fig. 4
 - [96] Present series, Vol. IV, pl. 45, fig. 1.
 - [97] Present series, Vol. IV, pl. 26, fig. 2.
 - [98] Present series, Vol. IV, pl. 28, fig. 2.
 - [99] Present series, Vol. IV, pl. 16, fig. 3.
 - [100] Present series, Vol. IV, pl. 17, fig. 1.
 - [101] Present series, Vol. IV, pl. 17, fig. 2.

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[102] Present series, Vol. IV, pl. 16, fig. 1.
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- [103] Present series, Vol. IV, pl. 31, fig. 1.
- [104] Present series, Vol. IV, pl. 18, fig. 1.
- [105] Present series, Vol. IV, pl. 11, fig. 1.
- [106] Present series, Vol. IV, pl. 20, fig. 1.
- [107] Present series, Vol. IV, pl. 19, fig. 2.
- [108] Present series, Vol. IV, pl. 33, fig. 1.
- [109] Present series, Vol. IV, pl. 40, fig. 2.
- [110] Present series, Vol. IV, pl. 20, fig. 3.
- [111] Present series, Vol. IV, pl. 19, fig. 3.
- [112] Present series, Vol. IV, pl. 19, fig. 4.
- [113] Present series, Vol. IV, pl. 14, fig. 3.
- [114] Present series, Vol. IV, pl. 13, fig. 1.
- [115] Present series, Vol. IV, pl. 32, fig. 3.
- [116] Present series, Vol. IV, pl. 14, fig. 2.
- [117] Present series, Vol. IV, pl. 8, fig. 3.
- [118] Present series, Vol. IV, pl. 31, fig. 2.
- [119] Present series, Vol. IV, pl. 30, fig. 2.
- [120] Present series, Vol. IV, pl. 33, fig. 2.
- [121] Present series, Vol. IV, pl. 23, fig. 3.
- [122] Present series, Vol. IV, pl. 8, fig. 1.
- [123] Present series, Vol. IV, pl. 37, fig. 3.
- [124] Present series, Vol. IV, pl. 25, fig. 4.
- [125] Present series, Vol. IV, pl. 23, fig. 2.
- [126] Present series, Vol. IV, pl. 24, fig. 1, and pl. 37, fig. 1.
- [127] Present series, Vol. IV, pl. 7, fig. 1.
- [128] Indian Notes and Monographs, Museum of the American Indian, Heye Foundation, Misc. Publ. 20, pp. 164-165, 1921.
 - [129] Present series, Vol. IV, plate 31, fig. 3.
- [130] Lyons, A. N.—Plant Names, Scientific and Popular, 1907, Detroit, p. 408, Art. 1906.
 - [131] Present series, Vol. IV, pl. 9, fig. 4.
 - [132] Present series. Vol. IV, pl. 45, fig. 1.
 - [133] Present series. Vol. IV, pl. 26, fig. 2.
 - [134] Present series, Vol. IV, pl. 16, fig. 3.
 - [135] Present series, Vol. IV, pl. 17, fig. 1.

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[136] Present series, Vol. IV, pl. 34, fig. 3.
[137] Present series, Vol. IV, pl. 11, fig. 1.
[138] Present series, Vol. IV, pl. 29, fig. 1.
[139] Present series, Vol. IV, pl. 33, fig. 1.
[140] Present series, Vol. IV, pl. 20, fig. 3.
[141] Present series, Vol. IV, pl. 40, fig. 3, and pl. 41, fig. 2.
[142] Present series, Vol. IV, pl. 25, fig. 4.
[143] Present series, Vol. IV, pl. 32, fig. 2.
[144] Present series, Vol. IV, pl. 7, fig. 2.
[145] Present series, Vol. IV, pl. 16, fig. 3.
[146] 1923 Yearbook, fig. 17.
[147] Present series, Vol. IV, pl. 35, fig. 4.
[148] Present series, Vol. IV, pl. 26, fig. 2.
[149] Present series, Vol. IV, pl. 40, fig. 2.
[150] Present series, Vol. IV, pl. 14, fig. 3.
[151] Present series, Vol. IV, pl. 31, fig. 2.
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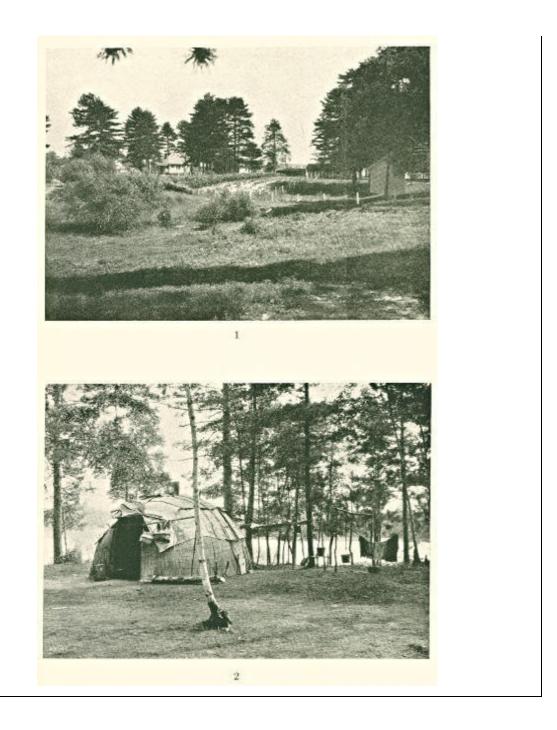
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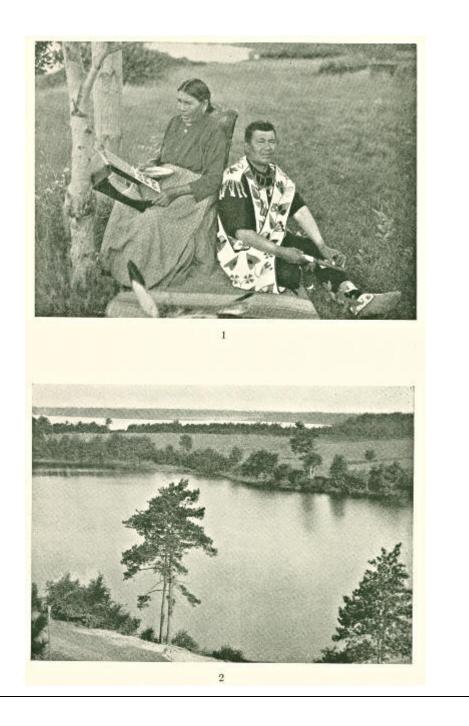


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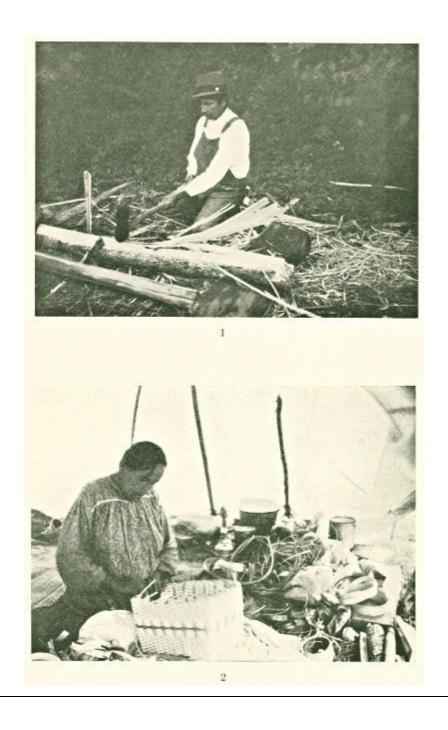
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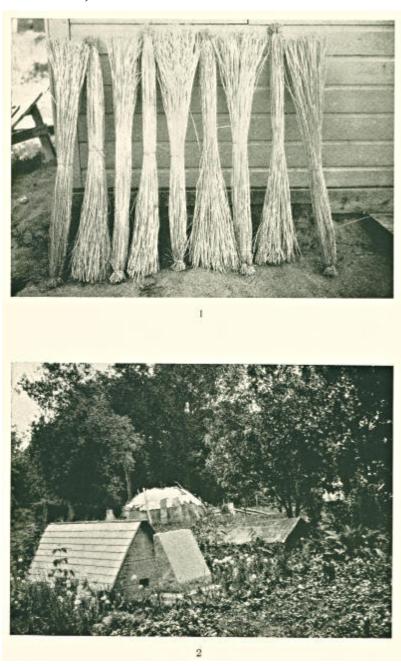


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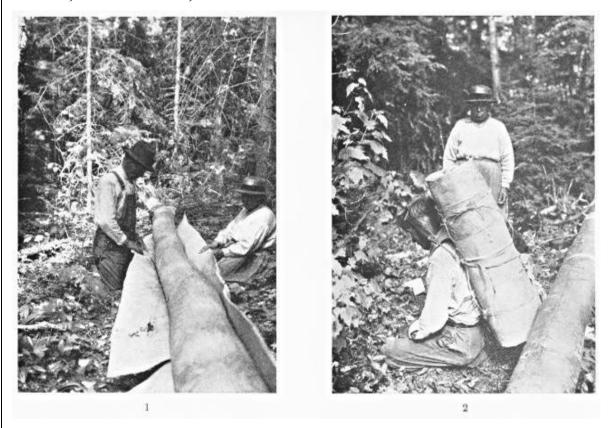
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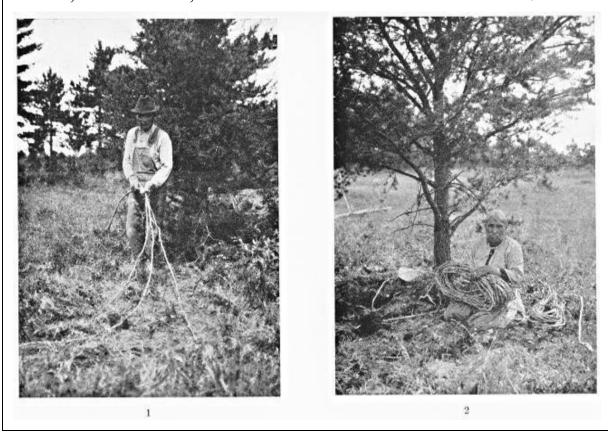


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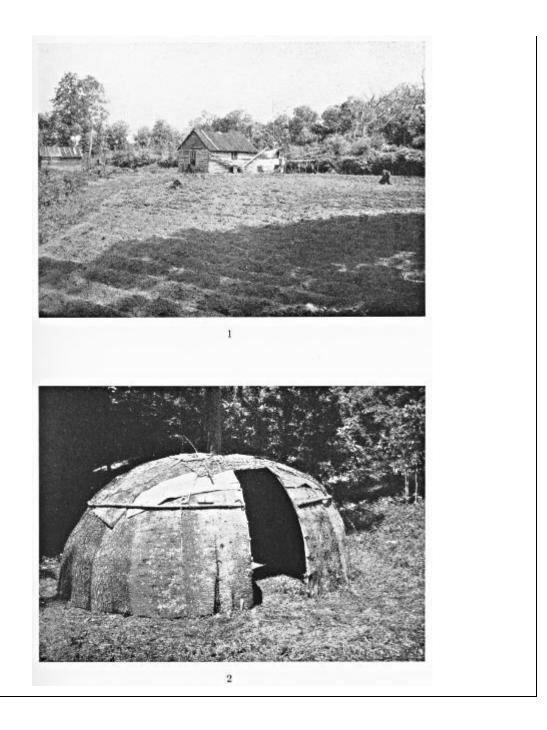
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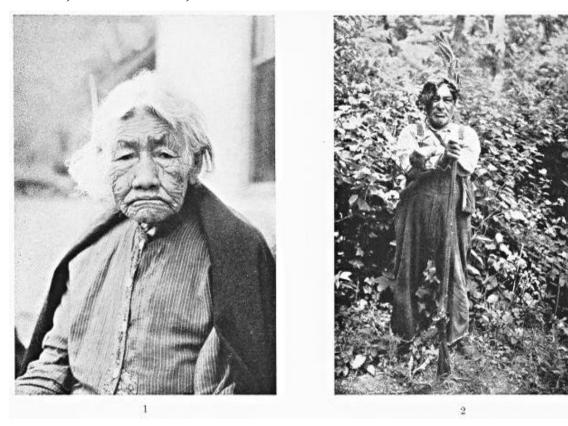


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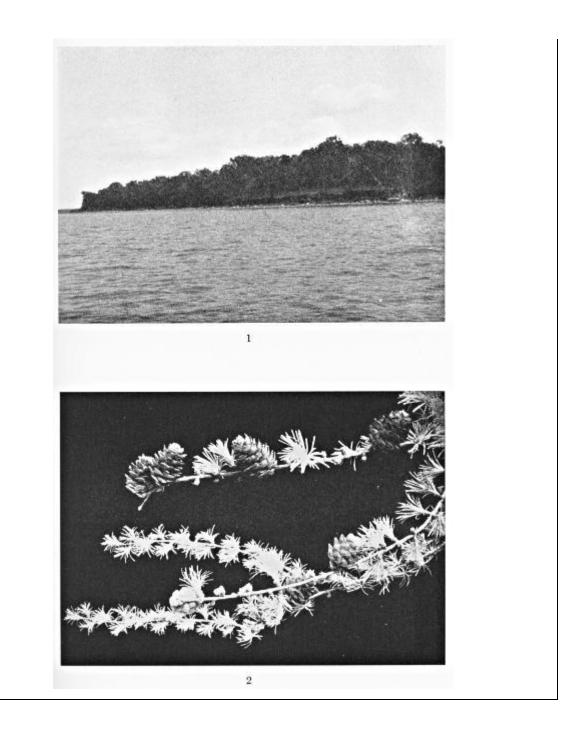
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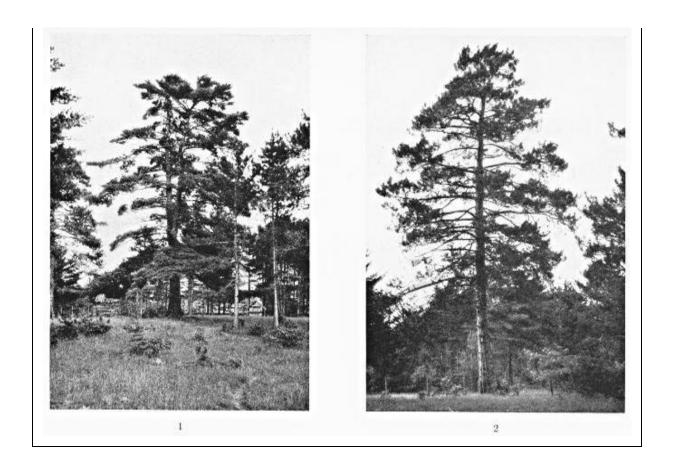
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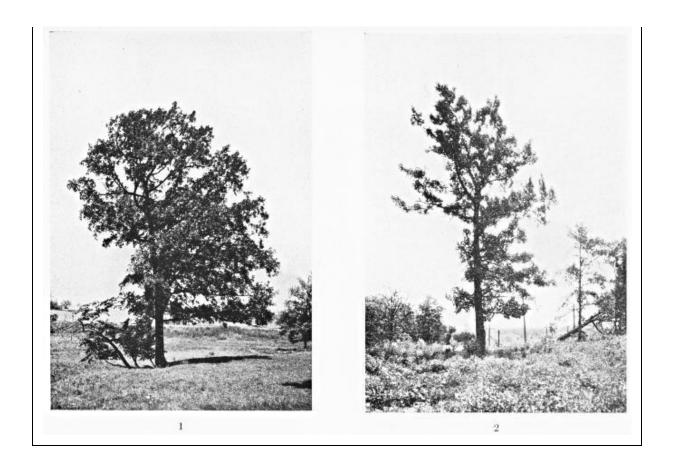
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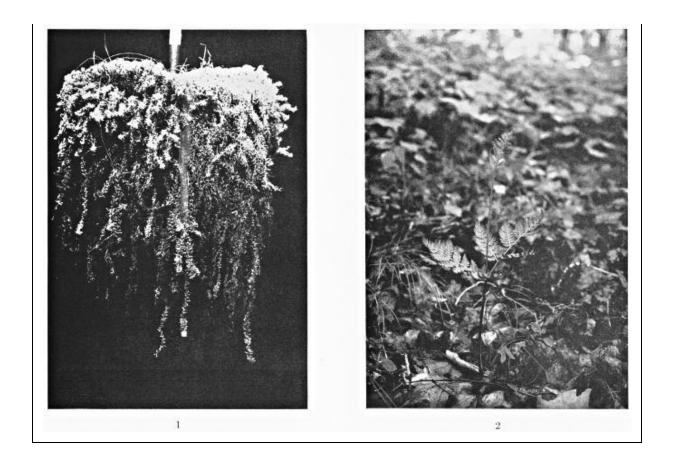
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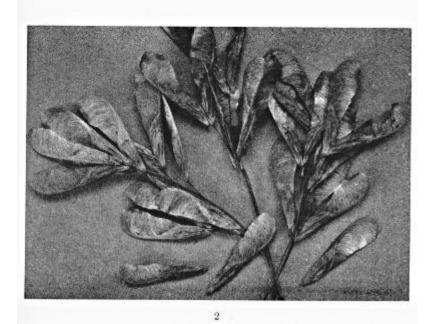
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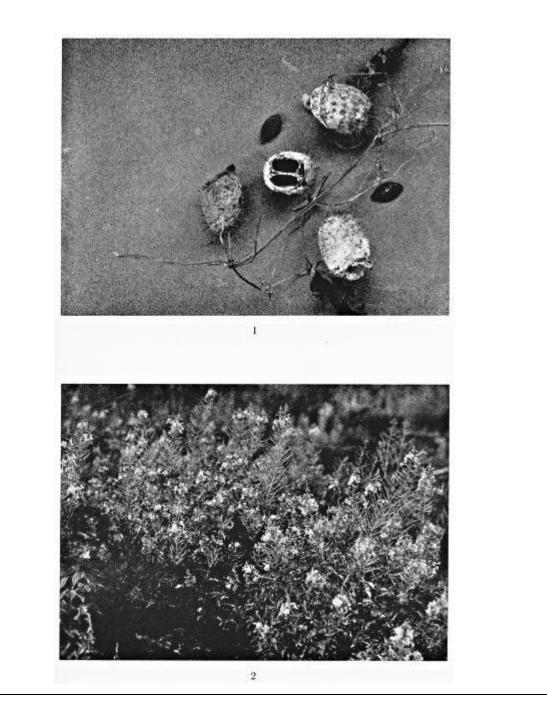


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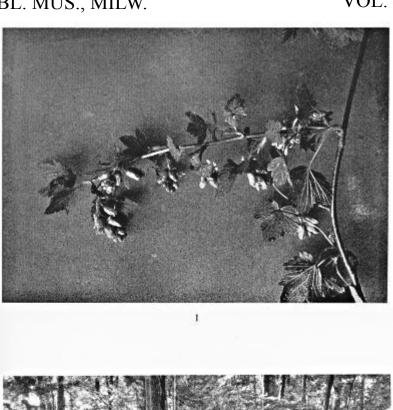
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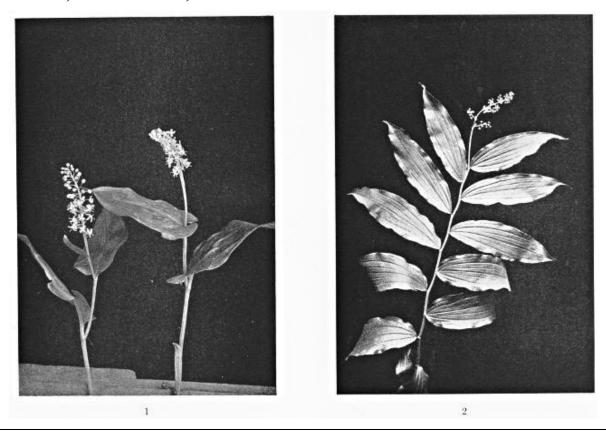
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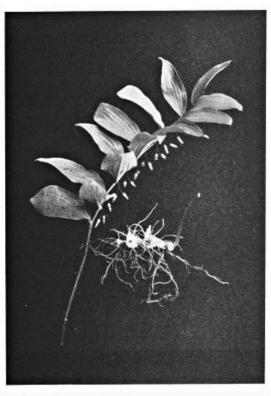
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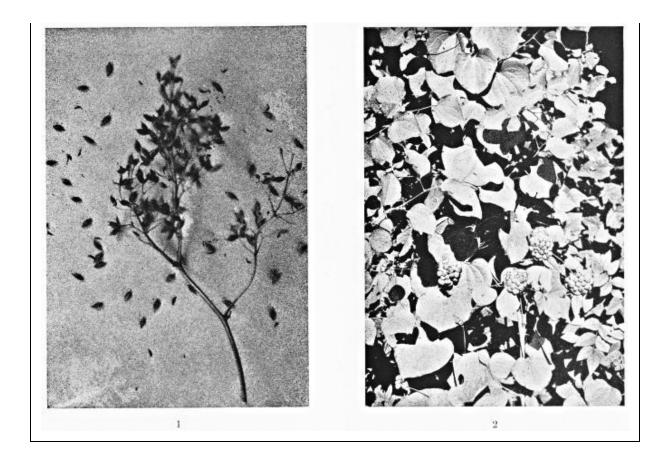
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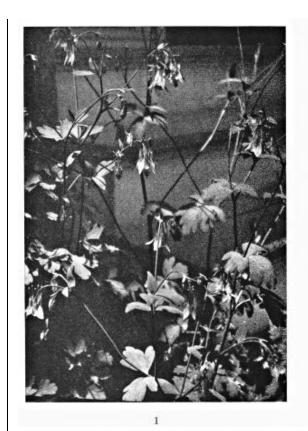
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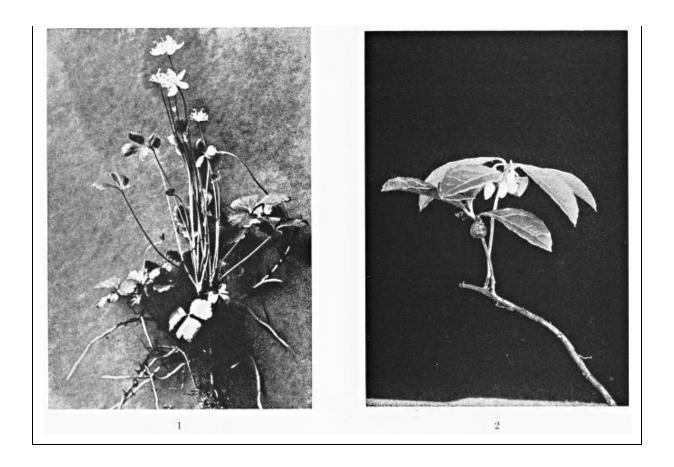
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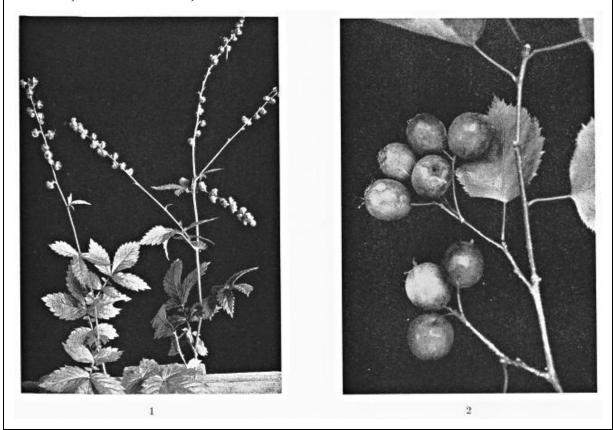
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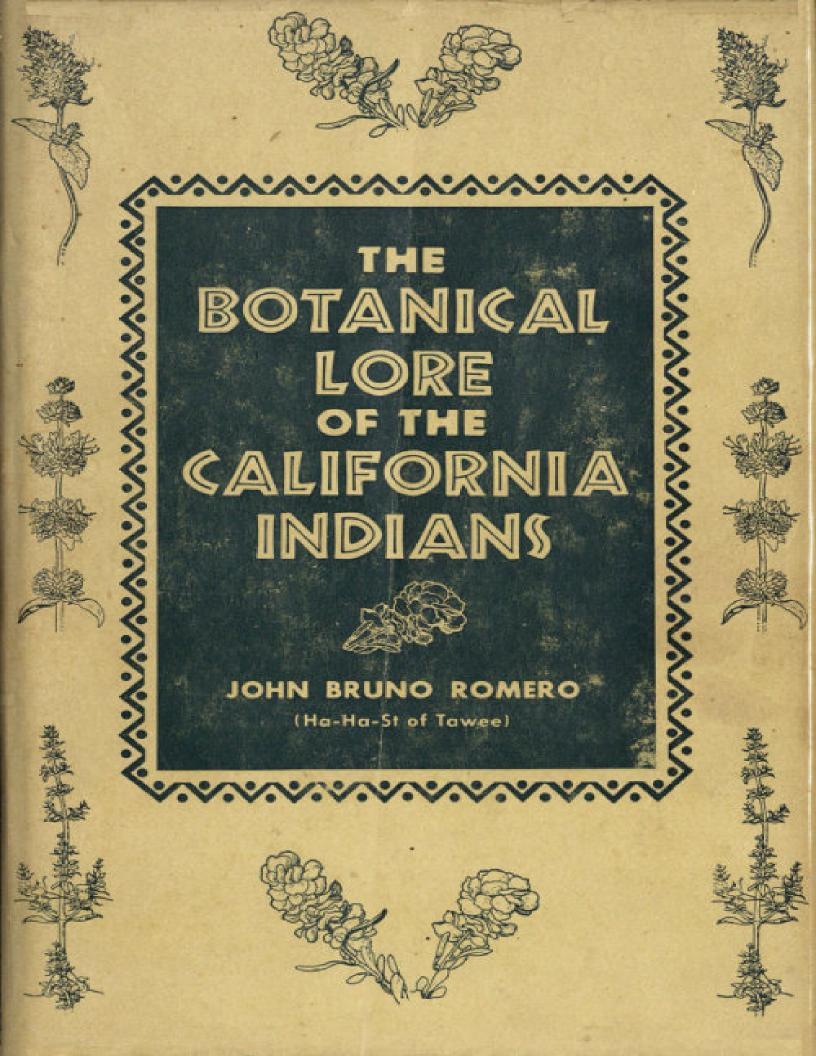
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The BOTANICAL LORE of the CALIFORNIA INDIANS with Side Lights on Historical Incidents in California

by JOHN BRUNO ROMERO "HA-HA-ST OF TAWEE"



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To My Uncle
CHIEF WILLIAM PABLO
of Mahum and Guana-pia-pa

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Preface

Of all the books written concerning the Indians of North America, I don't know of one which treats of the Indians' great knowledge of medicine, the vast store which was theirs of plants and herbs which possessed curative and healing qualities, many of them far superior, even today, to the medicine used by the white physician.

There is a reason. In some instances the white man did not get the correct information from his Indian brother due to the latter's inability to make himself understood—this was, of course, also true of the former. Again, some information given was intentionally wrong due to the ill-feeling the Indian had for the white man. And again, many of those healing plants were held in such veneration by the Indians, that to impart their virtues to a white man was an unpardonable crime, and the punishment meted out to the offender was of the severest form.

I am an Indian, proud of it and of my forefathers, whose bitterness toward the white man was only too well justified. But time changes all things and bitterness and hatred never made for understanding nor happiness.

In this spirit I wrote this book, in the spirit of doing good. And in this I have the help and permission of my dear uncle, Chief Pablo, of the Mahuna tribe of Indians of Southern California, who permitted me to describe certain plants whose curative properties have been kept a secret by the Indians for over one hundred years. This is the first time they are made known.

The Indian, living close to and with nature—the greatest teacher of all for those who have eyes to see—became nature's most intelligent pupil. Gifted with the keenest observation and the ability to reason, he searched the discovered plants which nature herself had provided for any ailment, sickness, or mishap which might befall him.

I am sending this book out into the world not for fame, but as a messenger of goodwill and peace. May it be received in this spirit and accomplish its mission.

The Story of the Indians of the Pacific Southwest

A gruesome, terrible year, the year of 1825! The fatal year when thousands of Indians of the Pacific Southwest were destroyed by that merciless, frightful scourge, smallpox. And the tradition of its ravages is kept alive even today among the descendants of the few who escaped death.

The tribal herb doctors at that time were wholly unprepared to combat this disease which wrought such fearful havoc. Sweeping along the entire Pacific Coast, it exacted a heavy toll of human lives, so heavy, in fact, that the number of Indians destroyed exceeded that of the American lives lost on the battlefields during World War I.

The epidemic ravaged not only the Pacific Coast. It even spread over the adjacent territories, carrying death everywhere it struck.

Not until the end of that terrible year did some of the Indian herb doctors begin to devote their attention to the disease. And then, calling upon all there was in their knowledge of medicinal plants, the chieftains, accompanied by their medicine men, held a council at which the matter of curing this destructive disease was brought under serious discussion.

That memorable meeting took place in the world-famous Palm Canyon, bordering the eastern slopes of San Jacinto Peak—better known to us by its true native name of *Tahquitz*—situated at the extreme eastern part of Riverside County.

After the adjournment of the meeting the chiefs and medicine men dispersed, returning to their respective tribes to resume their regular duties, each one with instructions to study ways and means which would effectively eradicate the scourge so greatly feared by all Indians.

Now, among those who had attended the meeting was Senior Chief Andres Lucero, of the Mahuna tribe, who was looked upon by all Indians as the possessor of the greatest knowledge of botanical medicine, and a master-teacher among his fellow tribesmen who rightly considered him as being without a peer in his field—thorough research and experimentation. In his experimental work he was more successful than any other, having had many years of experience. In addition, he possessed valuable medical knowledge which for centuries had been handed down from generation to generation, each recipient becoming a true master in the field of Indian medical science.

The men trained in the science of medicine were those who had a natural aptitude and inclination for the care of the sick—that is, men worthy of being selected to be taught anatomy and the various ailments of the human body.

Evidence of this is to be seen in paintings and hieroglyphics found in our Indian caves, which, in due time, it will be my duty to use in photographic illustration in order to correct many erroneous interpretations existing in collections and writings. To return to the beginning of our narrative, Andres Chino Pablo, while deeply pondering one day on the problem of what to give his stricken people, bethought himself suddenly of how in previous years he had treated violent fevers.

One was the fever which accompanied pneumonia and which was, at times, fully as dangerous as any fever known to mankind. But it was easily overcome through the administration of compounded herb steam baths.

In the course of time "Black Measles" made, by mere accident, its first appearance in the Pacific Southwest, again causing widespread terror among the Indians. However, Chief Andres Lucero had already decided what to do to check the epidemic. Standing calm and cool one morning and facing the rising sun, he called his people to him, everyone, young and old. Like a shaft of granite he stood, straight and erect, his eyes scanning carefully each member of his tribe. At last, with tears in his eyes, showing how deeply moved he was at the woe of his people, he announced his decision. His words were few:

"My sons and daughters, as the Great Spirit arises in the East, he comes to help us and he has given me the medicine and the power to cure all those of you who are sick. You will now go to the big cave where you will receive proper care and treatment. All of you shall go, even those who are not suffering from this devil's disease. And you will all be treated alike so that your blood shall be purified to guard you against the disease."

In other words, to render them "immune," in our language of today.

Now, one of the many caves in the San Jacinto mountain range, one which formerly had been used for religious studies in Chino Canyon, was converted into a cave-hospital and thousands of Indians were treated therein.

Due to the supposition, at the time, that the measles, then an unknown malady among the Indians, was really another form of smallpox—the diagnosis made didn't differ materially from the latter—the conclusion arrived at was to treat the disease accordingly.

A tireless and stubborn fight was waged by Chief Andres Lucero. Day and night he labored indefatigably, not only attending to his people, but also instructing other chieftains what to do and what to use, thus letting them share in his success in healing the sick.

Later on, the disease appeared in Twenty Nine Palms, in Borrego Valley, Indio, Coachella, Yuma, Temecula, Mojave, Tehachapi, Soboba—in fact, in all the small Indian settlements throughout the desert and mountain. Chief Andres Lucero was extremely satisfied with the results of his labors which had laid the cornerstone of knowledge and preparedness for the year of 1859, when a true epidemic of smallpox made its appearance again.

Investigations revealed that the scourge had started (*Temamaka*) to the north and had come (*Kichamba*) southward. Again the eye beheld the sad scenes of dead human bodies strewn along the valleys and mountains. The worst suffering was among the Indian tribes dwelling to the northward, who had shown a complete disregard of Chief Andres Chino Pablo, and paid no attention whatever to his messages and warnings.

However, the Chief stuck to his post until he saw his people safe. Those who died were comparatively few. The dead were those who, becoming panic-stricken through memories brought to their minds of former happenings, had fled into the desert. Had they but conquered their fears and obeyed the Chief's orders, nothing would have happened to them. Those were the victims of the plague—the deserters from the tribes. The smallpox was kept well under control in the settlements with only a two per cent death rate, which means practically nothing when compared with a previous death rate of fifty per cent caused by the same kind of plague. In some localities it rose to almost ninety per cent. Truly those were dark days indeed for the American Indians.

I shall now give, roughly, the medicinal plants used then and again in the same manner in the year 1918 when the "Black Plague," commonly known as "Spanish Influenza" was raging throughout the American continent and Europe. It was a strange coincidence, indeed, that a great many of those who escaped death from the enemy's bullets on the battlefield perished from the "Black Plague." The Indians, however, again won their battle against this frightful disease by the same means which had been employed against measles and smallpox with no loss of life whatsoever.

What a worthy and successful experiment it had proved to be under the wise guidance of Chief Andres Lucero, of the Mahuna Indians of Guana-pia-pa! He was truly a noble character whose labors, love for his people, and self-sacrifice saved the lives of thousands of Indians, and without whose loyalty and kindness to other tribesmen, the American Indian in the Pacific Southwest would be an extinct race of people today, with no one to tell what had actually taken place in the wild mountain regions and the desolate desert, which were neither inhabited nor trespassed upon by the white race.

The Indians compounded steam-bath herbs for the cure of "Black Measles" and smallpox from the following:

<u>Indian Name</u>

Artemisia tridentata Ulu-ca-hul-vall

Larrea mexicana Ato-col

Piperacea Chu-co-pot

Eriodictyon glutinosum californicum Ta-que-bel

Adiantum capillus-Veneris Tal-wal

Herb tea given to the patients was made from the following:

Ephedra Tut-tut
Sambucus pubens Haa-saat

Please bear in mind that the Indian name Tut-tut bestowed upon the plant *Ephedra* means something that pertains to the very sacred in Indian medicinal art. This sacred Indian name befitted the plant for the great medical value it possessed and for the important part it played in stamping out the horrible smallpox plague of 1857.

Thus came about the saving of Indian lives.

Help us save and preserve the wild plants for the benefit of mankind.

CHIEF WILLIAM PABLO, III

Medicine Man

Mahum and Guana-pia-pa meaning: White Water and Palm Springs area, California

Book of Herbs

Stomach disorders, worms, dysentery, diarrhea, etc.

SISYRINCHIUM ANGUSTIFOLIUM (Ind. Man-ta-ca)

Commonly known as Blue Star Flower Grass. Found widely distributed along the rich southern slopes of the lower coastal ranges. Effective in the treatment of functional affections of the stomach. In the form of tea, the entire plant was used to eradicate all kinds of stomach worms. Flowering season from March to April.

DIPSACUS GLUTINOSUS (Ind. Vaah-se-le-coo)

Known also as Monkey Flower, a plant not indigenous to any particular soil, grows abundantly in California in the lower coastal ranges, and also in the upper regions. Leaves, flowers, and stems were taken in the form of tea, and effected a thorough cure in severe cases of diarrhea.

VITIS VULPINA CALIFORNICA (Ind. Esq-urana-quat)

Also called Wild Grape. It occurs mostly along rich river bottoms and marshy soils generally. Usually associated with

RUBUS VILLOSUS (Ind. Pick-lam)

The Wild Blackberry. The roots of either of the two genera, boiled into a tea and given the patient, will afford permanent relief in mild cases of diarrhea. The roots may be gathered and used at any time of the year.

CAPSELLA BURSA-PASTORIS (Ind. Pa-sil)

Also called Shepherd's Purse. Probably one of the most common of all plants in Southern California soils, growing throughout the year on irrigated lands and on arid soils. Boiled into a tea it is a certain cure for even severe cases of dysentery. No more than two to three cups should be taken. This little plant is a blessing to mankind and should be made use of. It is the medicinal queen, and surpasses all others in cases of dysentery and diarrhea.

HEDEOMA PULEGIOIDES (Ind. Mo-cash)

American Pennyroyal. Considered as the greatest nuisance by farmers. As a curative agent in severe cases of dysentery it ranks next to *Capsella bursa-pastoris*. It is general throughout California, and blooms from August to September.

ANTHEMIS NOBILIS (Ind. Sa-mat-pl-ol)

American Field Camomile. A very common plant growing everywhere in California. It was used extensively for babies suffering from colic, and also to regulate unsettled stomachs.

Painful congestion of the stomach.

MALVA ROTUNDIFOLIA (Ind. Mal-val)

American Common Mallow, compounded with blossoms of California Wild Rose, or the seed.

ROSA CALIFORNICA (Ind. O-chul)

American California Wild Rose. This beautiful wild rose-bush inhabits the coastal ranges, and may be found far inland along open spaces in heavy woodland abounding in rather rich and mulchy soil.

Used in cases of stomach fevers, the ripe seed is given in the form of tea to relieve the stomach clogged with food as well as in so-called cases of painful congestion.

MONARDELLA VILLOSA (Ind. Tah-lis-wet)

Skirting for its habitat the high mountain lands, it is very seldom found anywhere else. It is a native of California, and is used chiefly for the relief of ordinary stomach-ache. When in bloom it is very fragrant and blossoms from late May till June. (American Horsemint—sometimes called Pennyroyal)

Fevers and constipation of the stomach.

ERYTHAEA MUEHLENBERGII (*Ind. Co-oniche-la-wa*)

Its habitat is confined to a few localities in San Diego County, the coastal regions in Santa Barbara, Orange County, and in San Bernardino along the southern border of the Mojave Desert.

It was used in the form of an infusion in cases of constipation caused by fever of the stomach.

Fevers.

JUNIPERUS CALIFORNICA (Ind. Gla-wat-pool)

American Juniper Berry. Its habitat extends from our high mountain ranges in northern San Diego County to Monterey County. The berries have a short season, ripening in these regions from late in July until early in September. They were used for making tea or simply chewed in cases of La Grippe fevers. They may be gathered, dried, and stored for future use.

Lung fevers.

PAEONIA BROWNII (Ind. Quel-ta-bat)

American Wild Peony. It inhabits shady canyons growing only on deep, rich, decomposed mulch. The blossoms are of

deep red color, and the blooming season lasts from May until June. Its roots bear a strong resemblance to young sweet potatoes and were gathered to be used in the form of tea for complicated lung fevers. The tea has a decidedly bitter taste.

Stomach fevers.

VERBENA HASTATA (Ind. Muy-u-vees)

American Wild Vervain. Inhabits the lower coastal ranges and pasture lands. Its blooming period is from late in May until July. This plant is remarkable for bearing three different colored blossoms—in some localities white, in others, pink, and then again, blue—all this owing to the mineral soil formation. The root is used for complicated stomach fevers.

Fevers.

MORAJAUM (Ind. Saa-al)

Grows along rivers and lake borders. This plant, being of a semiaquatic nature, resembles some of our wild orchids and blooms but a short season. The entire plant is used in cases of fevers complicated with headaches.

Eruptive Fevers.

SAMBUCUS PUBENS (Ind. Haa-sat)

American Elderberry. Indigenous to the coastal regions. The yellow blossoms were extensively used by all Indian tribes only in cases of measles.

MIRABILIS CALIFORNICA (Ind. See-wish-pe-yack)

American Four O'clock. The root of this plant served the same purpose as American Elderberry. Its habitat is Santa Barbara County, Calif., and it is not found anywhere else in a wild state.

There are no records that it was used for other eruptive fevers such as smallpox, scarlet fever, etc. These were introduced into this country later on by white European adventurers and settlers, the first cases being recorded in 1825. These diseases were greatly dreaded by the Indians, and whenever any of them contracted this malady, they would invariably vacate the locality they were in, and move many miles away to virgin country.

And, as a warning of danger to fellow tribesmen and to keep them away from the abandoned camp, all the rock mortars and clay pots were turned upside down and partly buried in the ground.

Plant poisoning.

GRINDELIA CUNEIFOLIA (Ind. Mie-chowl)

Grows in alkaline soils and its blooming season is from August to September. The plant was used a great deal in cases of itching skin eruption caused by poison oak, and is a cure for such disorders. (American Gum Plant)

RHUS DIVERSILOBA (Ind. E-yal)

Botanical Serum. This is the poison oak itself, of which the roots, during the dormant period, are cut and properly dried. When taken in the form of tea in a quantity of not more than four ounces, it will render a person immune against any further poisoning. This is a bona fide Indian formula.

[1]
Blooming season from May to June.

I ask my readers not to try this serum pending further laboratory experiments. I plan to subject myself to exhaustive tests under scientific observation and to publish the results.

Ulcers and diseases of the skin and feet.

ANTENNARIA MARGARITACEA (Ind. Te-bish-samat)

American Cotton Weed. Its habitat is all along the Southern California hill slopes, and the beautiful pearly flowers are used for ulcers and sores of the feet which fail to respond to treatment by other medicaments. The blossoms must be boiled. The liquid obtained is used to bathe the feet, and all parts of the skin affected. A very effective cure. The blossoms are also ground into a powder and applied to the part affected.

SOLIDAGO NEMORALIS (Ind. Pa-co-se-cheeh)

American Western Goldenrod. Its habitat is the river and creek bottom lands. Quite common in California, this plant has great healing power, especially in cases of old raw burns that have failed to heal properly, as well as major rotten ulcers. The leaves of the plant may be boiled and the liquid used to bathe the affected parts; while the pulp, as a poultice, is to be placed upon the burns and ulcers to promote disinfection and to hasten a rapid growth of new healthy flesh.

Solidago nemoralis has one other great virtue of considerable value. Two to three baths in a strong solution, prepared by boiling, will cure the Seven-Year Itch and free the victim from that terrible malady.

Fistulas and running sores.

PENTSTEMON CORDIFOLIUS (Ind. Ting-gi-wit)

American Wild Fuchsia. A native of the coastal ranges, northward from San Diego County to Monterey, Calif., this dark-green shrub is very attractive to the eye. It bears an array of deep-red blossoms, well-formed in clusters, at the very tip of long slender branches. It was used as a poultice and a wash for fistulas and deep, pus-running ulcers.

Eruptive scalp diseases.

EUPHORBIA (Ind. Te-mal-hepe)

A native of California, it is quite common on our inland fields. It is used for minor skin eruptions and scalp diseases. Used as a wash only. It blooms from early May to July.

AMBROSIA ARTEMISIFOLIA (Ind. Watch-ish)

American Common Ragweed. Grows in abundance in swamps and along waterways. There are two distinct species of this worthy plant, the dwarf variety and the gigantic kind. Either may be used for the same purpose as mentioned for *Euphorbia*. In full bloom from July to September.

How to retain the natural color of the hair.

ARTEMISIA TRIDENTATA (Ind. Ulu-ca-hul-vaal)

American Common Sage. Habitat, the California desert. For a good many years this plant has been used to restore the color of hair, but the method used and practiced is far from that of our people, the Indians. And this can be traced back to the misunderstanding of the people who first introduced this use of sage for that purpose. Of course, washing the hair with it as a scalp treatment will do no harm, because the plant itself has soothing and healing qualities; but to maintain the natural color of the hair, or to restore gray hair to its former color, one must drink the infusion when compounded in the way we know. The plant blooms from April to June.

ARTEMISIA CALIFORNICA (Ind. Hul-vaal)

Habitat, the coastal regions. The infusion made from this plant was used a great deal in cases of vaginal trouble. Blooming period from March to May. (American Wormwood)

RAMONA POLYSTACHYA (Ind. Qua-seel)

American White Salvia, playing a very important part in healing internally and removing particles of the afterbirth. The infusion from the roots was given to the patient to drink regularly in place of water.

LARREA MEXICANA (Ind. Ato-col)

American Creosote Bush. Its habitat covers the entire length and breadth of the Mojave Desert, San Bernardino County, and Riverside. This plant was used in cases of cramps of the stomach due to delayed menstruation, and in cases of this nature not more than one half of a cup of the tea was drunk. This plant is in full foliage from May to October.

CHENOPODIUM AMBROSIOIDES (Ind. Epa-so-tee)

Its habitat is in swamp bottom lands. The root of the plant was used in cases where the menstrual period had been overdue for five or as many as ten days. The plant itself has a rather offensive odor, but the boiled root is quite agreeable to the taste and very effective. The patient may drink as much of the tea as desired. Blooming season from March to late fall. (American Goosefoot)

CRACCA VIRGINIANA (Ind. Po-hiel)

American Garden Rue. A common garden shrub introduced into this country at the beginning of the early mission days.

Although the odor of this plant is quite disagreeable to the sense of smell, the infusion is very rich in flavor and not bad at all.

Flesh-wounds, knife-cuts, etc.

ANEMOPSIS CALIFORNICA (Ind. Che-vnes)

American Swamp Root. Habitat, swamps. This plant is plentiful in California—the territory where it grows wild could be measured in thousands of acres. When cut, dried, and powdered, it can be used for the disinfection of knife-cut wounds, and to draw and promote the growth of healthy flesh. (Spanish *Yerba Mansa*)

GRINDELIA SQUARROSA (Ind. Tanga-wet)

Habitat, low, sandy loam soils. For above-mentioned purposes this plant is very valuable from a medicinal standpoint, as it makes all wounds respond quickly to

healing, when used as a wash and for disinfection of cuts. A wet pulpy poultice must be applied to the wounds for quick results. The plant blooms from June to August. (American Gum Plant)

FRASERA (*Ind. So-cat-llami*)

American Deer Ears. Habitat, the high sierras and coastal ranges. The infusion is used for the treatment of infected sores.

CARDUACEA (Ind. San-ca)

American Green Sage. Its habitat is the Mojave Desert, San Bernardino County and north of the southern borders of the San Joaquin Valley. This plant is very valuable, being very powerful and of great medicinal use, and much attention should be given it by men of science.

The Indians used it universally in cases of serious and major wounds—the infusion being given the patient if symptoms of blood poisoning were present. Tetanus, commonly known as lockjaw, was easily overcome, thus eliminating the surgical operations so frequently resorted to by the medical profession. The infusion was also administered in cases of childbirth as a preventative of blood poisoning and gangrene with *Ramona polystachya*.

OPUNTIA (Ind. Tu-nah)

American Cactus Pear. Its habitat, the desert and dry lands. This plant was fully as important as *Piperacea*. The large leaves were scraped of their thorns and a plug made out of the leaf, according to the nature of the wound, and inserted into it, healing it quite rapidly—a first-class piece of botanical surgery.

Healing.

PLANTAGO MAJOR (Ind. Pal-qua-ah)

American Plantain. Its habitat is swamps and localities where there is abundant moisture. The plant, like many others, was used to dislodge and draw deeply embedded poisonous thorns and splinters from the flesh. The operation was quite simple. It consisted of applying a light coating of suet on one of the leaves, this was covered with another leaf and then placed, tied down firmly, over the thorn or splinter to be removed. It usually requires about 10 hours for the thorn to appear at the surface of the skin. The same procedure can also be used by persons who have accidentally stepped on a rusty nail—thus avoiding danger of blood poisoning. The simple poultice described above will prevent that.

(Ind. Chee-va-tow)

The California Clematis is a sister plant of the Eastern Clematis, a very good healer in the treatment of skin eruptions, the infusion to be used as a wash.

Inhabits the mid-coast and inland ranges, and, to the east, the territory where Daniel Boone's activities played their part and took their place in American history. Nothing, however, is mentioned about this plant at the time the Indians were pursuing him in the wilds of Kentucky, and yet it was one of the strong vines of *Clematis* which enabled Daniel Boone to escape and save his life by cutting it with his hunting knife above ground and hurling himself far out, thus putting the Indians off his track.

Myself an Indian, I have always admired Daniel Boone for his cool presence of mind. He was brave and fearless, although not a showman like Buffalo Bill and others whose exploits were chiefly founded on personal motives.

Coughs, colds and sore throat.

RUMEX HYMENOCALLIS (Ind. Ca-na-ma)

American Wild Rhubarb. Thrives in dead, sandy soils, and is very common throughout Southern California. The roots are long and bear a close resemblance to sweet potatoes. The infusion made from it has an acrid taste, and, when used as a gargle several times in cases of cough and sore throat, it will be found to give complete relief. The plant blooms in June and July.

PRUNUS SEROTINA (Ind. Is-lay)

American California Wild Cherry. At home in the high mountain ranges. An infusion of the bark in spring or summer while the sap is running, or of the roots in winter when the tree is dormant, may be used for common coughs.

PRUNUS ILICIFOLIA (Ind. Is-lay)

Holly-Leaf Cherry. Used for the same purposes as *Prunus* serotina.

SPIRAEA SALICIFOLIA (Ind. Ha-ba-ba-neek)

American Queen of the Meadows. Its habitat is the low coastal ranges. The root of the plant was used for common coughs and chest colds.

EUPATORIUM PURPUREUM (*Ind. Sa-ca-pe-yote*)

American Joe-Pye Weed. It was used for the same purpose as *Spiraea salicifolia* in localities where that plant couldn't be obtained, although the latter was greatly preferred for the extra medicinal qualities it possessed as a mild laxative. The root, when made into an infusion, is extremely pungent and rich in flavor, but agreeable in taste to most people.

MARRUBIUM VULGARE (Ind. O-o-hul)

American Horehound. Its habitat is the woodland. Although the infusion made from the leaves and flowers is rather bitter, it is very good for ordinary coughs and sore throats.

AUDIBERTIAS STACHYOIDES (Ind. Seel)

American Black Sage. This plant is one of the most valuable of all for the cure of deep dry coughs of long standing, which have settled in the bronchial tubes. This does not mean coughs of two or three weeks' duration, but those which have existed for a period of from four to six months and which have, therefore, reached a chronic, dangerous stage.

The infusion was made full strength and given to the patient in small doses, hot—never cold—in the daytime, and one extra big dose before retiring.

Blood hemorrhages of the lungs.

DENNSTAEDTIA PUNCTILOBULA (Ind. Ma-ciel)

American Hay-Scented Wild Fern. Its habitat lies in the high California mountain ranges. We are now coming to the tuberculosis line. Hemorrhages of the lungs, and common diseases which prevail to a great extent among people who, through neglect and irregular habits, intensify coughs and colds.

It was nothing to an Indian to overcome these maladies of the lungs, which in his case were usually due to accidental injury. This wild fern bears oil nodules on the crown of the root system and they are available only at a certain period, from May to June.

ERIODICTYON GLUTINOSUM CALIFORNICUM (Ind. Tan-que-bel)

Commonly known as Yerba Santa, this plant proved to be possessed of great medicinal merits, and was very soon adopted by the mission friars for its outstanding qualities in the cure of coughs, asthma, rheumatism and pneumonia, being rightly considered as far superior in this respect to any of the other medicines brought by them from Europe. In fact, so great was the medicinal usefulness of these plants and hundreds of others known to the Indians, that they soon became the objects of study and investigation, which, however, met with failure, due to the severe punishment meted out to any and all Indians for divulging any secrets pertaining to the medical history of plants used by the tribes. A penalty which was sufficient to deter them from any further misdeeds in that direction, and which they always remembered. Quite a contrast to the modern, elastic laws of our present civilization.

ERIODICTYON CALIFORNICUM (Ind. Que-bel)

American White Woolly Holly Plant is the sister plant of *E. glutinosum*.

Cathartics.

ERIOGONUM ELATUM (*Ind. Pa-va-coneel*)

American Bottle-Weed. Its habitat lies in the volcanic regions of the Mojave Desert. This plant is rather peculiar in its growth, thriving on poisonous volcanic soils, where no other form of plant life can exist. The Indians of the desert regions used the plant as a physic, and it outranks *Rhamnus californica* in this respect. The mission friars overlooked this plant for the reason that none of them ventured that far into the desert, valuing their lives above everything else.

The infusion obtained from the plant was used in very minimum doses, and when unable to do that, a small branch was cut and a very small piece was chewed by the constipated person.

RHAMNUS CALIFORNICA (Ind. Hoon-wet-que-wa)

American Coffee Berry. Its habitat is the canyons of high mountain ranges along waterway banks.

The bark was stripped off the trees, shade-dried and then ground in a *ca-wish-pat-os-vaal*, meaning the stone mortar and pestle generally used in those days, and even by druggists today, though made of different material. The prepared powder was used to a great extent at full strength in cases of constipation, and was administered in well-measured doses, but not in excess.

Owing to its medicinal properties this tree-plant was introduced into European countries where it gradually became the outstanding cathartic of all.

And this is the *Rhamnus californica*, the medicine of the Indians, named by Junipero De Serra *Cascara sagrada* — "Sacred Bark."

EQUISETUM HYEMALE (*Ind. Po-po-ot*)

Its habitat is confined to swampy lands. This plant is very fond of water, and attains a very vigorous growth under these conditions. Due to its aquatic nature, the plant, when fully matured, was gathered, shade-dried and an infusion made which was used solely in the treatment of prostate gland trouble. (American Horsetail)

EPHEDRA (Ind. Tut-tut)

Its habitat is the desert lands of California, northwestern Arizona, and Nevada.

This evergreen, shrubby plant was held in high esteem by all the Indians, and a good supply of it was always kept on hand for general use. The infusion made from it was used regularly to flush the kidneys. The tea is of a very delicious taste. A person cannot help liking it, and it also helps to purify the blood. (American Tea of the Indian)

PELLAEA ATROPURPUREA (Ind. Cala-wala)

American Purple Cliff Brake Fern. Its habitat: the high mountain ranges. This useful little fern grows abundantly on most of the limestone formations and is seldom found anywhere else. Like *Ephedra* it makes a delicious tea, which is used more or less for the same purpose, to flush the

kidneys and to tone and thin the blood in severely hot summer weather as a preventative against sunstroke.

Blood pressure, sunstroke.

(Ind. Te-ve-na-wa)

This plant is an inhabitant of the Mojave Desert. There are two different varieties, one of them being quite common on arid lands and side hills along our coastal highways. The other is the best, however, and, as a blood tonic, compares very favorably in medicinal worth with all others recommended.

The latter was used by the Indian for special cases of high blood pressure and hardening of the arteries.

It was generally used by Indian runners, and taken before and after a long-distance run over rough country.

Sedatives.

VERONICA OFFICINALIS (*Ind. Ca-wish-hubel*)

American Speedwell.

MENTHA SPICATA (Ind. Ga-vish-ho-ba-jat)

American Garden Spearmint. Habitat, the lower marshy coastal regions.

(Ind. Samat-hubel)

American Mountain False Pennyroyal.

MENTHA CANADENSIS (Ind. Samat)

Both *Ilysanthus* (above) and *Mentha Canadensis* inhabit the high mid-coastal ranges and are frequently found lining the borders of mountain streams in beautiful settings of wild ferns. (American Mint)

MICROMERIA DOUGLASII (Ind. Ya-mish-hubel)

Mint Family. A rare plant and found only in a few localities on the mid-coastal ranges, as in Orange County, San Juan Capistrano, at Hot Springs, situated on the southern slopes of the Trabuco mountains, Los Angeles County, Fish Canyon, Pasadena in Santa Barbara County, the heavy woodlands of Montecito Valley and in the Old Spanish Grand Rancho, San Leandro. It is also found northward as far as San Francisco at Angel Islands. The infusion was taken to soothe the nervous system in cases of insomnia.

Catarrh of the head and nasal chambers.

PLATANUS OCCIDENTALIS (Ind. Ci-vil)

American Sycamore. It is an inhabitant of the California mountain ranges. The underside of its leaves bears a very

fine yellowish moss, which the beautiful little hummingbirds like to use for building their tiny nests. In fact, they prefer it to any other material on account of its extreme softness.

These leaves are valuable as an effective cure for old chronic cases of catarrh, when the catarrh has passed into internal ulcers, which continually discharge material of an offensive odor.

The moss scraped from the underside of the leaves, carefully and patiently enough to have a sufficient supply to compound it with the dry powdered yolks of the eggs of quail and an infusion of *Andromeda polifolia* was also made and used as a nasal douche, to cleanse the conduits, followed afterwards by sniffing the powdered compound before retiring for the night.

HELENIUM AUTUMNALE—HELENIUM NUDIFLORUM (Ind. Pe-bah)

American Sneeze-Weed. Both inhabit swamps and mountain springs.

ANDROMEDA POLIFOLIA (Ind. Ho-bef-zo-bal)

American Moorwort. This is found only at very high mountain altitudes.

Toothache and pyorrhea.

ACHILLEA MILLEFOLIUM (Ind. Pas-wat)

American Yarrow. This plant bears a strong resemblance to the Wood Betony, which is poisonous, and both may, in their wild state, be found side by side in the same locality. It is indigenous to the mid-coastal range woodlands.

Persons suffering from a severe toothache can cut the tips of the leaves of *Achillea millefolium*, roll them into a small pellet and insert it into the cavity of the aching tooth. You will be surprised how quickly the pain disappears.

ERIOGONUM (Ind. Pas-vaat)

This inhabitant of the Mojave Desert, with its golden yellow flowers, is a treat to the true lover of nature. Its blooming season is in its full glory during the month of October when everything else in the way of flowering trees and shrubs is lying dormant. Thousands of acres in the desert may be seen carpeted with this golden color, blending with that of autumnal foliage and geological soil formation which also glows in many tints, offering wonders of inspiration to the artist—the greatest interpreter of the works of nature next to the botanist, geologist and naturalist.

For centuries *Pas-vaat* has been used by the Indians to keep the roots of the teeth and the gums in a state of health. Whenever pyorrhea was present and the teeth threatened to become loose, an infusion of the flowers and leaves of the plant was made and regularly used as a mouthwash. Although its taste is very bitter, holding the liquid in the mouth for a few minutes daily will prevent and cure pyorrhea and tend to the firm setting of the teeth.

QUERCUS RUBRA (Ind. Qui-neel)

American Red Oak. The juice obtained from the bark is a very efficient means for straightening and setting loose teeth, but it has no effect on pyorrhea.

PERSEA and VANILLA PLANIFOLIA

American Avocado, or Alligator Pear. Our Indian brothers of the North Central American states use the seeds of the avocado in the treatment of pyorrhea, although only in the form of powder. It is very good and efficient for toothache, as is also an infusion made of the vanilla bean.

Fever and chills.

ROSA GALLICA (Ind. Mal-va-pol)

American *Malva rosa*. This rose tree has to some extent been the subject of discussion among some of our botanical explorers and the result was always one of indecision.

Now let us look back a few years before the founding of the California Missions, and thus settle the dispute for all time. Twelve miles eastward of the Santa Barbara Mission is a small village by the name of Carpenteria, and at one time, this village was one of the largest Indian settlements in existence.

Before the arrival of the mission friars this place was a dense forest of the giant elm, *Ulmus pubescens*, a tree which is very soft and easy to work and the Indian settlement became the scene of great boat-building activity. The biggest and best trees were selected, hewed out and shaped into boats, and their boats were later used to navigate from Santa Barbara across the channel to Santa Rosa Island and other points. The Indians traded with the inhabitants of these islands, and thus they attained a great deal of magnetic iron in exchange for the wild products of the Pacific coast mainland. The magnetic iron was of general use among the Indians, being made into hammers, axes, scraping and cutting knives, fighting weapons, etc., all made in true Indian mechanical design.

Other valuable rock materials were also traded for, such as obsidian for arrowheads and small mortars, metates made of the volcanic rock found on the islands, and also ironwood. These were all materials much preferred by the Indians to those of the mainland, which were rather unfit to shape into stone utensils because they did not have the proper cleavage. The Santa Barbara mountain ranges offered none of these materials—only the minerals, Ullmannite, Oligocene rock and red jasper which sometimes served as passably fair substitutes.

Referring again to the trade articles of the island of Santa Rosa, the Indians, like their white brothers, liked to change and use different medicines. While navigating the rough sea across the Santa Barbara channel in their little boats, some of them would sometimes catch cold from getting wet and being exposed to cold winds. When reaching the islands some would have a high fever and chills, and then aid was given them in the form of *Malva rosa*, this being the plant used to break up the fever. And it will do so if properly administered. The Indians had so much faith in its value that they brought some of the seeds to the mainland where they were planted.

Later, on its introduction among other Indian tribes of the coastal belt, the plant found its way north- and southward until the coming of the California mission founders. They learned of the plant's medicinal value through Indian information, and were only too glad to adopt it for their own use—that plant and many others which proved superior to those brought by them from Europe and which they then discarded.

Thereupon the friars adapted themselves to the care and use of the herbs of the Indians.

This is the story of the *Malva rosa* after which the island of Santa Barbara bears its name *Santa Rosa*, or "Holy Rose," and botanically *Rosa gallica*.

Fractures.

ULMUS PUBESCENS (*Ind. He-wa-wa*)

American Elm. We have seen that the beautiful elm was used by choice as a light, soft boat-building material. It played also a very useful and important part in the adjustment and healing of broken and fractured arms or legs. The work was very simple and effective. The patient was placed in bed, or what was known in those days as the *un-wet*, meaning bearskin mattress, to lie down and rest till the Indian runners returned from the forest with the stripped bark of the elm, which was very carefully selected and had to be free of woody knots, with the inner side of the bark as smooth as silk. These large strips were cut to mould and fit clear around the broken bones, then tied with wet buckskin. This was done to allow contraction of the buckskin with that

of the green juicy bark of the elm, while the fevered and swollen joint absorbed the juice of the bark.

Care was taken to add more juice extracted from the tree to the bark strips to prevent quick contraction which would be very painful, due to swelling and counterpressure from the drying bark. The time involved in healing broken bones could well be considered two thirds of the time taken under the hands of modern skilled surgeons.

In parts of the country where the elm wasn't available a freshly killed rabbit, its skin quickly removed and slipped onto the broken joint served equally as well, only it required more time to heal.

Blood specific, purifier and tonic.

FOUQUIERIA SPLENDENS (Ind. Gaiesh-pohl)

American Desert Candlewood. Spanish, *Ocotillo*. This plant's habitat is the southeastern wings of the Mojave Desert, and the locality best suited to its growth is Borrego Valley at the northern border of San Diego County. This great valley, at one time very rich and fertile, was used by the Indian tribes of Chief Hobo-yak of Ca-we for the raising of considerable livestock. This particular spot commanded an extensive view of the desert territory, as well as the mountain peaks surrounding it. From the top, a clear view could be obtained toward north, northeast and southeast to the Mexican border, and it afforded a natural fortification for the aggressive Ca-we Indians.

There still remain a few of the sand-dune forts heavily overgrown with creosote bushes. These forts are deeply

recessed, formed in the shape of a horseshoe, its outlet serving as an entrance at the same time. Pointing northward toward the high mountain ranges, the graves, or burialground of the Indians, are located just outside of the fort and a few feet to the left from the outlet on a wellarranged plot of ground.

The interment was simple. After a grave had been dug, it was filled with dry wood and set on fire until a good bed of charcoal was attained; after which, the defunct together with his belongings was placed upon it and left to burn as the grave was covered.

Cremation took place slowly but surely.

Little evidence was left for the grave robber or the anthropologist. And still less for the archaeologist, as the defunct's pottery and rock mortars also were disposed of by being broken into thousands of pieces, and then scattered over the grave.

There is more to be said about this historical valley in that it was the main artery of caravan travel of the intrepid American and Mexican pioneers, and of the Spanish explorers, who all in turn were met and held up by the Indians for information. Those not offering resistance were allowed to pass through the territory unmolested—provided, of course, they wouldn't hang around the valley.

However, quite a number of bloody battles took place there, between Indians and whites, as the latter, having had some experience with hostile Apaches when crossing the desert, misunderstood the signals of the Ca-we Indians. Instead of waiting to see what they wanted, the leading scouts of the caravan ordered every man to stand by and, as the Indians came near, they opened fire on them. This didn't prove of

benefit to the pioneers and only resulted in disaster, thus putting an end to their journey.

Even to this day many of their belongings are kept well secured in the bosom of Borrego Valley. Sand dunes uncovered now and then by desert winds prove there is a possibility of their all being recovered in time and preserved as historical relics of days gone by.

At the northwest end of the valley are the historical camp grounds of De Anza, the Spanish explorer, who was the only one ever known to have put up camp in the valley in those days.

And this marked the beginning of darker days for the Indians. First came the Spaniards, then the Mexicans and last the American gringos. They all passed there, but none had the least suspicion of what was to take place in the future. De Anza, while resting up for a short period, explored among the surrounding mountains in search of a pass which would lead westward. In this the Indians helped him by pointing toward the Pacific coast. De Anza reported to his superiors the finding of emeralds, but in this he was mistaken as the precious stones found in those mountains are mostly tourmalines in a great variety of tints, including green. This probably accounts for De Anza's naming them emeralds. They also occur in red, pink, yellow, white and black, with spodumene crystals in violet and purple.

The floor of the valley also yields carnelian milky quartz, bloodstones, as well as fossilized wood and jasper. These beautiful precious stones have found a place among the gems of the world and are well-known among mineralogists. In the traditional history of the Indians, De Anza is still remembered for the discipline and control he kept over his men, a fact which greatly facilitated his progress. And his

goodwill and kindness toward the Indians were of the purest humaneness, standing out brightly as attributes of genuine manhood. Very few Spaniards could boast of such qualities —they ordinarily were brutal, and their history was written in blood in those days.

The Mexican soldiers who arrived later, by way of this valley, committed frightful excesses among the Indians, even assaulting and outraging the fair daughters of Ca-we. A horrible tragedy marked the sequel to those days of terror and bloodshed.

Then, in the rising dust on the northeastern horizon appeared a newcomer, General Kearny, in command of his gallant dragoons, following the course De Anza had taken. He had no trouble making the pass as his men were under strict military discipline and the blue uniforms worn by officers and troopers caused much admiration among the Indians. Little did they know, however, that behind this army was a power and authority which could be exercised without cause or provocation in the name of the government of the United States—and that was exactly General Kearny's mission: to retake the lands held by the Mexicans as their own at San Pasqual. He became engaged in a heated battle with Mexican soldiers and civilians and his casualties were so heavy that he faced defeat. As a last resort, he appealed to the Indians chiefs for help, and the Ca-we Indians, remembering only too well the atrocities and brutalities committed upon their women by the soldiers of Mexico, granted the General's request and dispatched five hundred warriors to aid General Kearny.

Arriving at the battlefield, the Indian braves attacked the Mexicans from all sides, thus saving the day for General Kearny who had but a few of his men left.

As to the kind of report he made to the War Department, and whether he took all the credit for having won this bloody battle whereas, by rights, the Indians alone were responsible for the victory, is not known to us. But we have every reason to believe that the report was in his favor in order to shield the command from embarrassment were it to become known that Indian aid and tactics had been the deciding factor. At any rate, up to the present time, Indian records don't show any letter of acknowledgment ever having been received from the United States Government for the service rendered General Kearny.

Instead of receiving at least a "Thank you," they were from that time on looked upon as "easy," believing anything that was told them—and this was proved to their own satisfaction in 1851-52. No doubt some of our fellow citizens do not know what this means. Therefore, to elucidate a little, let me say that this was the time when a benevolent government sent a very able regiment of politicians out here in command of a few army engineers.

These engineers executed their commission in a first-rate manner and negotiated and signed 18 treaties with the signatures also of 400 Indian chiefs. And the Indians turned over more than one hundred million acres of fertile lands to the government, leaving a reserve of ten million acres to the Indians. The larger acreage was to be paid for, as per duly signed agreement, at the rate of \$1.25 per acre, and to this day the Indian is still waiting for it. The politicians, however, lost no time but took over as much as they could of these rich Indian lands and eventually the entire open country was known as the Ranch of Senator "This," or Senator, Congressman, or Colonel "That."

That the longest road has a turning was proved by the battle of San Pasqual: it opened the Indians' eyes to many things—

such as, that had they but stayed out of it or used our forces otherwise, a different story would be told. The Indians were expelled from the Borrego Valley. We need no explanation here that they were good strategists and fighters and their holdings there were needed for the purpose mentioned. The valley has been donated by these patriotic and liberal politicians to the State of California and, by law, has become its property, and a state park.

And from high on its mountain top, the men of Ca-we may look down into the valley and think of its past history with an ache in their hearts. Only a few make a yearly trip there, for the purpose of gathering a goodly supply of medicinal plants and the *Ocotillo* or Indian Poinsettia Candlewood.

Blood tonic.

SALIX WASHINGTONIA (Ind. Ke-cham-ka)

American Willow Tree. This is a common inhabitant of most of our swamps and rivers and is occasionally met with far inland. Like the elm tree, it is very fond of water, and both species may be found growing together in the desert or dry mountain gorges. We should, therefore, always look for such places when in want of water—for it is sure to be close to the surface and can be had by digging a few feet underground.

The Indians, when traveling across country, always stopped at such places where these trees were growing, and water was obtainable very quickly in sufficient quantities for domestic use. Don't get discouraged if you don't find water seepages on the surface. You must remember that the elm and the willow growing around that ancient fountain consume most of the water coming upward to the surface.

These sources of liquid supply were once the watering places for migratory birds flying east or northward, and by means of their droppings these trees became habitants of these wild regions.

Concerning the medicinal value of the willow tree, the Indians would take the leaves and pound them in the stone mortar, after which the pulp was put into water where it was allowed to remain a few hours. The liquid was then taken like any other beverage, the patient first having taken a bath to prevent a cold, and to keep the blood at the proper temperature.

The tea has a decidedly bitter taste. During the dormant season of the trees when the leaves were not available, the bark was stripped from the tree and served the purpose just as well.

TABARDILLO (Ind. Pees-wel)

This strawberry-leaved plant grew in our time in abundance throughout the lower coastal ranges and valleys; but when the white pioneers in the early days began clearing the land for agricultural purposes, it marked the destruction of this and other valuable plants also.

Therefore, this plant is now totally extinct in the lower coastal plains, but still available in a few remote places in the higher ranges, where it is gathered by the Indians for home use.

Tea is made from the plant, and all the members of the family partake of it for at least one full month each year.

The infusion made from the root is of a clear, wine-red color, and is extremely beneficial as a blood tonic.

HOSACKIA GLABRA (Ind. Su-cot)

American Deer Grass. Inhabiting the high coastal ranges, this beautiful little flowering grass when in bloom, during the month of May, appears to be almost a massive bouquet of carnations among the greenery of the mountain slopes.

Deer are frequently found foraging in places where the *Hosackia glabra* grows, as they are very fond of the grass, and the Indians, as a rule, pick such localities to hunt in.

The infusion made from the plant is rather aromatic and, if taken regularly, it will help to build up the blood.

Antidote.

PIPERACEA (Ind. Chu-co-pat)

Habitat, rich northern mountain slopes. It grows mostly in underbrush, but is sometimes found on cleared land. It was gathered, dried and then ground in the rock mortar to a very fine powder, for use when our people exchanged poisoned arrows for bullets on the field of battle. Our poisoned arrows were more effective than bullets, as a scratch would send an enemy to eternal rest. Today we still use this plant in the treatment of trachoma, and rattlesnake, black-widow and scorpion bites. (American Pepper Plant)

Poison.

ESCHSCHOLTZIA CALIFORNICA (*Ind. Tee-snnat*)

American Golden Poppy. The true native flower of our western domain—the flower of the beautiful, rich golden color. However, being a poisonous plant, the poppy fields were of no use to the good morals and medical practice of the Indian doctors in the days gone by. But the notorious witch-doctor, having more of the devil in him than of anything else, made general use of this plant to compound some of his poisonous medicines in his irregular and evil practice. This may be strange to learn, but we had its counterpart among other races—the white race included—where witchcraft with its incantations, love potions and straight poisoning of humans played quite a role. And so it

was here among the Indians. For instance, if a woman became enamoured of a certain man and the object of her affections paid no attention to her advances, whether his regards were already placed in some other quarter, or for other reasons, this was sufficient for the woman who, having had her immoral desires thwarted, resorted to the witch-doctor. He would compound a preparation with the poppy as one of its main ingredients. This was then given to the innocent victim with the help of a second or third party, either in a solid or liquid form, and in less than twenty-four hours after partaking of it the poor fellow's mentality became befogged and powerless, and was thus easily controlled by the evil woman.

When such a case was brought to the attention of the chief of the tribe, orders were given to bring the malefactors in to be tried before the rest of the chiefs.

The leaders of this evil practice, if found guilty, were condemned to exile, and, under a guard of warriors, taken far out into the desolate desert with the death penalty hanging over them, should they ever return.

The poisoned victim was placed in the hands of the tribal doctor who gave him an antidote which counteracted the poison given by the witch—something which no white doctor has been able to do in spite of his knowledge of medical science and chemistry. Cases of such nature have happened among Indians and yet the patient's normal state of mind and health was restored.

ASTRAGALUS MOLLISSIMUS (Ind. Po-gat)

American Locoweed. A good many years ago this poisonous plant was powdered and used to dope race horses, as the Spaniards were very fond of this sport of kings. And since they were the great landowners when the Americans began to come in, this sport became more popular than ever. Money was wagered against large tracts of the Mexican-Spanish lands in behalf of their favorite horses, and at times amounted to many hundreds of acres of the richest and most fertile land. It was this very poisonous *Astragalus mollissimus* that was responsible for the transference of large Spanish and Mexican grants into the hands of Americans.

The Indians, being well-informed and cognizant of the fraud being perpetrated at the expense of their good friends, revealed to them the tactics employed and, for a small compensation, offered to recover for them some of their losses. This offer was gladly accepted and, in consequence, the Mexican landowner would again challenge the former American winner, whereupon a date was set for the race.

Under cover of night the Indian would watch over the horse that was to run until the day of the race, when he would appear in order to redeem his promise. Although this may cause surprise, it was only a little Indian trick, playing its part of revenge on deceiving, dishonest persons.

It was clean, honest revenge, not requiring the poisoning of one of our most highly valued domestic animals, and this is how it was done.

The Indian rider concealed under the bosom of his buckskin shirt two pieces of skin, one from a fresh bearskin and the other from that of a mountain lion. When both riders were lined up for the race and right at the moment of taking off, the Indian, with a quick jerk, would pull both skins—which were hanging on a string—from under his shirt and his opponent's horse, quickly scenting them, would stop and balk, throw up his head and look fearfully around in all directions.

The Indian made the wire easily and thus the other horse's deceiving owner lost the race and also his ill-gotten gains, proving again that crime, in any form, doesn't pay in the long run.

Hair tonic, hair and scalp diseases.

LARREA MEXICANA (Ind. Ato-col)

American Creosote Bush. I have mentioned the use of this shrubby bush in the beginning for another disease. It was used by the Indians for various maladies which I shall describe toward the end of the book.

The plant was one of the principal herbs used to eradicate dandruff and the infusion, when used as a hair-wash once a week for a period of about two months, will be found enough to rid a person of dandruff thoroughly. Its one drawback, if any, is that it will make the hair coarse, although on the other hand, very strong. It was also used as a disinfectant and deodorizer of bodily odors by sponging the body with the full-strength infusion.

LOPHOPHORA WILLIAMSII (Ind. Am-mool)

American Desert Agave or Button Root. Indigenous to the Mojave Desert, San Bernardino County, East Riverside County and the Borrego Valley situated at the northern end of San Diego County, and thence southeastward to the Mexican border. The Indians made special trips to places where this plant grew, and spent several weeks at a time in harvesting it. The root is very important and yields the proper ingredients to compound one of the finest hair tonics known—greatly superior to the best on the American market of today.

After gathering the plants, the Indians roasted the leaves in covered underground rock pits. After this was done they underwent a sun-drying process, following which they were cut into small square pieces and stored away for winter use in hermetically sealed earthen *ay-as*.

The plant was put to many other uses which I shall not divulge at this time, as it would probably invite total extermination of the desert agave, as occurred in the case of the bison and the messenger dove.

Ringworms and scalp germs of the hair roots.

MICRAPELIS MICRACARPA (Ind. Yal)

American Thorny Cucumber. This beautiful vine is very common through the lower and upper coastal ranges. Wherever you may go you will see the thorny cucumber. It is very bitter to the taste and the seeds are very pretty, running into the various shades of white, yellow, gray, black, olive-green, brown, and red.

In the '90s the white people discovered that they could be worked into portieres, hanging ornaments, etc., as they looked so beautiful and the fad became so strong that

young and old would search for these seeds all over the country with the result that the plant became almost extinct, the usual net result when the white man took a fancy to certain plants or animals. However, in this instance, kind Mother Nature hid a few seeds away among and under the carpet of autumn leaves which in time replaced the destruction wrought by the white man.

One should know that we, the so-called savages, never destroyed wantonly, and when we gathered the flowers, seeds, leaves and bark of plants, we did so for a useful purpose, not to strew them along the highways as the custom is among certain humans of today.

Micrapelis micracarpa was used in the treatment of ringworm in the epidermis. Juices extracted from the rind of the thorny cucumber were rubbed into afflicted parts—a sure and effective remedy.

For the treatment of diseased scalps and hair roots the oil extracted from the seeds is massaged into the scalp and thus prevents the falling out of the hair.

The juice of *Micrapelis micracarpa* will remove human bloodstains, one of the most difficult stains to remove. The Indian made quite frequent use of it—when returning from the battlefield or a hunting trip—to remove such stains from his buckskin clothes.

The soap of the Indian.

CUCURBITA FOETIDISSIMA (Ind. Meh-hish) American Wild Gourd. This plant, inhabiting the arid soils of the coastal plains, is very hardy and at its best in worthless ground unsuitable for agricultural purposes. Thanks to Mother Nature, by thriving in otherwise dead soils, it was assured of continuous preservation.

The Indians regarded it highly as being useful in what washing they had to do toward keeping their buckskin clothes and blankets clean. Very soon after the vandals from Spain invaded our country, they adopted this plant in place of their greasy soaps. When the gourds were fully matured they were gathered and put away in the shade to dry for winter use. For the day's washing, one gourd was put in about ten gallons of water to help bleach the clothes, while large, square pieces were cut from the roots (which grow to an immense size) and were used as root soap bars for rubbing the clothes laid on a smooth log or a flat rock. Another plant similarly used was the fibrous bulb of the

CHLOROGALUM POMERIDIANUM (Ind. Mo-cee)

A member of the Lily family, known as Soap Plant.

SAPONARIA OFFICIANALIS (Ind. Yu-look-ut-hish)

American Soapwort. Inhabits the woodlands of the lower coast regions. The juice extracted from the roots of this plant makes an excellent hair tonic and cleanser, giving the hair a beautiful, brilliant gloss and, as a shampoo, it exceeds most of the modern hair tonics which, in my opinion, are more or less injurious to the hair roots due to an excess of alcohol in the preparations. Blooming season: May to June.

Its leaves were also of much use in cases of pains of the spleen. They were ground into a pulp and applied as a poultice-plaster directly where the pain was, and kept there for from three to four hours.

BRODIAEA (Ind. Meh-wahot)

Is an inhabitant of the lower coastal regions, and is one of the other plants serviceable for making an excellent shampoo for the hair, the bulb and flowers being used for the purpose. Blooms from March to May.

Protection against lightning.

CEANOTHUS DIVARICATUS and PINUS SABINIANA (Ind. O-Oot) (Ind. Wa-at)

The California Lilac—Spanish *Chaparral*—an inhabitant of the mountain ranges, blooms like the common lilac and is very beautiful.

Attracting every nature lover, this gigantic shrub is possessed of a strange power, which up to the present has escaped attention, due to its having been kept secret among the Indians for centuries.

As I am writing Indian legends through botany, I, for the first time, shall reveal the virtues of this shrub and it should prove of the greatest interest to those engaged in scientific research, especially in geology and botanical chemistry. And if the shrub is used as the Indians used it—and still do—it will help to safeguard life when thunder and lightning are at their worst at timber line of high mountainsides and peaks.

These monumental cones were at one time, in the early Archean period, surcharged with volcanic activity, which was responsible for the enormous iron deposits stored in the bowels of the earth. Electrical storms, being attracted by the iron, burst at times there with terrific violence, causing a truly phenomenal disturbance; while lightning bolts strike the iron bodies, completely magnetizing them, turning them gradually into the mineral, magnetic iron.

Now, let us bear in mind that cone-bearing pines and the *Chaparral* grow side by side on and over these magnetic iron deposits. Of the two, the pine seldom escapes destruction whereas the *Chaparral* deflects lightning. At the harvest season of the pine nuts, when these storms were very frequent, precaution had to be taken against the danger of being struck by lightning, and the *Chaparral* was the tree chosen in the pine forest by the Indians as furnishing both safety and shelter.

Now, some of our Red fellow men, through ignorance and a belief in miracles, were superstitious and quite sincere in their belief in the efficiency possessed by the magnetic iron mineral, and in its inherent supernatural powers to guard their homes against prowlers and thieves. So, much of it was gathered after its discovery and placed inside the homes to protect them from such intruders. Therefore, whenever a man was known to be in the possession of this mineral he became the object of much reverence and respect by wrongdoers, the belief being that the magnetic iron attracts and draws to it all other particles of nonmagnetic iron. By the same token, if they entered strange premises, the same thing would happen to them and they would be held until the rightful owner appeared.

The author of *Chi-nich-nich*, Dr. John P. Harrington, of the Department of Ethnology of the Smithsonian Institution,

found himself against a wall when he wrote something about this "wizard" mineral under its Indian name without a sample from his Indian informant, Mr. Albanes. Dr. Harrington was unable to give a firsthand description and had no definite idea of what the mineral actually was until he requested me to revise his work, a thing I did gladly at the printing office in Santa Ana, Calif.

Later on, when my opinion was asked regarding the book I, of course, drew my own conclusions and withheld any criticism. This I did, not deeming it wise to make any remarks about parts of the work which did not represent the true phases of Indian life, for, as I held the key that would correct those parts, any criticism from me would only have led to my being questioned as to my knowledge of things which I didn't feel at liberty to divulge.

Accordingly, my identification of the "wizard stone" broke up an expensive Smithsonian expedition which was to be made by a group of geologists, with all its branches well-represented, in search of magnetic iron. Now, this is a mineral which has some commercial value in the electrical field, the steel industries and in the manufacture of scientific instruments, although some charlatans, like some of my Indian brothers, claim the mineral possesses supernatural powers and the so-called lodestone is sold today to a good many people as a talisman.

This lodestone is nothing more than common magnetic iron, yellow in color due to the large amount of sulphur in the mineral. The silver-gray magnetic ore which was the Indian's "wizard stone" derives its color from the arsenic it contains. Furthermore, many other spurious contrivances are being sold, not to Indians but to white people of even very superior intelligence and P. T. Barnum fell far short in his estimate of the number of people just waiting to fall into the

snare of deception, with his famous remark that "a sucker is born every minute." Every second would be nearer the truth.

By personal investigation which I made I found that some of these deluded victims, men and women both, carry upon their persons lodestones for "luck," whereas others think that by wearing them concealed close to the flesh it gives them a strong magnetic personality and thereby they command the attention they desire from others.

This is not likely to happen. You can magnetize your body, to be sure, but not this way. The right way is the way of the Indians of wisdom, nature's way. If you are getting sluggish, low in vitality and vigor, it simply means that the battery-cells of your body are low and need recharging. Civilization has to some extent deprived us of this great body builder and has isolated us until the flesh of our feet does not make contact with the vast electrical currents of Mother Nature. To receive any benefits from this natural resource you must not wear shoes in the spring or early summer months, and, weather permitting, go to some lonely place where you are sure there won't be any interference by the authorities, remove your clothing and then lie flat on the ground with your muscles well relaxed.

While doing this, dismiss from your mind everything which would cause you worry. Slowly but surely you will find yourself to be a different man if this is repeated yearly. Thus you will have learned to "magnetize" your soul and preserve yourself for the many years before you, as most Indians do.

How to be free from daily annoying trivialities, which only serve to undermine one's health, weaken one's body and render one an easy prey to disease and misery, the Indian understood thoroughly. Instead, he cultivated poise, and reached such perfection that he became the envy of the white race in that respect.

Antivenin for rattlesnake and tarantula bites.

DATURA METELOIDES. (Ind. Qui-qui-sa-waal)

American Jimson Weed. This plant is an inhabitant of the California coastal region and is not particular as to the nature of the soil or its fertility, but thrives anywhere. This tuberous, bushy plant is highly narcotic and when the leaves are properly cured they can be used either in the form of tea or smoked, but withal, very sparingly, since an overdose may very likely cause one to be committed to an insane asylum, as it is a rank poison and its effect may even land one in an undertaker's mortuary. Therefore, my advice is to leave it alone.

My Indian brothers, being unable to give correct information to hard-shelled scientists and writers through a poor knowledge of the English language, were made objects of criticism, and science deliberately declined to acknowledge the medicinal value of this cousin to Datura stramonium which in modern medical practice is of great value at the present time.

Considering, however, the value and uses of *Datura meteloides*, I assert that this decision was very irregular and out of all proportion as to what it was intended. We know that everything can be abused, yet some of our Indian brothers who wished to live in ignorance and superstition had a perfect right to do so. In truth, it wasn't so with all Indians and there were really some great minds amongst them.

When, for instance, the Chinaman wishes to see the beautiful lotus and cherry blossoms of his native land, he does so through the smoke of the opium-pipe.

Then, how about our boasted white civilization which is supposed to be superior to all? Some, of course, like to see Yankee Doodle marching down the street, others draw the hypodermic from its case to stimulate the vision of desire—or sniff cocaine through the nostrils for the same purpose.

How much, I ask, has present-day civilization to offer the Indian? Kind readers and hard-shelled scientists, I pray you, let us be rational and let us go deeper into the field of investigation. And I advise you for your own good to do so even if *Datura meteloides* has failed to make its appearance in the pharmacopoeia with its commercial mark [*Rx] prefixed with the "M.D." As I have said once before, there is very little in the drugstores today for which the Indian cannot find a substitute in the great field of nature. The plants I am writing about in this book represent just one-fourth of the medicinal botany of our Indians of the Pacific Southwest.

In support of my assertion, I only ask that you visit the Historical Southwest Museum in Los Angeles, Calif., and see with your own eyes what a medicine case consisted of for the general practice of medicine in the early days, in those days when most people of the white race thought themselves further advanced in medicine than the Indians. Such was not the case by far, and for a comparison and evidence of my assertion I submit a résumé of the contents used by the first white doctor to practice medicine in the State of California. His name I omit. His soul is at rest!

His medicine case contained a few vials: (1) Oil of Cloves, (2) Spirits of Ammonia, (3) Spirits of Peppermint, (4)

Wintergreen, (5) Jamaica Ginger, (6) Castor Oil, (7) Quinine.

And that was all he had to serve as a comparison with what the Indians used, and in this I prefer that you, kind reader, be the judge. I am not exaggerating but speak only in the light of truth. A great deal of misinterpretation of Indian life has been written by white authors who gathered their information from Indians who knew a great deal but were unable to give comprehensive data to the white writer. Others were there who could have done so, but their lips were sealed where the white man was concerned. This accounts for the mistakes which have been made and whereby Datura meteloides has failed to gain recognition for its meritorious medicinal value. It is worth knowing that the plant is antivenin and will effect cures of rattlesnake and tarantula bites. What improvement has the hard-shelled scientist made to counteract the deadly poison of the tarantula? None, of course!

Not so long ago a man in New Orleans, La., gave up his life for want of a serum that would counteract the poison of a tarantula which had bitten him. Three doctors, equipped with all the white man's knowledge of medicine and chemistry, strove desperately hard to save the man's life but finally gave up in despair and frankly admitted that to date no serum had been discovered to conquer the poison of the tarantula!

Yet there is one and it behooves the medical profession to get acquainted with *Datura meteloides*.

A practical and effective demonstration was given in the presence of a group of mission friars at San Gabriel, California, in the year 1828. The friars, having heard that toulache was used by the Indians to cure rattlesnake bites, lost no time in watching attentively the procedure followed

by the Indian in charge—Genio Guana-pia-pa was the medicine man. The patient was seated before them wellcovered with a blanket, with only an opening remaining around the neck in order to permit *Datura meteloides* to be poured over his body. All this, of course, was very simple. But what of the process used to extract the poison, when, and what compounds? Yes, there is just one other which belongs in the formula, a formula which has cost me thirtytwo years of waiting to finally wrest it from my uncle, Chief Pablo of Pe-we-pe and Guana-pia-pa who gave me access to the ancient historical records of the Indians of California. records which many historians, archaeologists, practically all men of science would welcome.

The white man has missed the true and better half of the Indian history of the Pacific Southwest. This I shall describe in another book after the translation has been made.

The rattlesnake and tarantula formula I will donate to the good of mankind, free under patent rights under my control to avoid medical exploitation, speculation, and selfish rights of monopoly. I am not in search of mere money. Honor and character are of far more value to me. My happiness comes to me from the good I can do to others, and this to me is almost an obligation to clear and right every wrong done to my people; not with a deadly weapon, but with pen and ink, the Lord willing!

We Indians have not yet learned some of the ways and customs of our white brothers, and, therefore, I could not say that what cannot be done today can be done ten years from now. Our religion and philosophy teach us that the heart is the pendulum of life, each stroke representing timely death which may befall us with one of these strokes any moment, and so don't forget *Datura meteloides*.

Once an incident occurred when *Datura meteloides* was being prepared at a place where the spying eyes of the friars couldn't observe it. Enough plundering had been done already, and the Indians had no desire to divulge their secret. They would only show them what they could do. One of the friars, full of doubt and curiosity, asked one of the Indians who, the day before, had assisted a patient bitten by a rattlesnake to go with him into one of the fields north of the Mission, pretending he wanted information as to certain plants growing there. When there, the friar drew near to a Datura meteloides, and at once began questioning the Indian about the plant, whereupon the Indian refused to give information. The friar, seeing he couldn't make him yield, began kicking at the plant, uttering at the same time Latin words, which of course were wholly unintelligible to the Indian. The friar did that only to make the Indian show resentment, thinking he had cursed a plant which, to the Indian, was sacred.

However, the friar's scheme didn't work; the Indian stood by in silence, until at last the saintly friar lost control of his temper, damned the Indian and his herbs and finally told him that if he'd dig up one of the roots he would chew it, nay, even swallow it, just to show him it was worthless.

The Indian took him at his word, dug up a root and handed it to him. Our friar was game and began chewing it. Accidentally he swallowed some of the bitter juice and in 15 minutes went through terrible convulsions, till death came.

Weather observation, travel and fishing aids, aqueous plants.

ECHINOCACTUS and SEMPERVIVUM (Ind. Co-pash)

American Water-Barrel Cactus. An inhabitant of the arid Pacific southwestern deserts. Like all Indians in their boyhood days I was also warned of the great perils threatening human beings in the desert, and in order to meet any emergency which might arise, we received much instruction for the time to come when this was absolutely necessary for our safety. The schooling given us consisted chiefly of weather observation, how to detect the approach of severe desert storms from the very beginning of sunset through part of the night by watching the action of the stars, the night atmosphere and the various changes of the air currents.

All this had to be mastered to such a degree of perfection that I doubt very much if any Bureau of Meteorology could do better. Most of the changes indicated heat waves, electric rainstorms, terrific wind, sand storms, etc. The only instrument the Indian had was his index finger which he made use of by holding it in his mouth for a few seconds, then pulling it out quickly and thrusting it upright toward the sky, his eyes fixed on the North Star. The side of the finger which cooled quickest indicated the direction of the wind.

Now came our water compasses, very primitive in form, but instructive and true to sense of direction as direct leaders to water holes.

Of course the Indians venturing across the arid desert were always careful to take with them the *Sempervivum*—House Leek—and, as an extra measure of precaution, another plant which grows abundantly in the semi-arid regions. These very same things were taught some of the old white pioneers who were friendly and had shown kindness to the Indians, while others perished from lack of knowledge of how to make use of these plants—the *Echinocactus* and the *Sempervivum*, which furnish thirst-quenching juices.

The thorns of the *Echinocactus* were used by the Indians as fishhooks for deep-water fishing so that the modern fishhook is by no means the white man's invention.

Both the *Echinocactus* and *Sempervivum* were also used for the prevention of swelling of the salivary glands as a result of the tongue being dry and inactive.

General medication.

TRICHOSTEMA LANATUM (Ind. Zu-bal)

American Wild Rosemary. This shrub, when in full bloom in the months of May to July, emits a sweet, balsamic fragrance, and is of great medicinal value for many ailments.

The Indians who made use of this plant a great deal had no difficulty in tracing it through its scent to its place of growth, where the flowering stocks were carefully gathered so that the root and crown system suffered no injury. Extra precaution was taken for the next annual blooming season, for most of the plants were of a delicate nature. As far back as I can remember, in the late '90s, the Trichostema lanatum grew in abundance along the near coastal ranges, but gradually this very valuable plant became a victim of extermination through brush fires at the hands of careless hunters and the clearing of land by farmers. The Indians, perceiving how rapidly these plants were vanishing. gathered the seeds and carried them further inland, into rough mountain country where they were resown, and there they remained in their last botanical refuge with hundreds of others which are of great medicinal value also.

Furthermore, from such localities Indian hunters would gather the seeds and carry them still further into the mountains for safety and for purposes of propagation. Today it is solely due to the Indian's foresight that *Trichostema lanatum* is found plentifully in the Pe-we-pe mountains, better known today as the San Gorgania mountains. It is also found in Riverside County and the San Jacinto mountains, on southward over high mountaintops in lower California, Mexico, and northward to San Rafael but rarely beyond that point.

Ptomaine poisoning.

ERIOGONUM UMBELLATUM (Ind. Hula-cal)

An inhabitant of the arid California desert, it is a massive, white-flowering shrub remarkable for the long duration of its blooming period which lasts from early June till late September. During this time the desert may be seen covered with a vast mass of white blossoms comparable in its color effect to the winter snowfields in northern latitudes.

To have the opportunity to see the manifold flowering wonders of this great desert, in their sudden magical changes, one must visit it during the period from early February till late in the fall.

The time to see cactus in bloom is in February and March. The latter month ends the flowering season for this particular plant. Again the desert becomes flowerless and gloomy for at least two months and then good Mother Nature with her magic wand once more transforms the desolate desert into a brilliant garden of flowers and shrubs. There are the Yucca Whipplei and the yucca palm, the

Joshua palm and the desert lilac, the desert poinsettias, marguerites, desert and scrub pines. All a riot of color, but the *Eriogonum* survives them all into September. What a wonderful array of color greets the eye! As far as it can see it is fairly stunned by these glowing tints and hues, from rich ultramarine to pale yellow—red, lavender, purple, pink, light blue, to the purest cream white. This blooming season ends in July, but alone the *Eriogonum* keeps on blooming till September.

Then there is one short rest period for about one month as if in preparation for a carpet of golden blooms.

Shrubs, bushes, and small trees which have been practically dormant for ten months of the year burst out in golden vestments to greet the approaching winter, and bid a last farewell to Indian Summer.

Such is the aspect of the desert, at that time of the year. And, strangest of all, of all the hundreds of species of trees, bushes, and shrubs, all different from each other, not one bears anything but yellow blossoms.

Let us turn back to where we began, to the especial value of the plant to hunters and vacationists who make their yearly visits to certain mountain and desert regions favored by them. It will certainly do no harm to acquaint yourself with the medicinal value of the *Eriogonum* since you have to depend for your sustenance mostly on canned foods.

Occasions arise when users of such foods are made very ill, even suffer death, through so-called ptomaine poisoning. To obtain the service of a doctor is well-nigh an impossibility and ptomaine poisoning is a fast-working, exceedingly dangerous poison, where delay is fatal.

The plant *Eriogonum* grows nowadays in the coastal regions as well as in the desert where it originally came from, and the first thing to do when attacked by ptomaine poison is to make a strong infusion from the blossoms of the *Eriogonum*, or, if these are not available, use the roots, and take, or give to the poison victim, two brimful cups with a pinch of salt added to each cup.

This remedy counteracts the poison and gives safe and complete relief.

Jewelry and talismans.

ASCLEPIAS SYRIACA (Ind. Samat-hap-pac)

American Milk Weed. White botanists claim this plant to be edible, but to my knowledge there is no botanical record extant which bears out the assertion as to its ever having been used as a food.

The Indians pressed out the milky juices and used the extract obtained in the manufacture of their jewelry, most of their precious stones being made into necklaces, earrings, collars, wrist and upper arm bracelets, all mounted in this milk-juice preparation of the *Asclepias syriaca*.

This kind of jewelry was worn by Indians of a higher civilization as talismans, just as civilized people of today wear similar ornamental articles with more or less superstitious belief. We need only point to the so-called "charms" worn by many to bring luck, ward off disaster or sickness—in fact, for more reasons of a superstitious nature than the Indian ever thought of.

A great deal in the way of royalties are due the Indian, in return for the use of his art-craft, yet a few jewelry items have been overlooked by Mr. Jeweler—items which, peradventure, may bring him great wealth if properly ballyhooed.

Let us take, for instance, the case of the witch-doctor among the Indians with his special ornamental necklace—the symbol of his profession—a necklace denoting supernatural powers, a crystal quartz for a nose-piece. The necklace is made of eagle-, bear- and lion-claws, the poison fangs of rattlesnakes, etc.

It must be understood, however, that the necklace mentioned will not endow the wearer of it with any power whatsoever, unless those various claws are extracted from the living animals which, no doubt, makes the manufacture of such a necklace somewhat hazardous and dangerous.

As far as is known, no patent has been granted yet on the process of getting these necklace ornaments in compliance with the rules of "Charm-Craft." So here is a fine chance for some enterprising, courageous jeweler to strive for renown and riches.

But, Mr. Jeweler, there must be no copying, no pilfering of any sort. The rules must be obeyed in strict honesty. The patent will then be found waiting.

Hunting with poisoned arrows.

KALMIA LATIFOLIA (Ind. Po-ha-not)

American California Mountain Laurel. It may be of interest to sportsmen that this plant, growing in the high mountain ranges, is as greatly relished by the deer as *Hosackia glabra*. Deer in large numbers look for this shrubby tree and this is the key to the white man's puzzle why Indians are such successful hunters. It is simply that the Indian lived the life God intended him to, and, through close association with animals in the wilderness, he became proficient in observing their habits, imitating their calls and thus bringing them within shooting distance of his bow and arrow. Here the *Kalmia* played an important part. The hunter not only used it as a body deodorizer, but also made use of the top part of a deer skull with the skin and antlers left on, never exposing more than these, when lying in ambush.

The *Kalmia* had other virtues, besides, in that it furnished one of the ingredients to compound a poison in which to dip arrowheads. A deer hit with an arrow had a slim chance of getting away wounded. If it happened, it was only for a short distance and then it would drop paralyzed from the effect of the poisoned arrow. The meat was edible and harmless and none was left over.

The grizzly bear was one of the most ferocious members of the bear family in the Pacific Southwest. Although quite common and plentiful, this powerful animal was killed with as much ease as the housewife of today kills a chicken.

When hunting this bear the Indians would select one which had the best coat of hair. Two Indians would work together, beginning with yelling, singing, and dancing around him to such effect that he became very angry and charged one of the hunters. With speed and precision the other one would run up to the bear from behind and shoot his arrow straight into the bear's kidneys, thus in most cases rendering the bear quite helpless; and try as hard as he might to turn on

his enemy, his efforts proved futile. Paralyzed in the hind legs due to the arrow being imbedded in the kidneys handicapped him so that he had to vent his rage in a sitting position. The other Indian in front of him, thereupon would shoot an arrow straight into his ear, ending it all in a few seconds. The skin, when cured and tanned, was used for the interior lining of tepees, bed covers, and ground mattresses. However, the time came when bear hunting was abolished by executive orders of our Indian chieftains, and this was caused by the following:

At one time these Indian chiefs, while traversing their territory, were attracted by gunfire. Driven by suspicion and curiosity, they decided to investigate and went to where the shooting was taking place. Great, indeed, was their surprise when they came upon two white hunters battling with a grizzly and it seemed that the bullets of the old-time muzzle-loading gun didn't prove up to expectations. There was very little time to reload, so one of the hunters threw his gun away and fled with the other partner in close pursuit, the wounded bear right on their heels and in full command of the situation.

The sight of this caused the chiefs great mirth and fun, and from that day forth, it was made known to all the tribes that the bear had some human understanding, had no use for the white man and was the protector of the Indians' domain. The act witnessed by the chiefs that day made the bear a regular member and scout of honor of all tribes facing a possible invasion of their virgin country.

In spite of all this, however, the white man resorted to the use of traps and poisoned bait to exterminate the Indians' friend. But, advised by some intelligent instinct this animal had, the bear decided suddenly to leave, and drifted away into Mexico and to northern latitudes.

Even to this day, the bear is considered a great friend by the Indians and when one is killed or dies of natural causes, much reverence and respect is paid him by the older people who, in their minds, are still living in earlier days, now gone by.

Care of the eyes.

SALVIA COLUMBRIAE (Ind. Pa-sal)

This plant belongs to the food division but plays another important rôle, considering what it means to a person to be relieved of the excruciating pain caused by the introduction of a foreign substance into the eye, thus producing a temporary obstruction of the vision. Many Indians, after a hard day's hunting or riding through severe sandstorms, had this experience, and consequently, they never neglected to give their eyes proper care.

When time to retire, the Indian would put at least a couple of seeds of the *Salvia columbriae* under the eyelids, and, with eyes shut tight to keep the seed from dropping out, he would fall asleep. As they swelled, they would move about with every movement of the eyeball and emit a gelatinous substance which gathered up every particle of sand or any other substance present, and, when removed, left the eye clear and free of any possible inflammation. This is a good example of the care the Indian gave his eyes and accounts for his good and strong vision.

An inhabitant of the arid lands, it grows prolifically in places where in earlier days the Indians made their homes, and very often the ancient dwellings which our people used will be found covered with large beds of *Salvia columbriae*, with their beautiful blossoms of purple and lavender.

These colors were to the Indians a mournful reminder of their departed ones, in their lifelong struggle and search for food, so mightily important to sustain life. Regarding the use of the *Columbriae* for this purpose, the method used was very simple.

It was cut and bundled by the male members of the family, brought in and heaped up on a large cleared space of ground, formed into a circle and then trodden down as hard as a cement floor. This was done with water and the bare feet and threshing with long sticks. By thus beating the heap of *Columbriae*, they released the seeds which were then winnowed by being blown before a wind current made with the aid of two baskets. After this, they were carried to the grinding stones to be ground into a fine meal which made excellent porridge—a very popular dish among Indians.

Foods, medicine, tanning and dyes.

QUERCUS VIRGINIANA (Ind. Qui-neel)

American Live Oak. This evergreen tree of the western mountain ranges is the most imposing of all the species of the oak family. It grows to an immense size and attains a great height. Some of these giants of the forest cover and shade an area large enough to afford protection to as many as three hundred adult persons.

A great deal has been written in song and poetry in praise of the stately oak but the Indians found out by experience that the acorns it bore were far more nutritious than poetry, and before long the noble tree was adopted as a regular member of the tribes—a bountiful provider of food.

Even so, the oak was by them much honored in war and love songs, for the many good things it furnished them besides food. The fallen leaves made warm mattress-bedding while the bark played a part in medicine and also in the tanning and dyeing of buckskin in various fast colors by blending with the bark of other oaks and roots. Let it be understood that these dyes thus produced were of a firm, non-fading nature and also excellent preservers of buckskin.

The colors produced were very beautiful and ranged from pure white to yellow, red, light and dark brown, light pink, gray and black.

Regarding the acorns, special care was given to the harvested crop and the process was simple. The acorns were put into fine, hand-woven net bags and tied with a rawhide rope to a tree close to the river bank whereupon the bags were placed in the stream. The running water would cause the acorn shell to swell and split open, thus releasing into the water most of the tannic acid which the acorns contained. After being left in the water for a week or so, they were taken out, the hulls removed and spread out to dry. Afterwards they were ground into a fine meal, sundried again, and then put away for winter use.

The porridge made of it jells like custard and, when well cooked, has the color of chocolate pie. It can be cut into squares and served with deer meat or eaten as a dessert with cream and sugar. Besides being very delicious and nourishing it is also a great flesh builder.

As a warning, let it be said, never to eat any acorns picked fresh from the tree, because of the tannic acid they contain; in that state they may cause severe constriction of the bowels and the glands of the throat.

Bleeding navel.

TYPHA LATIFOLIA and QUERCUS AGRIFOLIA (Ind. Co-o-tem) (Ind. Qui-neel)

American Cat-tail is an aquatic grass inhabiting shallow, stagnant lakes and swamps and is very common on the Pacific coast of California. *Tule* is perhaps the name by which the plant is best known, although the other is also very common. This valuable grass has failed to find a place among the scientists of the world, as *Tule* is a purely Indian name, and is far from being identical with those so far being classified by botanical science. But *Tule* is medicinal and has healing properties which were made use of by the Indians to heal bleeding navels. Nothing could be better.

The blades of the grass were gathered and burned to the consistency of charcoal, then finely powdered and sprinkled on the bleeding parts.

When this couldn't be obtained, the Indians further inland had recourse to the apples growing on the Scrub-Oak or *Quercus agrifolia*, and these were, of course, dried and powdered, and medicated with balsam oil. The salve proved to be very effective in healing the afflicted parts. In short, the results were first-class and saved the lives of many little Indian babies.

Indian food.

PROSOPIS JULIFLORA (Ind. Pe-che-te)

Mesquite Bean. An inhabitant of the southwestern deserts, it ranges as far as the northwestern and southwestern central parts of Mexico. A native of southeastern California, Arizona, New Mexico, and Texas, the *Juliflora* was perhaps one of the trees which provided the greater part of food for the natives.

Its contents were very rich in protein and even wild animals relished it greatly. To obtain the yearly supply, the Indians made a regular pilgrimage early in the season to localities where the *Juliflora* grew in abundance, and stood guard over the trees for many weeks until the bean pods were fully matured. Then they were harvested and ground in rock mortars to the fineness of flour, such as is used in the baking of cakes, tarts, etc.

It could also be mixed to the consistency of porridge, either with hot or cold water and taken with sun-dried venison. It formed a very nourishing diet. Sugar was never added to it.

The bean pods of the *Juliflora* are extremely sweet, and may be eaten right off the tree if dry enough. In any other condition they are unpalatable.

PTERIS AQUILINA (Ind. Wel-met)

American Bracken Fern. This graceful and stately fern of great beauty of leaf design inhabits the high mountain ranges where there are well-shaded forest lands rich in mulch. This fern is well-known to every Indian for the sad historical part it played in the life of our fair and beloved sister Ramona, the daughter of Ca-we and wife of

Alessandro, the immortal Indian who suffered death without a moment's warning at the hands of a brute and coward.

The authoress of *Ramona*, Helen Hunt Jackson, mentions in her book what good use of this fern Alessandro made in preparing Ramona's bed at the time of their elopement and tells of the hardships both young lovers underwent.

The young sprouting shoots of the *Pteris aquilina* fern mean as much to the Indians as asparagus does to white people, as it contains much oil which is extremely rich in flavor when the shoots are properly cut and cooked.

There are ferns in song, ferns in poetry, ferns where wedding bells ring, ferns on the altars of churches and ferns in God's acre. Also in gardens, but nature's garden is where the Indian wants them!

Food and bleaching.

YUCCA WHIPPLEI (Ind. Yu-ca)

American Spanish Bayonet. The name yucca is the true native Indian name of this exquisite plant, but even Mr. Whipple, the botanist, failed, like many others, to properly describe the beauty of the yucca.

During the months of May and June when the plant is in full bloom it is nothing strange, when venturing into the desert mountains, to find oneself in a veritable forest of countless thousands of yuccas. With its erect stalk, attaining a height of from four to twelve feet, heavily and massively crowned with creamy white blossoms, the yucca closely resembles a gigantic hyacinth of the California desert and mountains, and its delicious fragrance outrivals many of the costliest perfumes.

The use of the yucca was of much importance, some of the stalks were cut just at the time the plant was in full bloom, the flowers are edible, the stalk rich in sugar which produces a fine quality of syrup, obtained by first roasting the stalks in underground pits.

Other stalks were allowed to mature, their pods yielding the finest material for bleaching buckskin fiber a pure white. Also used very much in the art of basketry, etc.

Rheumatism.

URTICA HOLOSERICEA (Ind. Panga-tum)

American Stinging Nettle. An inhabitant of the swamps and river beds. This plant was used in most cases of inflammatory rheumatism of the most peculiar kind known to mankind, particularly when the lower limbs were affected to such an extent that they became numb, cold and useless. The cure was very simple if your limbs were in a bad state, but rather unpleasant if in a sound condition.

The nettle was cut and brought to the Indian patient's bedside, where the leaves were rubbed on all his ailing parts. This was repeated for several days until warmth in the affected parts and a proper circulation of the blood was attained. When the patient was able to get up and walk, a second treatment of a different nature was administered, the so-called Rock Steam-Bath of a herb compound made up of the following three plants:

PHLOX SUBULATA (Ind. E-wa-yack)

American Moss Pink. An inhabitant of the Mojave Desert.

PINUS MONTICOLA (Ind. Wa-ta)

American Scrub Pine. An inhabitant of the northern slopes of our California Mother coast range, and in a few localities on the desert floor.

ADIANTUM CAPILLUS-VENERIS (Ind. Ta-wal)

American Southern Maidenhair Fern. Inhabits the high coastal ranges, but further north it will be found on the lower coastal ranges.

Menstrual period.

LIPPIA LANCEOLATA (Ind. Te-eel-p-yack)

Lemon Verbena. Spanish *Cedron*. This shrubby tree has become nearly extinct and but few specimens are found now and then. The infusion made from its leaves and blossoms is very aromatic, somewhat like peppermint.

CRYSANTHEMUM PARTHENIUM (Ind. Che-ke-wat)

American Feverfew, Spanish *Artemisa*. This plant was used for the same medicinal purpose as the one mentioned above.

Diseased throat glands, scrofula.

NICOTIANA GLAUCA (Ind. Tee-baat)

American Tobacco Tree. This tree, very common along the Pacific coast, grows from Santa Barbara southward to the end of Lower California, and the Mexican peninsula. The tree grows in terraced gorges and ravines and is rarely to be found anywhere else.

The leaves were steamed and applied externally as a poultice over the swollen parts of the throat caused by inflammation of the throat glands, and also for scrofula. While the latter malady didn't exist among the Indians, yet they treated and cured some of the whites who had it, with *Nicotiana glauca*.

It was also steamed into the body of those suffering from rheumatism and proved there also its value to many human beings.

I have once before spoken of other plants useful for the same purpose, but as this plant has something to recommend it for the last-named ailment, it is appropriate to mention it again in connection with scrofula and inflammation of the throat glands.

To the plant serving all these cases equally well, we must give credit where credit is due, even at the cost of repetition, in order to give the reader a fair understanding of the various diseases a plant may be good for.

Surely a wonderful provision made by nature!

Fishing.

CROTON SETIGERUS (Ind. Tu-tal)

American Dove Weed. The beautiful dwarf plant is very common throughout the coastal region and far into the inland valleys. It appears about July in most barley fields after the harvest. It is truly a paradise for wild turtledoves, and the hunter who goes into a place where the *Croton setigerus* grows may be sure of bagging a good number of doves in a short time.

The Indians gathered the plant for use in their fishing operations, and some of it was stored away for winter use. The weed has a strongly intoxicating effect on fish.

A place was selected along the stream bed in a rather shallow spot and dammed across.

After this, a regular mat, formed of *Setigerus*, was laid on the surface of the water, while a large number of Indians went upstream to herd the schools of fish downstream and into the trap. Quite a simple procedure, as the herding was done by merely beating the water ahead of them. A barricade built of brushwood behind them prevented the fish from going upstream. The water in the pond having become impregnated with the *Setigerus* affected the fish so that they soon floated helplessly on the surface of the water where the Indians just picked them out by hand. When a

sufficient supply had been taken, the *Croton setigerus* was removed and piled up on the bank of the stream to dry and be used again. The dam and barricade were also done away with and the uncaught fish were allowed to get into fresh water to recuperate.

Tonic for loss of appetite.

MONTIA PERFOLIATA (Ind. Lah-chu-meek)

American Miner's Lettuce. This plant inhabits the coastal regions where it thrives only in deep, decomposed beds of oak-tree mulch at suitable points in the shady woodlands, where the circulation of water is present under a deposit of mulch.

The juice of the plant is an excellent appetite-restorer.

ALLIUM BISCEPTRUM (Ind. Ye-sil-ta-usa)

American Wild Onion. It is an inhabitant of the lower midcoast ranges, and the extract obtained from it is compounded with the powdered berries of *Rhus trilobata*.

RHUS TRILOBATA (Ind. Sa-lat)

American Squaw-weed. An inhabitant of Southern California's higher ranges, it makes an excellent restorative for an inactive stomach which refuses food. The Indians also

obtained the fiber from the vines of the shrub by stripping it off with the thumbnail and using it for basket making.

For poisonous insect-bites.

ALLIUM CANADENSE or ALLIUM VINEALE (Ind. Ye-sil-we-na)

American Wild Field Garlic. A plant held in great esteem by the Indians, protecting them, when hunting or exploring, from poisonous snakes, lizards, scorpions, tarantulas and insects during the summer season.

It was the custom of the Indians then to discard their buckskin clothes and roam around with as little covering as possible until the fall of the year, when they donned their heavier clothing again for the approaching cold weather. Now, it is well-known how disagreeable the odor of garlic is to most human beings, but they don't know that it is likewise so to reptiles and insects. The Indians, however, knew this, although they never ate it. They used it only as medicine when needed, but its greatest usefulness was to guard against being bitten by poisonous vermin.

The Indians ground the wild garlic into a pulp and then rubbed it well over their legs up to the thighs, making extra sure that the skin was thoroughly saturated with the garlic juice and thus protected. The Indian would enter any locality to do his hunting, even if it was infested with thousands of rattlesnakes, without the slightest fear or worry. The reason is very simple. Whenever the snake or insect comes within smelling distance of the garlic, it is so much affected by it as to become well-nigh asphyxiated and is rendered helpless.

The white man, in order to follow fashion, wears leggings, but I am sure that he could use the formula I have given, very much to his advantage. I give this formula freely to mankind, a formula which has remained a secret for over a century and it will mean the saving of many lives if used as described above.

Antidote.

BERTHOLLETIA (Ind. Pacah-quit)

American Arrow-wood. It is an inhabitant of the California River border lands within the Pacific coastal belt, and is occasionally also found on the southern border of the western desert lying in the northern part of the Pacific coast.

There has been much discussion in the past, and many arguments, many flatly declaring that the arrowwood was used by the Indians for making bows and arrow stocks.

Being an Indian, that and nothing else, let me explain the matter clearly as to this particular controversy. The young shoots of the *Bertholletia* were selected from the parent stock, well-seasoned and then used for arrow stocks on which small arrow points were fitted for the young Indian children to practice and hunt with. It was never used for bows, however. For the making of fire through friction, it was very useful and yet, this alone would not give an adequate account of the value of arrowwood shrub. This is left to the decoction made from it, to counteract the poison in wounds inflicted by arrowheads in battle engagements, and therein lies its principal claim to the consideration shown it by the Indians.

PHYTOLACCA DECANDRA (Ind. Che-ne-va-ica-cal)

American Ink Berry. This shrub, a common inhabitant of California's coastal regions, has been placed by the white writer in the division of poisonous plants, and we agree with him. So the only credit given the plant is chiefly for the remarkable beauty it displays with its starlike flowers and racemes of dark-blue berries. Yet it has been condemned under the label of poison, and much is being done toward its destruction wherever found. However, it is a fruitless task, and may only become a near-success when the Indians and the birds shall be known as two signs of life vanished from the face of the earth. For these two are responsible for the preservation and propagation of the shrub.

Morphine, opium, and cocaine are by far deadlier poisons than *Phytolacca*—why, then, do doctors prescribe them to soothe and ease pain, etc.? The root of the plant has some medicinal qualities to ease severe neuralgic pains, and is deemed very efficient and important in Indian medical formulas. For making dyes and inks the berries are excellent, whereas the leaves are most useful in the treatment of skin diseases, and to eradicate and clean the epidermis of pimples and blackheads.

Therefore, help to conserve and not destroy this really valuable plant.

Diseases of the liver.

RORIPPA NASTURTIUM OFFICINALE (Ind. Pang-sa-mat)

American Water Cress. It is an inhabitant of the coastal regions, swamps and rivers. This aquatic plant is more deserving of attention than has been given it, and is fully worthy of the name it bears, *Officinale*, which means all that the word implies. The Indians, having discovered the medicinal qualities of this plant, immediately gave it a place in their medical and food division and, up to the present year of our Lord, the plant has been used in the treatment of disorders of the liver—cases such as torpid liver, cirrhosis of the liver and as a dissolvent of gallstones, etc.

When these diseases are curable, the diet is simple—with no restrictions and no red tape to plague the patient. The first meal taken in the morning must consist of *Nasturtium officinale*, salted very sparingly, and of this the patient should eat as much as possible and do without further food until noon, when he may eat whatever he likes. This method must be repeated every morning. Care must be taken not to use liquor if one wishes to insure quick recovery.

When the liver is ulcerated it takes at least two months to heal properly, but all other cases are of short duration.

Reducing teas.

LEPIDIUM EPETALUM (Ind. Chesa-mok-ka-mok)

American Pepper Grass.

SALINIA (*Ind. Cheena-wah*)

American Salt Grass.

PANICUM CAPILLARE (Ind. Ne-wa-cha-mo)

American Witch Grass. The first two are fond of rich, agricultural soils, whereas the latter prefers alkaline lands. All three have been declared noxious weeds and are listed as such by the Department of Agriculture, although the Indians found some use for these grasses.

There were times when some of our men and women became over-fat; in fact, so fat that they had great difficulty in traveling, the exertion making them complain of heart trouble which in reality was nothing but a discomfort due to short respiration caused by excessive fatness. Accordingly, something had to be done. A search was made, and experiments with good results finally obtained. These grasses compounded with the bark of sassafras, wall-wort and others (also named for extermination, just like the three above-named plants) are excellent for reducing purposes.

The chief trouble in our schools where botany is taught seems to be that too much attention is given to the *appearance* of plants, instead of to their medicinal value and other useful properties.

Birth control.

IVA AXILLARIS (Ind. Na-wish-mal)

American Poverty-Weed. This hardy plant predominates on most of the salty marshes and lake shores. It is hardly worth destroying as it mostly grows in soils totally unfit for agriculture, or anything else, for that matter.

Let me mention, however, that there is quite a history connected with the earliest beginning of the Indian's life in connection with this plant. No doubt it will be of interest to the readers of this book to learn that the plant played an important part in what is today assumed to be a modern institution—birth-control.

The Indians knew and practiced it from the earliest times, but only in cases when women proved themselves incapable, even when at their best, to give birth to healthy children.

In such cases they were compelled to make use of this plant as a preventative and this should explain the Indian's wonderful stamina, his sturdiness and perfect physique. Moreover, the great chiefs prohibited the raising of deformed children, as ordinarily they considered this a great sin.

In later years the secret was let out by some Indian women, and thus it found its way among the Spanish and American settlers, when many cases of abortion were due to the use of this herb—a universal practice of modern civilization with its accompanying evils of genocide and other evils of a criminal nature.

Kidney diseases.

CROTON CORYMBOSUS (Ind. O-chot-pa-wish)

Spurge. Its habitat is in the southern Mojave sand dunes. This beautiful shrub, like many of the other desert plants, seems to select the worst of soils to grow in, and is often to be found in crevices of mineralized dykes of crystalline rocks. The infusion made from the plant cured kidney infections.

EPHEDRA (Ind. Tut-tut)

The Tea of the Indian is found in the swamplands of the coastal regions. The infusion made from the leaves and blossoms was taken internally for pleurisy of the kidneys.

An infusion made separately from the roots was also used internally to relieve severe cases of gonorrhea and painful bloating of the stomach. This remedy is very effective and highly esteemed by the Indians as one of the royal plants for the cure of these dangerous ailments, which take the lives of so many of the white race.

APIUM (Ind. Se-ma-mek)

American Parsley. Its habitat is the swamps and coastal regions. The infusion made from this plant was taken regularly and in preference to water or any other beverage for chronic diseases of the kidneys.

The tea is very rich in flavor and pleasant to the taste. The patient should partake of as much as one half gallon per day and also eat an equal amount of it. The plant having been domesticated it is no trouble to get it anywhere. Even butcher shops and vegetable dealers sell it.

XANTHIUM CANADENSE (Ind. Cho-co-late)

American Cocklebur. It grows everywhere in California, being found in every swamp and pasture land—a veritable nuisance to the cattle raiser.

From the medical standpoint, however, the plant is very valuable to the members of both sexes who are suffering from diseased kidneys complicated with gonorrhea, diseases which, when allowed to take their own course, will in due time develop into tuberculosis, rheumatism, and finally total paralysis of both the upper and lower limbs, as has happened in such cases.

The introduction of these maladies occurred with the advent of the white race into our territory and this caused the Indians to go into further botanical research to find the proper plants to combat and conquer these dreadful diseases. I introduce the world in general to two other sister plants, and also three belonging to a different group.

CENTAUREA MELITENSIS (*Ind. Se-sa-naa*)

American Star Thistle.

XANTHIUM SPINOSUM (Ind. O-yu-mo-val)

American Spiny Cocklebur.

MALVACEA RUBRA (Ind. E-ya-wa-manka)

American Creeping Rock Mallow. Spanish Yerba Mora Real.

Venereal diseases.

CERCOCARPUS BETULAEFOLIUS (Ind. Man-geet)

American Mahogany Shrub. Its habitat is in the California hills and mountains, and it is quite common. The bark and roots were made into an infusion and taken by the Indians for venereal diseases or gonorrhea gleet.

CENTUNCULUS (*Ind. Pepe-nel*)

American Pimpernel. Its habitat is on the northern slopes of the highest mountain peaks of California, at an elevation of from eight to ten thousand feet above sea level. This wonder plant is made into a tea and taken in acute cases of gonorrhea, where the bladder and urinal tract fail to function.

EDIBLE FRUITS OF SHRUBS

The plants listed here are common in our California mountains:

Arctostaphylos Manzanita Berry

Sambucus pubens Elderberry
Ribes glutinosum Wild Currant
Ribes amarum Gooseberry

Prunus serotina Wild Black Cherry
Prunus ilicifolia Hollyleaf Cherry

Heteromeles arbutifolia California Holly Berry

Vitis vulpina Wild Grape

Rubus villosus Wild Raspberry
Rhus trilobata Squaw Bush Berry

Rhus integrifolia Lemonade Berry

These berries should be eaten sparingly, as the acidity contained in them is much stronger than that of citric acid. Their chief use is to quench the thirst, where water is scarce in the mountains, either when hunting or hiking, or engaged in fighting forest fires. For this purpose the berries above will be found excellent and a veritable boon. Everyone traveling in desert or mountains should make himself familiar with the plants and fruits growing therein, as this knowledge not only permits him to guard against possible discomfort or hardship, but has also been the means of saving life. The Indians knew that better than anyone else.

No doubt, the following literary effort in the English language by Chief Pablo will set the risibilities of my readers to working. Als, the Chief, never had the benefit of a school education, and English wasn't easy for him to acquire. However, he was game, and in 1908, when he was

appointed Chief of the Indian Reservation, he bravely set to work and wrote this article.

He was sixty-four years old then. Nothing would do but he must have a typewriter. Right manfully he tackled it, but when he had finished he heaved a tremendous sigh and declared he'd rather go on the warpath than pound a typewriter again.

But he surely deserves great credit and his record as Chief of the Indian Police was a brilliant one.

The Legend of Console Mineral Springs near Homuba Canyon

The canyon has been known as Homuba among the Indians for many years. And on that canyon there are three mineral springs. They are located near Loma Linda. It is southeast from Loma Linda, way up in the canyon, a distance of three miles.

Professor J. Console, an Indian friend, is the owner of the mineral springs nowadays. In the early days the Indians called the springs *Phal-poole*, *Phal-quapekalet*, *Hickescah-heppasca*, which means Witch Springs, Life Springs, Sisters and Brother Springs.

Those three springs were discovered in this way. There were Indian settlements all over that country, near the springs and around the springs. One day three Indian children, two sisters and one brother, went up the canyon and disappeared in those springs. The father and mother and other relatives of the missing children followed the tracks of the children until they came to the springs. After having tried everything to find them, the father and mother and the relatives in their sorrow went to the witch-doctors to see if they could help them find the children. Then one witch-doctor said:

"Come with me and I will show you where your children are and how they disappeared in those springs. You may not see them but you will hear them, and you will have to be satisfied."

So the children's family went there and the witch-doctor stopped at the center spring and said:

"Listen to the Great Father who is above us, the Creator of the world. He has taken your boy and put him in this spring, so that this spring will bring health to you and to others."

Then the witch-doctor walked up to the spring and spoke:

"Brother, your father and mother and all the relatives are here, and they would like to hear from you."

Then a voice arose from the spring and said:

"I am here with my two sisters. We were placed here by our Lord, the Creator of the world. He has given me the power to bring new life to those who are sick. You may come and visit me and my sisters whenever you wish. My elder sister is in the spring on the east side of me, and my younger sister in the spring on the west side of me. But we are all three in this one place, and if you will live together and honor the great Lord, when you are sick if you will use these life springs, we will help you get back your health. These springs shall be known as the 'Two Sisters and Brother Life Springs.'"

And all the people listened. Therefore the Indians went up there and held a great ceremony, and from then on they used the springs for medical purposes.

Then the Catholic missionaries came to this country and established the missions. They took the Indian children by

force and made them Catholics. And these Christians also went up to the springs and used them for many years.

Later on the United States Government came to this country and took these lands and gave the Indians reservations for their use. And the Indians had to leave the springs, which originally belonged to them.

When the mission was first built at San Gabriel the priest asked an Indian:

"Why do you Indians take your children, when they are sick, to those springs, instead of taking them to a doctor?"

And the Indian answered:

"Father, the springs at Homuba Canyon can cure any sickness. That is why we take our children there when they are sick, and they are healed. Our ancestors used those springs and became healed."

Then the priest went up to the springs to examine the water, and he took some of the water and made the Indian carry it to the chapel, and he blessed the water, and held Mass with it, and used it to cure the sick. And, finally, the priest moved the mission from San Gabriel to San Bernardino. Old San Bernardino is now known as Redlands. The mission was established there. It is about three miles from the springs. And from there the priest used to send the Indians to bring the waters to the mission, using it as medicine. And he cured many sick Indians.

Now there were two Indian villages nearby, and they fought over the possession of those springs. They went on the warpath over the Two Sisters and Brother Life Springs. So the mission went away and settled elsewhere, and the priest also went away.

Then our white neighbors came, as I said, and drove the Indians from our sacred springs. That is why the Indians are dying out in Southern California, because we must live on worthless lands far away from those springs.

Our white neighbors may think we Indians have no religion, but that is not so. We do believe in God who is the Creator of the world, and of the firmament, of Indians as well as white people.... Therefore we are brothers in God, as we are created by God.

I often hear white people say they are Americans in America, and we are Indians. I say we are the native sons of America. We are good to our country and to our white neighbors, and do not trouble them. When the missions first came to this country the Indians were numerous and the country well inhabited by the Indians. Then the Indians did not know that the country was going to be filled with intoxicating liquor. If they had known that, they would never have allowed the missionaries to establish any missions in this country. For a great number of Indians died of intoxicating liquor.

However, the United States Government made a law prohibiting the sale of intoxicating liquor to the American Indians. But by that time it was too late. The American Indians are nearly all gone. But maybe a few will be saved.

It was in 1908 that special officers suppressed the liquor traffic among the mission Indians in Southern California. The chief of these special officers came to me and asked:

"Why is it that you are always fighting the whites?"

"Because they are all liars, thieves, and whisky peddlers," I answered.

He looked at me and said:

"Am I a liar and a whisky peddler?"

"No," I answered. "You do not look like one. I think you are on the square."

So he said to me:

"I want you to work with me on the same job."

"What job do you mean?" said I.

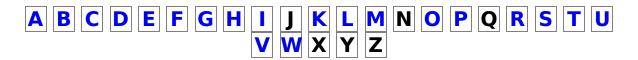
"To suppress the liquor traffic among the mission Indians," he said.

So I was deputized as Special Officer since then, and I became Chief of Police in the Indian Service for nine Indian reservations under the United States Government, to protect the Indians, to make transactions for the Indians, and to help them become sober, improve their morals, and become civilized. In 1847 if the United States Government had sent us a man like Mr. C. T. Coggeshall, who is the superintendent of the nine Indian reservations, the Indians would never have lost the Two Sisters and Brother Life Springs. Mr. Coggeshall is a man with large experience and he has done a lot of good for the Indians under his jurisdiction.

However, I am glad that Mr. John Console owns the springs, because he is a friend of the Indians. He helps the Indians with those springs. The springs cure light sickness, but for serious sickness we have to use herbs.

CHIEF WILLIAM ALS PABLO

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THE BOTANICAL LORE OF THE CALIFORNIA INDIANS

by John Bruno Romero (Ha-Ha-St of Tawee)

Rare Indian lore collected and interpreted by a full-blooded Chu-Mash Indian, who grew up among members of the Cahuilla tribe, is revealed in this unique book. Written by a man who is anxious to share his ancestral knowledge of the treasures in the Great Field of Nature, this volume describes 120 medicinal herbs and gives recipes for their preparation, their uses, their English and Latin names, and where they may be found.

The collection presented here was hand-picked from 500 specimens gathered by the author on a plant-hunting expedition on the Pacific Coast and in Arizona. Only twenty-eight, it is said, are known to modern medical science.

For more than one hundred years, the Indians have kept to themselves their profound knowledge of medicinal herbs and their application. Meanwhile, if the Indian, with his intelligent and extraordinary attachment to nature, had not preserved and replanted a large number of these herbs, many of them would now be extinct.

A close collaborator of the historical department of the Santa Ana Museum in his native California, the author is known as a botanist of such high order that some years back the British Museum sought his assistance in assembling a remarkable collection of Pacific Coast specimens of medicinal herbs and Indian artifacts.

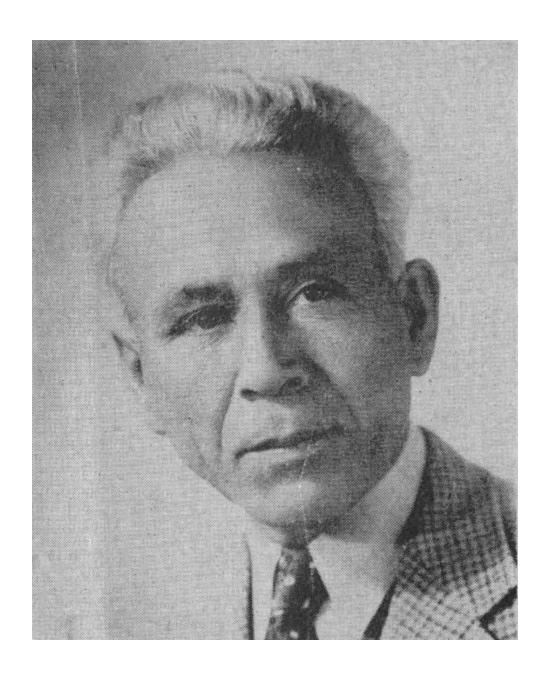
Mr. Romero, whose Indian name is Ha-Ha-St of Tawee, presents his material in highly entertaining manner, and his remarks, some of them *sotto voce*, are extremely apropos. Adding to the color of the book is a wonderful legend written by the author's father, Chief Als Pablo, Chief of Police of the Indian reservations in the Southwest at the turn of the century.

The book is dedicated to the memory of the author's uncle, Chief William Pablo of Guana-pia-pa, medical herbalist and medicine man. It is a unique treasury of authentic Americana, fortunately preserved for our time.



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JOHN BRUNO ROMERO



John Bruno Romero is a descendant of the Chu-Mash, once the largest and most powerful of Indian tribes, whose domain included all the islands along the California Coast, and, on the mainland, from the San Fernando Mission northwest to San Francisco and north-northwest to the High Sierras.

Mr. Romero was born in Santa Barbara, where he studied Spanish and Latin at the Franciscan School Mission, and attended the Sherman Institute, where he was a student of English and scientific subjects. He was later graduated from the Detroit Veterinarian College.

At one time, the Cahuilla Indians controlled the lands of California southward to the end of what is now the Mexican peninsula. When the Chu-Mash tribe, in its later years, had dwindled in numbers, Mr. Romero joined the Cahuilla tribe "to help fight the United States Government for our land treaty rights." Today this tribe is the second oldest in California and the strongest in membership.

The author's interests are wide. He is a director of Indian Affairs for seven Southern California counties, and while his principal hobby is medicinal botany, he is also a collector of minerals, stamps, books, and fossils, and dabbles in taxidermy. Fond of children, he has adopted and reared ten orphans. At one time or another, he has worked as a surveyor, explorer, geologist, and antho-botanist, and his home is a veritable treasure trove of interesting archaeological, geological, and botanical specimens which he has collected in the mountains and deserts of Southern California and Arizona—in sections where the white man has seldom traveled.

In 1933 he discovered, in the Trabuco Hills, in Orange County, near Los Angeles, the skeleton of a mastodon, one of the few uncovered in Southern California. Paleontologists at the Los Angeles Museum made varying estimates of the age of the bones, ranging from ten thousand to a million years.

In 1937, when the author was a junior geologist at the Santa Ana Museum, he deciphered the hieroglyphics inscribed on some rocks found on the Indian prayer grounds at the peak of a volcanic vent in La Piomosa range in Arizona, which have been instrumental in providing historical information about the life of the early Indians in the Southwest. The inscriptions revealed the location of food and water in the surrounding country and primitive conceptions of the supernatural.

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The Sacred Formulas of the Cherokees

Seventh Annual Report of the Bureau of Ethnology to the Secretary of the

James Mooney



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Title: The Sacred Formulas of the Cherokees
Seventh Annual Report of the Bureau of Ethnology to the
Secretary of the Smithsonian Institution, 1885-1886,
Government Printing Office, Washington, 1891, pages 301-398

Author: James Mooney

Release Date: March 9, 2008 [EBook #24788]

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THE

SACRED FORMULAS OF THE CHEROKEES.

JAMES MOONEY.

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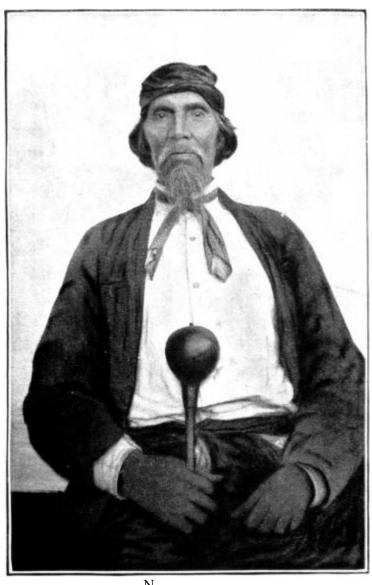
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SEVENTH ANNUAL REPORT

PL. XXIV

BUREAU OF

ETHNOLOGY



A'YU^NINI (SWIMMER).

SACRED FORMULAS OF THE CHEROKEES.

By James Mooney.

INTRODUCTION.

The sacred formulas here given are selected from a collection of about six hundred, obtained on the Cherokee reservation in North Carolina in 1887 and 1888, and covering every subject pertaining to the daily life and thought of the Indian, including medicine, love, hunting, fishing, war, self-protection, destruction of enemies, witchcraft, the crops, the council, the ball play, etc., and, in fact, embodying almost the whole of the ancient religion of the Cherokees. The original manuscripts, now in the possession of the Bureau of Ethnology, were written by the shamans of the tribe, for their own use, in the Cherokee characters invented by Sikwâ'ya (Sequoyah) in 1821, and were obtained, with the explanations, either from the writers themselves or from their surviving relatives.

Some of these manuscripts are known to be at least thirty years old, and many are probably older. The medical formulas of all kinds constitute perhaps one-half of the whole number, while the love charms come next in number, closely followed by the songs and prayers used in hunting and fishing. The great number of love charms will doubtless be a surprise to those who have been educated in the old theory that the Indian is insensible to the attractions of woman. The comparatively small number of war formulas is explained by the fact that the last war in which the Cherokees, as a tribe, were engaged on their own account, closed with the Revolutionary period, so that these things were well nigh forgotten before the invention of the alphabet, a generation later. The Cherokees who engaged in the Creek war and the late American civil war fought in the interests of the whites, and their leaders were subordinated to white officers, hence there was not the same opportunity for the exercise of shamanistic rites that there would have been had Indians alone been concerned. The prayers for hunting, fishing, and the ball play being in more constant demand, have been better preserved.

These formulas had been handed down orally from a remote antiquity until the early part of the present century, when the invention of the Cherokee syllabary enabled the priests of the tribe to put them into writing. The same invention made it possible for their rivals, the missionaries, to give to the Indians the Bible in their own language, so that the opposing forces of Christianity and shamanism alike profited by the genius of Sikwâya. The pressure of the new civilization was too strong to be withstood, however, and though the prophets of the old religion still have much influence with the people, they are daily losing ground and will soon be without honor in their own country.

Such an exposition of the aboriginal religion could be obtained from no other tribe in North America, for the simple reason that no other tribe has an alphabet of its own in which to record its sacred lore. It is true that the Crees and Micmacs of Canada and the Tukuth of Alaska have so-called alphabets or ideographic systems invented for their use by the missionaries, while, before the Spanish conquest, the Mayas of Central America were accustomed to note down their hero legends and priestly ceremonials in hieroglyphs graven upon the walls of their temples or painted upon tablets made of the leaves of the maguey. But it seems never to have occurred to the northern tribes that an alphabet coming from a missionary source could be used for any other purpose than the transcription of bibles and catechisms, while the sacred books of the Mayas, with a few exceptions, have long since met destruction at the hands of fanaticism, and the modern copies which have come down to the present day are written out from imperfect memory by Indians who had been educated under Spanish influences in the language, alphabet and ideas of the conquerors, and who, as is proved by an examination of the contents of the books themselves, drew from European sources a great part of their material. Moreover, the Maya tablets were so far hieratic as to be understood only by the priests and those who had received a special training in this direction, and they seem therefore to have been entirely unintelligible to the common people.

The Cherokee alphabet, on the contrary, is the invention or adaptation of one of the tribe, who, although he borrowed most of the Roman letters, in addition to the forty or more characters of his own devising, knew nothing of their proper use or value, but reversed them or altered their forms to suit his purpose, and gave them a name and value determined by himself. This alphabet was at once adopted by the tribe for all purposes for which writing can be used, including the recording of their shamanistic prayers and ritualistic ceremonies. The formulas here given, as well as those of the entire collection, were written out by the shamans themselves—men who

adhere to the ancient religion and speak only their native language—in order that their sacred knowledge might be preserved in a systematic manner for their mutual benefit. The language, the conception, and the execution are all genuinely Indian, and hardly a dozen lines of the hundreds of formulas show a trace of the influence of the white man or his religion. The formulas contained in these manuscripts are not disjointed fragments of a system long since extinct, but are the revelation of a living faith which still has its priests and devoted adherents, and it is only necessary to witness a ceremonial ball play, with its fasting, its going to water, and its mystic bead manipulation, to understand how strong is the hold which the old faith yet has upon the minds even of the younger generation. The numerous archaic and figurative expressions used require the interpretation of the priests, but, as before stated, the alphabet in which they are written is that in daily use among the common people.

In all tribes that still retain something of their ancient organization we find this sacred knowledge committed to the keeping of various secret societies, each of which has its peculiar ritual with regular initiation and degrees of advancement. From this analogy we may reasonably conclude that such was formerly the case with the Cherokees also, but by the breaking down of old customs consequent upon their long contact with the whites and the voluntary adoption of a civilized form of government in 1827, all traces of such society organization have long since disappeared, and at present each priest or shaman is isolated and independent, sometimes confining himself to a particular specialty, such as love or medicine, or even the treatment of two or three diseases, in other cases broadening his field of operations to include the whole range of mystic knowledge.

It frequently happens, however, that priests form personal friendships and thus are led to divulge their secrets to each other for their mutual advantage. Thus when one shaman meets another who he thinks can probably give him some valuable information, he says to him, "Let us sit down together." This is understood by the other to mean, "Let us tell each other our secrets." Should it seem probable that the seeker after knowledge can give as much as he receives, an agreement is generally arrived at, the two retire to some convenient spot secure from observation, and the first party begins by reciting one of his formulas with the explanations. The other then

reciprocates with one of his own, unless it appears that the bargain is apt to prove a losing one, in which case the conference comes to an abrupt ending.

It is sometimes possible to obtain a formula by the payment of a coat, a quantity of cloth, or a sum of money. Like the Celtic Druids of old, the candidate for the priesthood in former times found it necessary to cultivate a long memory, as no formula was repeated more than once for his benefit. It was considered that one who failed to remember after the first hearing was not worthy to be accounted a shaman. This task, however, was not so difficult as might appear on first thought, when once the learner understood the theory involved, as the formulas are all constructed on regular principles, with constant repetition of the same set of words. The obvious effect of such a regulation was to increase the respect in which this sacred knowledge was held by restricting it to the possession of a chosen few.

Although the written formulas can be read without difficulty by any Cherokee educated in his own language, the shamans take good care that their sacred writings shall not fall into the hands of the laity or of their rivals in occult practices, and in performing the ceremonies the words used are uttered in such a low tone of voice as to be unintelligible even to the one for whose benefit the formula is repeated. Such being the case, it is in order to explain how the formulas collected were obtained.

HOW THE FORMULAS WERE OBTAINED.

On first visiting the reservation in the summer of 1887, I devoted considerable time to collecting plants used by the Cherokees for food or medicinal purposes, learning at the same time their Indian names and the particular uses to which each was applied and the mode of preparation. It soon became evident that the application of the medicine was not the whole, and in fact was rather the subordinate, part of the treatment, which was always accompanied by certain ceremonies and "words." From the workers employed at the time no definite idea could be obtained as to the character of these words. One young woman, indeed, who had some knowledge of the subject, volunteered to write the words which she used in her prescriptions, but failed to do so, owing chiefly to the opposition of the half-breed shamans, from whom she had obtained her information.

THE SWIMMER MANUSCRIPT.

Some time afterward an acquaintance was formed with a man named A'yûⁿ 'ini or "Swimmer," who proved to be so intelligent that I spent several days with him, procuring information in regard to myths and old customs. He told a number of stories in very good style, and finally related the Origin of the Bear¹. The bears were formerly a part of the Cherokee tribe who decided to leave their kindred and go into the forest. Their friends followed them and endeavored to induce them to return, but the Ani-Tsâ'kahĭ, as they were called, were determined to go. Just before parting from their relatives at the edge of the forest, they turned to them and said, "It is better for you that we should go; but we will teach you songs, and some day when you are in want of food come out to the woods and sing these songs and we shall appear and give you meat." Their friends, after learning several songs from them, started back to their homes, and after proceeding a short distance, turned around to take one last look, but saw only a number of bears disappearing in the depths of the forest. The songs which they learned are still sung by the hunter to attract the bears.

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FACSIMILE OF GAHUNI MANUSCRIPT.
Formula for Didùⁿlĕckĭ. (Page 349.)

When Swimmer had finished the story he was asked if he knew these songs. He replied that he did, but on being requested to sing one he made some excuse and was silent. After some further efforts the interpreter said it would be useless to press the matter then as there were several other Indians present, but that to-morrow we should have him alone with us and could then make another attempt.

The next day Swimmer was told that if he persisted in his refusal it would be necessary to employ some one else, as it was unfair in him to furnish incomplete information when he was paid to tell all he knew. He replied that he was willing to tell anything in regard to stories and customs, but that these songs were a part of his secret knowledge and commanded a high price from the hunters, who sometimes paid as much as \$5 for a single song, "because you can't kill any bears or deer unless you sing them."

He was told that the only object in asking about the songs was to put them on record and preserve them, so that when he and the half dozen old men of the tribe were dead the world might be aware how much the Cherokees had known. This appeal to his professional pride proved effectual, and when he was told that a great many similar songs had been sent to Washington by medicine men of other tribes, he promptly declared that he knew as much as any of them, and that he would give all the information in his possession, so that others might be able to judge for themselves who knew most. The only conditions he made were that these secret matters should be heard by no one else but the interpreter, and should not be discussed when other Indians were present.

As soon as the other shamans learned what was going on they endeavored by various means to persuade him to stop talking, or failing in this, to damage his reputation by throwing out hints as to his honesty or accuracy of statement. Among other objections which they advanced was one which, however incomprehensible to a white man, was perfectly intelligible to an Indian, viz: That when he had told everything this information would be taken to Washington and locked up there, and thus they would be deprived of the knowledge. This objection was one of the most difficult to overcome, as there was no line of argument with which to oppose it.

These reports worried Swimmer, who was extremely sensitive in regard to his reputation, and he became restive under the insinuations of his rivals. Finally on coming to work one day he produced a book from under his ragged coat as he entered the house, and said proudly: "Look at that and now see if I don't know something." It was a small day-book of about 240 pages, procured originally from a white man, and was about half filled with writing in the Cherokee characters. A brief examination disclosed the fact that it contained just those matters that had proved so difficult to procure. Here were prayers, songs, and prescriptions for the cure of all kinds of diseases—for chills, rheumatism, frostbites, wounds, bad dreams, and witchery; love charms, to gain the affections of a woman or to cause her to

hate a detested rival; fishing charms, hunting charms—including the songs without which none could ever hope to kill any game; prayers to make the corn grow, to frighten away storms, and to drive off witches; prayers for long life, for safety among strangers, for acquiring influence in council and success in the ball play. There were prayers to the Long Man, the Ancient White, the Great Whirlwind, the Yellow Rattlesnake, and to a hundred other gods of the Cherokee pantheon. It was in fact an Indian ritual and pharmacopæia.

After recovering in a measure from the astonishment produced by this discovery I inquired whether other shamans had such books. "Yes," said Swimmer, "we all have them." Here then was a clew to follow up. A bargain was made by which he was to have another blank book into which to copy the formulas, after which the original was bought. It is now deposited in the library of the Bureau of Ethnology. The remainder of the time until the return was occupied in getting an understanding of the contents of the book.

THE GATIGWANASTI MANUSCRIPT.

Further inquiry elicited the names of several others who might be supposed to have such papers. Before leaving a visit was paid to one of these, a young man named Wilnoti, whose father, Gatigwanasti, had been during his lifetime a prominent shaman, regarded as a man of superior intelligence. Wilnoti, who is a professing Christian, said that his father had had such papers, and after some explanation from the chief he consented to show them. He produced a box containing a lot of miscellaneous papers, testaments, and hymnbooks, all in the Cherokee alphabet. Among them was his father's chief treasure, a manuscript book containing 122 pages of foolscap size, completely filled with formulas of the same kind as those contained in Swimmer's book. There were also a large number of loose sheets, making in all nearly 200 foolscap pages of sacred formulas.

On offering to buy the papers, he replied that he wanted to keep them in order to learn and practice these things himself—thus showing how thin was the veneer of Christianity, in his case at least. On representing to him that in a few years the new conditions would render such knowledge

valueless with the younger generation, and that even if he retained the papers he would need some one else to explain them to him, he again refused, saying that they might fall into the hands of Swimmer, who, he was determined, should never see his father's papers. Thus the negotiations came to an end for the time.

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FACSIMILE OF SWIMMER MANUSCRIPT.

Formula for Dalàni Ùⁿnagei (Page <u>364</u>.)

On returning to the reservation in July, 1888, another effort was made to get possession of the Gatigwanasti manuscripts and any others of the same kind which could be procured. By this time the Indians had had several months to talk over the matter, and the idea had gradually dawned upon them that instead of taking their knowledge away from them and locking it up in a box, the intention was to preserve it to the world and pay them for it at the same time. In addition the writer took every opportunity to impress upon them the fact that he was acquainted with the secret knowledge of other tribes and perhaps could give them as much as they gave. It was now much easier to approach them, and on again visiting Wilnoti, in company with the interpreter, who explained the matter fully to him, he finally consented to lend the papers for a time, with the same condition that neither Swimmer nor anyone else but the chief and interpreter should see them, but he still refused to sell them. However, this allowed the use of the papers, and after repeated efforts during a period of several weeks, the matter ended in the purchase of the papers outright, with unreserved permission to show them for copying or explanation to anybody who might be selected. Wilnoti was not of a mercenary disposition, and after the first negotiations the chief difficulty was to overcome his objection to parting with his father's handwriting, but it was an essential point to get the originals, and he was allowed to copy some of the more important formulas, as he found it utterly out of the question to copy the whole.

These papers of Gatigwanasti are the most valuable of the whole, and amount to fully one-half the entire collection, about fifty pages consisting of love charms. The formulas are beautifully written in bold Cherokee characters, and the directions and headings are generally explicit, bearing out the universal testimony that he was a man of unusual intelligence and ability, characteristics inherited by his son, who, although a young man and speaking no English, is one of the most progressive and thoroughly reliable men of the band.

THE GAHUNI MANUSCRIPT.

The next book procured was obtained from a woman named Ayâsta, "The Spoiler," and had been written by her husband, Gahuni, who died about 30 years ago. The matter was not difficult to arrange, as she had already been

employed on several occasions, so that she understood the purpose of the work, besides which her son had been regularly engaged to copy and classify the manuscripts already procured. The book was claimed as common property by Ayâsta and her three sons, and negotiations had to be carried on with each one, although in this instance the cash amount involved was only half a dollar, in addition to another book into which to copy some family records and personal memoranda. The book contains only eight formulas, but these are of a character altogether unique, the directions especially throwing a curious light on Indian beliefs. There had been several other formulas of the class called Y'û'nwěhĭ, to cause hatred between man and wife, but these had been torn out and destroyed by Ayâsta on the advice of an old shaman, in order that her sons might never learn them. In referring to the matter she spoke in a whisper, and it was evident enough that she had full faith in the deadly power of these spells.

In addition to the formulas the book contains about twenty pages of Scripture extracts in the same handwriting, for Gahuni, like several others of their shamans, combined the professions of Indian conjurer and Methodist preacher. After his death the book fell into the hands of the younger members of the family, who filled it with miscellaneous writings and scribblings. Among other things there are about seventy pages of what was intended to be a Cherokee-English pronouncing dictionary, probably written by the youngest son, already mentioned, who has attended school, and who served for some time as copyist on the formulas. This curious Indian production, of which only a few columns are filled out, consists of a list of simple English words and phrases, written in ordinary English script, followed by Cherokee characters intended to give the approximate pronunciation, together with the corresponding word in the Cherokee language and characters. As the language lacks a number of sounds which are of frequent occurrence in English, the attempts to indicate the pronunciation sometimes give amusing results. Thus we find: Fox (English script); kwâgisĭ' (Cherokee characters); tsú'lû' (Cherokee characters). As the Cherokee language lacks the labial f and has no compound sound equivalent to our x, kwâgisĭ' is as near as the Cherokee speaker can come to pronouncing our word fox. In the same way "bet" becomes wětĭ, and "sheep" is sikwi, while "if he has no dog" appears in the disguise of ikwi hâsĭ nâ dâ'ga.

THE INÂLI MANUSCRIPT.

In the course of further inquiries in regard to the whereabouts of other manuscripts of this kind we heard a great deal about Inâ'lĭ, or "Black Fox," who had died a few years before at an advanced age, and who was universally admitted to have been one of their most able men and the most prominent literary character among them, for from what has been said it must be sufficiently evident that the Cherokees have their native literature and literary men. Like those already mentioned, he was a full-blood Cherokee, speaking no English, and in the course of a long lifetime he had filled almost every position of honor among his people, including those of councilor, keeper of the townhouse records, Sunday-school leader, conjurer, officer in the Confederate service, and Methodist preacher, at last dying, as he was born, in the ancient faith of his forefathers.

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FACSIMILE OF GATIGWANASTI MANUSCRIPT. Yugwilû' formula. (Page <u>375</u>.)

On inquiring of his daughter she stated that her father had left a great many papers, most of which were still in her possession, and on receiving from the interpreter an explanation of our purpose she readily gave permission to examine and make selections from them on condition that the matter should be kept secret from outsiders. A day was appointed for visiting her, and on arriving we found her living in a comfortable log house, built by Inâlĭ himself, with her children and an ancient female relative, a decrepit old woman with snow-white hair and vacant countenance. This was the oldest woman of the tribe, and though now so feeble and childish, she had been a veritable savage in her young days, having carried a scalp in the scalp dance in the Creek war 75 years before.

Having placed chairs for us in the shade Inâli's daughter brought out a small box filled with papers of various kinds, both Cherokee and English. The work of examining these was a tedious business, as each paper had to be opened out and enough of it read to get the general drift of the contents, after which the several classes were arranged in separate piles. While in the midst of this work she brought out another box nearly as large as a small trunk, and on setting it down there was revealed to the astonished gaze such a mass of material as it had not seemed possible could exist in the entire tribe.

In addition to papers of the sort already mentioned there were a number of letters in English from various officials and religious organizations, and addressed to "Enola," to "Rev. Black Fox," and to "Black Fox, Esq," with a large number of war letters written to him by Cherokees who had enlisted in the Confederate service. These latter are all written in the Cherokee characters, in the usual gossipy style common among friends, and several of them contain important historic material in regard to the movements of the two armies in East Tennessee. Among other things was found his certificate as a Methodist preacher, dated in 1848. "Know all men by these presents that Black Fox (Cherokee) is hereby authorized to exercise his Gifts and Graces as a local preacher in M.E. Church South."

There was found a manuscript book in Inâli's handwriting containing the records of the old council of Wolftown, of which he had been secretary for several years down to the beginning of the war. This also contains some valuable materials.

There were also a number of miscellaneous books, papers, and pictures, together with various trinkets and a number of conjuring stones.

In fact the box was a regular curiosity shop, and it was with a feeling akin, to despair that we viewed the piles of manuscript which had to be waded through and classified. There was a day's hard work ahead, and it was already past noon; but the woman was not done yet, and after rummaging about inside the house for a while longer she appeared with another armful of papers, which she emptied on top of the others. This was the last straw; and finding it impossible to examine in detail such a mass of material we contented ourselves with picking out the sacred formulas and the two

manuscript books containing the town-house records and scriptural quotations and departed.

The daughter of Black Fox agreed to fetch down the other papers in a few days for further examination at our leisure; and she kept her promise, bringing with her at the same time a number of additional formulas which she had not been able to obtain before. A large number of letters and other papers were selected from the miscellaneous lot, and these, with the others obtained from her, are now deposited also with the Bureau of Ethnology. Among other things found at this house were several beads of the old shell wampum, of whose use the Cherokees have now lost even the recollection. She knew only that they were very old and different from the common beads, but she prized them as talismans, and firmly refused to part with them.

OTHER MANUSCRIPTS.

Subsequently a few formulas were obtained from an old shaman named Tsiskwa or "Bird," but they were so carelessly written as to be almost worthless, and the old man who wrote them, being then on his dying bed, was unable to give much help in the matter. However, as he was anxious to tell what he knew an attempt was made to take down some formulas from his dictation. A few more were obtained in this way but the results were not satisfactory and the experiment was abandoned. About the same time A'wani'ta or "Young Deer," one of their best herb doctors, was engaged to collect the various plants used in medicine and describe their uses. While thus employed he wrote in a book furnished him for the purpose a number of formulas used by him in his practice, giving at the same time a verbal explanation of the theory and ceremonies. Among these was one for protection in battle, which had been used by himself and a number of other Cherokees in the late war. Another doctor named Takwati'hi or "Catawba Killer," was afterward employed on the same work and furnished some additional formulas which he had had his son write down from his dictation. he himself being unable to write. His knowledge was limited to the practice of a few specialties, but in regard to these his information was detailed and accurate. There was one for bleeding with the cupping horn. All these formulas obtained from Tsiskwa, A'wanita, and <u>Takwtihi</u> are now in possession of the Bureau.

THE KANÂHETA ANI-TSALAGI ETI.

Among the papers thus obtained was a large number which for various reasons it was found difficult to handle or file for preservation. Many of them had been written so long ago that the ink had almost faded from the paper; others were written with lead pencil, so that in handling them the characters soon became blurred and almost illegible; a great many were written on scraps of paper of all shapes and sizes; and others again were full of omissions and doublets, due to the carelessness of the writer, while many consisted simply of the prayer, with nothing in the nature of a heading or prescription to show its purpose.

Under the circumstances it was deemed expedient to have a number of these formulas copied in more enduring form. For this purpose it was decided to engage the services of Ayasta's youngest son, an intelligent young man about nineteen years of age, who had attended school long enough to obtain a fair acquaintance with English in addition to his intimate knowledge of Cherokee. He was also gifted with a ready comprehension, and from his mother and uncle Tsiskwa had acquired some familiarity with many of the archaic expressions used in the sacred formulas. He was commonly known as "Will West," but signed himself W.W. Long, Long being the translation of his father's name, Gûnahi'ta. After being instructed as to how the work should be done with reference to paragraphing, heading, etc., he was furnished a blank book of two hundred pages into which to copy such formulas as it seemed desirable to duplicate. He readily grasped the idea and in the course of about a month, working always under the writer's personal supervision, succeeded in completely filling the book according to the plan outlined. In addition to the duplicate formulas he wrote down a number of dance and drinking songs, obtained originally from A'yûn'inĭ, with about thirty miscellaneous formulas obtained from various sources. The book thus prepared is modeled on the plan of an ordinary book, with headings, table of contents, and even with an illuminated title page devised by the aid of the interpreter according to the regular Cherokee idiomatic form, and is altogether a unique specimen of Indian literary art. It contains in all two hundred and fifty-eight formulas and songs, which of course are native aboriginal productions, although the mechanical arrangement was performed under the direction of a white man. This book also, under its Cherokee title, *Kanâhe'ta Ani-Tsa'lagĭ E'tĭ* or "Ancient Cherokee Formulas," is now in the library of the Bureau.

There is still a considerable quantity of such manuscript in the hands of one or two shamans with whom there was no chance for negotiating, but an effort will be made to obtain possession of these on some future visit, should opportunity present. Those now in the Bureau library comprised by far the greater portion of the whole quantity held by the Indians, and as only a small portion of this was copied by the owners it can not be duplicated by any future collector.

CHARACTER OF THE FORMULAS—THE CHEROKEE RELIGION.

It is impossible to overestimate the ethnologic importance of the materials thus obtained. They are invaluable as the genuine production of the Indian mind, setting forth in the clearest light the state of the aboriginal religion before its contamination by contact with the whites. To the psychologist and the student of myths they are equally precious. In regard to their linguistic value we may quote the language of Brinton, speaking of the sacred books of the Mayas, already referred to:

Another value they have,... and it is one which will be properly appreciated by any student of languages. They are, by common consent of all competent authorities, the genuine productions of native minds, cast in the idiomatic forms of the native tongue by those born to its use. No matter how fluent a foreigner becomes in a language not his own, he can never use it as does one who has been familiar with it from childhood. This general maxim is tenfold true when we apply it to a European learning an American language. The flow of thought, as exhibited in these two linguistic families, is in such different directions that no amount of practice can render one equally accurate in both. Hence the importance of studying a tongue as it is employed by natives; and hence the very high estimate I place on these "Books of

Chilan Balam" as linguistic material—an estimate much increased by the great rarity of independent compositions in their own tongues by members of the native races of this continent.²

The same author, in speaking of the internal evidences of authenticity contained in the Popol Vuh, the sacred book of the Kichés, uses the following words, which apply equally well to these Cherokee formulas:

To one familiar with native American myths, this one bears undeniable marks of its aboriginal origin. Its frequent puerilities and inanities, its generally low and coarse range of thought and expression, its occasional loftiness of both, its strange metaphors and the prominence of strictly heathen names and potencies, bring it into unmistakable relationship to the true native myth.³

These formulas furnish a complete refutation of the assertion so frequently made by ignorant and prejudiced writers that the Indian had no religion excepting what they are pleased to call the meaning less mummeries of the medicine man. This is the very reverse of the truth. The Indian is essentially religious and contemplative, and it might almost be said that every act of his life is regulated and determined by his religious belief. It matters not that some may call this superstition. The difference is only relative. The religion of to-day has developed from the cruder superstitions of yesterday, and Christianity itself is but an outgrowth and enlargement of the beliefs and ceremonies which have been preserved by the Indian in their more ancient form. When we are willing to admit that the Indian has a religion which he holds sacred, even though it be different from our own, we can then admire the consistency of the theory, the particularity of the ceremonial and the beauty of the expression. So far from being a jumble of crudities, there is a wonderful completeness about the whole system which is not surpassed even by the ceremonial religions of the East. It is evident from a study of these formulas that the Cherokee Indian was a polytheist and that the spirit world was to him only a shadowy counterpart of this. All his prayers were for temporal and tangible blessings—for health, for long life, for success in the chase, in fishing, in war and in love, for good crops, for protection and for revenge. He had no Great Spirit, no happy hunting ground, no heaven, no hell, and consequently death had for him no terrors

and he awaited the inevitable end with no anxiety as to the future. He was careful not to violate the rights of his tribesman or to do injury to his feelings, but there is nothing to show that he had any idea whatever of what is called morality in the abstract.

As the medical formulas are first in number and importance it may be well, for the better understanding of the theory involved, to give the Cherokee account of

THE ORIGIN OF DISEASE AND MEDICINE.

In the old days quadrupeds, birds, fishes, and insects could all talk, and they and the human race lived together in peace and friendship. But as time went on the people increased so rapidly that their settlements spread over the whole earth and the poor animals found themselves beginning to be cramped for room. This was bad enough, but to add to their misfortunes man invented bows, knives, blowguns, spears, and hooks, and began to slaughter the larger animals, birds and fishes for the sake of their flesh or their skins, while the smaller creatures, such as the frogs and worms, were crushed and trodden upon without mercy, out of pure carelessness or contempt. In this state of affairs the animals resolved to consult upon measures for their common safety.

The bears were the first to meet in council in their townhouse in Kuwa'hĭ, the "Mulberry Place," and the old White Bear chief presided. After each in turn had made complaint against the way in which man killed their friends, devoured their flesh and used their skins for his own adornment, it was unanimously decided to begin war at once against the human race. Some one asked what weapons man used to accomplish their destruction. "Bows and arrows, of course," cried all the bears in chorus. "And what are they made of?" was the next question. "The bow of wood and the string of our own entrails," replied one of the bears. It was then proposed that they make a bow and some arrows and see if they could not turn man's weapons against himself. So one bear got a nice piece of locust wood and another sacrificed himself for the good of the rest in order to furnish a piece of his entrails for the string. But when everything was ready and the first bear stepped up to make the trial it was found that in letting the arrow fly after

drawing back the bow, his long claws caught the string and spoiled the shot. This was annoying, but another suggested that he could overcome the difficulty by cutting his claws, which was accordingly done, and on a second trial it was found that the arrow went straight to the mark. But here the chief, the old White Bear, interposed and said that it was necessary that they should have long claws in order to be able to climb trees. "One of us has already died to furnish the bowstring, and if we now cut off our claws we shall all have to starve together. It is better to trust to the teeth and claws which nature has given us, for it is evident that man's weapons were not intended for us."

No one could suggest any better plan, so the old chief dismissed the council and the bears dispersed to their forest haunts without having concerted any means for preventing the increase of the human race. Had the result of the council been otherwise, we should now be at war with the bears, but as it is the hunter does not even ask the bear's pardon when he kills one.

The deer next held a council under their chief, the Little Deer, and after some deliberation resolved to inflict rheumatism upon every hunter who should kill one of their number, unless he took care to ask their pardon for the offense. They sent notice of their decision to the nearest settlement of Indians and told them at the same time how to make propitiation when necessity forced them to kill one of the deer tribe. Now, whenever the hunter brings down a deer, the Little Deer, who is swift as the wind and can not be wounded, runs quickly up to the spot and bending over the blood stains asks the spirit of the deer if it has heard the prayer of the hunter for pardon. If the reply be "Yes" all is well and the Little Deer goes on his way, but if the reply be in the negative he follows on the trail of the hunter, guided by the drops of blood on the ground, until he arrives at the cabin in the settlement, when the Little Deer enters invisibly and strikes the neglectful hunter with rheumatism, so that he is rendered on the instant a helpless cripple. No hunter who has regard for his health ever fails to ask pardon of the deer for killing it, although some who have not learned the proper formula may attempt to turn aside the Little Deer from his pursuit by building a fire behind them in the trail.

Next came the fishes and reptiles, who had their own grievances against humanity. They held a joint council and determined to make their victims dream of snakes twining about them in slimy folds and blowing their fetid breath in their faces, or to make them dream of eating raw or decaying fish, so that they would lose appetite, sicken, and die. Thus it is that snake and fish dreams are accounted for.

Finally the birds, insects, and smaller animals came together for a like purpose, and the Grubworm presided over the deliberations. It was decided that each in turn should express an opinion and then vote on the question as to whether or not man should be deemed guilty. Seven votes were to be sufficient to condemn him. One after another denounced man's cruelty and injustice toward the other animals and voted in favor of his death. The Frog (walâ'sĭ) spoke first and said: "We must do something to check the increase of the race or people will become so numerous that we shall be crowded from off the earth. See how man has kicked me about because I'm ugly, as he says, until my back is covered with sores;" and here he showed the spots on his skin. Next came the Bird (tsi'skwa; no particular species is indicated), who condemned man because "he burns my feet off," alluding to the way in which the hunter barbecues birds by impaling them on a stick set over the fire, so that their feathers and tender feet are singed and burned. Others followed in the same strain. The Ground Squirrel alone ventured to say a word in behalf of man, who seldom hurt him because he was so small; but this so enraged the others that they fell upon the Ground Squirrel and tore him with their teeth and claws, and the stripes remain on his back to this day.

The assembly then began to devise and name various diseases, one after another, and had not their invention finally failed them not one of the human race would have been able to survive. The Grubworm in his place of honor hailed each new malady with delight, until at last they had reached the end of the list, when some one suggested that it be arranged so that menstruation should sometimes prove fatal to woman. On this he rose up in his place and cried: "Wata'n Thanks! I'm glad some of them will die, for they are getting so thick that they tread on me." He fairly shook with joy at the thought, so that he fell over backward and could not get on his feet

again, but had to wriggle off on his back, as the Grubworm has done ever since.

When the plants, who were friendly to man, heard what had been done by the animals, they determined to defeat their evil designs. Each tree, shrub, and herb, down, even to the grasses and mosses, agreed to furnish a remedy for some one of the diseases named, and each said: "I shall appear to help man when he calls upon me in his need." Thus did medicine originate, and the plants, every one of which has its use if we only knew it, furnish the antidote to counteract the evil wrought by the revengeful animals. When the doctor is in doubt what treatment to apply for the relief of a patient, the spirit of the plant suggests to him the proper remedy.

THEORY OF DISEASE—ANIMALS, GHOSTS, WITCHES.

Such is the belief upon which their medical practice is based, and whatever we may think of the theory it must be admitted that the practice is consistent in all its details with the views set forth in the myth. Like most primitive people the Cherokees believe that disease and death are not natural, but are due to the evil influence of animal spirits, ghosts, or witches. Haywood, writing in 1823, states on the authority of two intelligent residents of the Cherokee nation:

In ancient times the Cherokees had no conception of anyone dying a natural death. They universally ascribed the death of those who perished by disease to the intervention or agency of evil spirits and witches and conjurers who had connection with the Shina (Anisgi'na) or evil spirits.... A person dying by disease and charging his death to have been procured by means of witchcraft or spirits, by any other person, consigns that person to inevitable death. They profess to believe that their conjurations have no effect upon white men.⁵

On the authority of one of the same informants, he also mentions the veneration which "their physicians have for the numbers four and seven, who say that after man was placed upon the earth four and seven nights were instituted for the cure of diseases in the human body and the seventh night as the limit for female impurity."

Viewed from a scientific standpoint, their theory and diagnosis are entirely wrong, and consequently we can hardly expect their therapeutic system to be correct. As the learned Doctor Berendt states, after an exhaustive study of the medical books of the Mayas, the scientific value of their remedies is "next to nothing." It must be admitted that many of the plants used in their medical practice possess real curative properties, but it is equally true that many others held in as high estimation are inert. It seems probable that in the beginning the various herbs and other plants were regarded as so many fetiches and were selected from some fancied connection with the disease animal, according to the idea known to modern folklorists as the doctrine of signatures. Thus at the present day the doctor puts into the decoction intended as a vermifuge some of the red fleshy stalks of the common purslane or chickweed (Portulaca oleracea), because these stalks somewhat resemble worms and consequently must have some occult influence over worms. Here the chickweed is a fetich precisely as is the flint arrow head which is put into the same decoction, in order that in the same mysterious manner its sharp cutting qualities may be communicated to the liquid and enable it to cut the worms into pieces. In like manner, biliousness is called by the Cherokees dalâ'nĭ or "yellow," because the most apparent symptom of the disease is the vomiting by the patient of the yellow bile, and hence the doctor selects for the decoction four different herbs, each of which is also called dalânĭ, because of the color of the root, stalk, or flower. The same idea is carried out in the tabu which generally accompanies the treatment. Thus a scrofulous patient must abstain from eating the meat of a turkey, because the fleshy dewlap which depends from its throat somewhat resembles an inflamed scrofulous eruption. On killing a deer the hunter always makes an incision in the hind quarter and removes the hamstring, because this tendon, when severed, draws up into the flesh; ergo, any one who should unfortunately partake of the hamstring would find his limbs draw up in the same manner.

There can be no doubt that in course of time a haphazard use of plants would naturally lead to the discovery that certain herbs are efficacious in certain combinations of symptoms. These plants would thus come into more frequent use and finally would obtain general recognition in the Indian materia medica. By such a process of evolution an empiric system of medicine has grown up among the Cherokees, by which they are able to

treat some classes of ailments with some degree of success, although without any intelligent idea of the process involved. It must be remembered that our own medical system has its remote origin in the same mythic conception of disease, and that within two hundred years judicial courts have condemned women to be burned to death for producing sickness by spells and incantations, while even at the present day our faith-cure professors reap their richest harvest among people commonly supposed to belong to the intelligent classes. In the treatment of wounds the Cherokee doctors exhibit a considerable degree of skill, but as far as any internal ailment is concerned the average farmer's wife is worth all the doctors in the whole tribe.

The faith of the patient has much to do with his recovery, for the Indian has the same implicit confidence in the shaman that a child has in a more intelligent physician. The ceremonies and prayers are well calculated to inspire this feeling, and the effect thus produced upon the mind of the sick man undoubtedly reacts favorably upon his physical organization.

The following list of twenty plants used in Cherokee practice will give a better idea of the extent of their medical knowledge than could be conveyed by a lengthy dissertation. The names are given in the order in which they occur in the botanic notebook filled on the reservation, excluding names of food plants and species not identified, so that no attempt has been made to select in accordance with a preconceived theory. Following the name of each plant are given its uses as described by the Indian doctors, together with its properties as set forth in the United States Dispensatory, one of the leading pharmacopæias in use in this country. For the benefit of those not versed in medical phraseology it may be stated that aperient, cathartic, and deobstruent are terms applied to medicines intended to open or purge the bowels, a diuretic has the property of exciting the flow of urine, a diaphoretic excites perspiration, and a demulcent protects or soothes irritated tissues, while hæmoptysis denotes a peculiar variety of bloodspitting and aphthous is an adjective applied to ulcerations in the mouth.

SELECTED LIST OF PLANTS USED.

- 1. UNASTE TSTIYÛ="very small root"—Aristolochia serpentaria—Virginia or black snakeroot: Decoction of root blown upon patient for fever and feverish headache, and drunk for coughs; root chewed and spit upon wound to cure snake bites; bruised root placed in hollow tooth for toothache, and held against nose made sore by constant blowing in colds. Dispensatory: "A stimulant tonic, acting also as a diaphoretic or diuretic, according to the mode of its application; * * * also been highly recommended in intermittent fevers, and though itself generally inadequate to the cure often proves serviceable as an adjunct to Peruvian bark or sulphate of quinia." Also used for typhous diseases, in dyspepsia, as a gargle for sore throat, as a mild stimulant in typhoid fevers, and to promote eruptions. The genus derives its scientific name from its supposed efficacy in promoting menstrual discharge, and some species have acquired the "reputation of antidotes for the bites of serpents."
- 2. UNISTIL ÛnISTÎ8="they stick on"—Cynoglossum Morrisoni—Beggar lice: Decoction of root or top drunk for kidney troubles; bruised root used with bear oil as an ointment for cancer; forgetful persons drink a decoction of this plant, and probably also of other similar bur plants, from an idea that the sticking qualities of the burs will thus be imparted to the memory. From a similar connection of ideas the root is also used in the preparation of love charms. Dispensatory: Not named. C. officinale "has been used as a demulcent and sedative in coughs, catarrh, spitting of blood, dysentery, and diarrhea, and has been also applied externally in burns, ulcers, scrofulous tumors and goiter."
- 3. ÛⁿNAGÉI="black"—Cassia Marilandica—Wild senna: Root bruised and moistened with water for poulticing sores; decoction drunk for fever and for a disease also called ûⁿnage'i, or "black" (same name as plant), in which the hands and eye sockets are said to turn black; also for a disease described as similar to ûⁿnagei, but more dangerous, in which the eye sockets become black, while black spots appear on the arms, legs, and over the ribs on one side of the body, accompanied by partial paralysis, and resulting in death should the black spots appear also on

- the other side. Dispensatory: Described as "an efficient and safe cathartic, * * * most conveniently given in the form of infusion."
- 4. KÂSD'ÚTA="simulating ashes," so called on account of the appearance of the leaves—Gnaphalium decurrens—Life everlasting: Decoction drunk for colds; also used in the sweat bath for various diseases and considered one of their most valuable medical plants. Dispensatory: Not named. Decoctions of two other species of this genus are mentioned as used by country people for chest and bowel diseases, and for hemorrhages, bruises, ulcers, etc., although "probably possessing little medicinal virtue."
- 5. ALTSA'STI="a wreath for the head"—Vicia Caroliniana—Vetch: Decoction drunk for dyspepsia and pains in the back, and rubbed on stomach for cramp; also rubbed on ball-players after scratching, to render their muscles tough, and used in the same way after scratching in the disease referred to under ûnagei, in which one side becomes black in spots, with partial paralysis; also used in same manner in decoction with Kâsduta for rheumatism; considered one of their most valuable medicinal herbs. Dispensatory: Not named.
- 6. DISTAI'YĬ="they (the roots) are tough"—Tephrosia Virginiana—Catgut, Turkey Pea, Goat's Rue, or Devil's Shoestrings: Decoction drunk for lassitude. Women wash their hair in decoction of its roots to prevent its breaking or falling out, because these roots are very tough and hard to break; from the same idea ball-players rub the decoction on their limbs after scratching, to toughen them. Dispensatory: Described as a cathartic with roots tonic and aperient.
- 7. U'GA-ATASGI'SKĬ="the pus oozes out"—Euphorbia hypericifolia—Milkweed: Juice rubbed on for skin eruptions, especially on children's heads; also used as a purgative; decoction drunk for gonorrhœa and similar diseases in both sexes, and held in high estimation for this purpose; juice used as an ointment for sores and for sore nipples, and in connection with other herbs for cancer. Dispensatory: The juice of all of the genus has the property of "powerfully irritating the skin when applied to it," while nearly all are powerful emetics and

- cathartics. This species "has been highly commended as a remedy in dysentery after due depletion, diarrhea, menorrhagia, and leucorrhea."
- 8. GÛ'NĬGWALĬ'SKĬ="It becomes discolored when bruised"—Scutellaria lateriflora—Skullcap. The name refers to the red juice which comes out of the stalk when bruised or chewed. A decoction of the four varieties of Gûnigwalĭ'skĭ—S. lateriflora, S. pilosa, Hypericum corymbosum, and Stylosanthes elatior—is drunk to promote menstruation, and the same decoction is also drunk and used as a wash to counteract the ill effects of eating food prepared by a woman in the menstrual condition, or when such a woman by chance comes into a sick room or a house under the tabu; also drunk for diarrhea and used with other herbs in decoction for breast pains. Dispensatory: This plant "produces no very obvious effects," but some doctors regard it as possessed of nervine, antispasmodic and tonic properties. None of the other three species are named.
- 9. K'GA SKÛⁿTAGĬ="crow shin"—Adiantum pedatum—Maidenhair Fern: Used either in decoction or poultice for rheumatism and chills, generally in connection with some other fern. The doctors explain that the fronds of the different varieties of fern are curled up in the young plant, but unroll and straighten out as it grows, and consequently a decoction of ferns causes the contracted muscles of the rheumatic patient to unbend and straighten out in like manner. It is also used in decoction for fever. Dispensatory: The leaves "have been supposed to be useful in chronic catarrh and other pectoral affections."
- 10. ANDA'NKALAGI'SKĬ="it removes things from the gums"—Geranium maculatum—Wild Alum, Cranesbill: Used in decoction with Yânû Unihye'stĭ (Vitis cordifolia) to wash the mouths of children in thrush; also used alone for the same purpose by blowing the chewed fiber into the mouth. Dispensatory: "One of our best indigenous astringents. * * * Diarrhea, chronic dysentery, cholora infantum in the latter stages, and the various hemorrhages are the forms of disease in which it is most commonly used." Also valuable as "an application to indolent ulcers, an injection in gleet and leucorrhea, a gargle in

- relaxation of the uvula and aphthous ulcerations of the throat." The other plant sometimes used with it is not mentioned.
- 11. Û'nLĔ UKĬ'LTĬ="the locust frequents it"—Gillenia trifoliata—Indian Physic. Two doctors state that it is good as a tea for bowel complaints, with fever and yellow vomit; but another says that it is poisonous and that no decoction is ever drunk, but that the beaten root is a good poultice for swellings. Dispensatory: "Gillenia is a mild and efficient emetic, and like most substances belonging to the same class occasionally acts upon the bowels. In very small doses it has been thought to be tonic."
- 12. SKWA'LĬ=Hepatica acutiloba—Liverwort, Heartleaf: Used for coughs either in tea or by chewing root. Those who dream of snakes drink a decoction of this herb and I'natû Ga'n'ka="snake tongue" (Camptosorus rhizophyllus or Walking Fern) to produce vomiting, after which the dreams do not return. The traders buy large quantities of liverwort from the Cherokees, who may thus have learned to esteem it more highly than they otherwise would. The appearance of the other plant, Camptosorus rhizophyllus, has evidently determined its Cherokee name and the use to which it is applied. Dispensatory: "Liverwort is a very mild demulcent tonic and astringent, supposed by some to possess diuretic and deobstruent virtues. It was formerly used in Europe in various complaints, especially chronic hepatic affections, but has fallen into entire neglect. In this country, some years since, it acquired considerable reputation, which, however, it has not maintained as a remedy in hæmoptysis and chronic coughs." The other plant is not named.
- 13. DA'YEWÛ="it sews itself up," because the leaves are said to grow together again when torn—Cacalia atriplicifolia—Tassel Flower: Held in great repute as a poultice for cuts, bruises, and cancer, to draw out the blood or poisonous matter. The bruised leaf is bound over the spot and frequently removed. The dry powdered leaf was formerly used to sprinkle over food like salt. Dispensatory: Not named.
- 14. A'TALĬ KÛLĬ'="it climbs the mountain."—Aralia quinquefolia—Ginseng or "Sang:" Decoction of root drunk for headache, cramps,

etc., and for female troubles; chewed root blown on spot for pains in the side. The Cherokees sell large quantities of sang to the traders for 50 cents per pound, nearly equivalent there to two days' wages, a fact which has doubtless increased their idea of its importance. Dispensatory: "The extraordinary medical virtues formerly ascribed to ginseng had no other existence than in the imagination of the Chinese. It is little more than a demulcent, and in this country is not employed as a medicine." The Chinese name, ginseng, is said to refer to the fancied resemblance of the root to a human figure, while in the Cherokee formulas it is addressed as the "great man" or "little man," and this resemblance no doubt has much to do with the estimation in which it is held by both peoples.

- 15. ÛTSATĬ UWADSĬSKA="fish scales," from shape of leaves— Thalictrum anemonoides—Meadow Rue: Decoction of root drunk for diarrhea with vomiting. Dispensatory: Not named.
- 16. K'KWĚ ULASU'LA="partridge moccasin"—Cypripedium parviflorum —Lady-slipper: Decoction of root used for worms in children. In the liquid are placed some stalks of the common chickweed or purslane (Cerastium vulgatum) which, from the appearance of its red fleshy stalks, is supposed to have some connection with worms. Dispensatory: Described as "a gentle nervous stimulant" useful in diseases in which the nerves are especially affected. The other herb is not named.
- 17. A'HAWĬ' AKĂ'TĂ'="deer eye," from the appearance of the flower—Rudbeckia fulgida—Cone Flower: Decoction of root drunk for flux and for some private diseases; also used as a wash for snake bites and swellings caused by (mythic) tsgâya or worms; also dropped into weak or inflamed eyes. This last is probably from the supposed connection between the eye and the flower resembling the eye. Dispensatory: Not named.
- 18. UTĬSTUGĬ'=Polygonatum multiflorum latifolium—Solomon's Seal: Root heated and bruised and applied as a poultice to remove an ulcerating swelling called tu'stĭ', resembling a boil or carbuncle. Dispensatory: "This species acts like P. uniflorum, which is said to be

emetic. In former times it was used externally in bruises, especially those about the eyes, in tumors, wounds, and cutaneous eruptions and was highly esteemed as a cosmetic. At present it is not employed, though recommended by Hermann as a good remedy in gout and rheumatism." This species in decoction has been found to produce "nausea, a cathartic effect and either diaphoresis or diuresis," and is useful "as an internal remedy in piles, and externally in the form of decoction, in the affection of the skin resulting from the poisonous exhalations of certain plants."

- 19. ĂMĂDITA'TÌ="water dipper," because water can be sucked up through its hollow stalk—Eupatorium purpureum—Queen of the Meadow, Gravel Root: Root used in decoction with a somewhat similar plant called Ămăditá'tĭ û'tanu, or "large water dipper" (not identified) for difficult urination. Dispensatory: "Said to operate as a diuretic. Its vulgar name of gravel root indicates the popular estimation of its virtues." The genus is described as tonic, diaphoretic, and in large doses emetic and aperient.
- 20. YÂNA UTSĔSTA="the bear lies on it"—Aspidium acrostichoides—Shield Fern: Root decoction drunk to produce vomiting, and also used to rub on the skin, after scratching, for rheumatism—in both cases some other plant is added to the decoction; the warm decoction is also held in the mouth to relieve toothache. Dispensatory: Not named.

The results obtained from a careful study of this list may be summarized as follows: Of the twenty plants described as used by the Cherokees, seven (Nos. 2, 4, 5, 13, 15, 17, and 20) are not noticed in the Dispensatory even in the list of plants sometimes used although regarded as not officinal. It is possible that one or two of these seven plants have medical properties, but this can hardly be true of a larger number unless we are disposed to believe that the Indians are better informed in this regard than the best educated white physicians in the country. Two of these seven plants, however (Nos. 2 and 4), belong to genera which seem to have some of the properties ascribed by the Indians to the species. Five others of the list (Nos. 8, 9, 11, 14, and 16) are used for entirely wrong purposes, taking the Dispensatory as authority, and three of these are evidently used on account of some fancied

connection between the plant and the disease, according to the doctrine of signatures. Three of the remainder (Nos. 1, 3, and 6) may be classed as uncertain in their properties, that is, while the plants themselves seem to possess some medical value, the Indian mode of application is so far at variance with recognized methods, or their own statements are so vague and conflicting, that it is doubtful whether any good can result from the use of the herbs. Thus the Unaste'tstiyû, or Virginia Snakeroot, is stated by the Dispensatory to have several uses, and among other things is said to have been highly recommended in intermittent fevers, although alone it is "generally inadequate to the cure." Though not expressly stated, the natural inference is that it must be applied internally, but the Cherokee doctor, while he also uses it for fever, takes the decoction in his mouth and blows it over the head and shoulders of the patient. Another of these, the Distai'yĭ, or Turkey Pea, is described in the Dispensatory as having roots tonic and aperient. The Cherokees drink a decoction of the roots for a feeling of weakness and languor, from which it might be supposed that they understood the tonic properties of the plant had not the same decoction been used by the women as a hair wash, and by the ball players to bathe their limbs, under the impression that the toughness of the roots would thus be communicated to the hair or muscles. From this fact and from the name of the plant, which means at once hard, tough, or strong, it is quite probable that its roots are believed to give strength to the patient solely because they themselves are so strong and not because they have been proved to be really efficacious. The remaining five plants have generally pronounced medicinal qualities, and are used by the Cherokees for the very purposes for which, according to the Dispensatory, they are best adapted; so that we must admit that so much of their practice is correct, however false the reasoning by which they have arrived at this result.

MEDICAL PRACTICE.

Taking the Dispensatory as the standard, and assuming that this list is a fair epitome of what the Cherokees know concerning the medical properties of plants, we find that five plants, or 25 per cent of the whole number, are correctly used; twelve, or 60 per cent, are presumably either worthless or incorrectly used, and three plants, or 15 per cent, are so used that it is difficult to say whether they are of any benefit or not. Granting that two of

these three produce good results as used by the Indians, we should have 35 per cent, or about one-third of the whole, as the proportion actually possessing medical virtues, while the remaining two-thirds are inert, if not positively injurious. It is not probable that a larger number of examples would change the proportion to any appreciable extent. A number of herbs used in connection with these principal plants may probably be set down as worthless, inasmuch as they are not named in the Dispensatory.

The results here arrived at will doubtless be a surprise to those persons who hold that an Indian must necessarily be a good doctor, and that the medicine man or conjurer, with his theories of ghosts, witches, and revengeful animals, knows more about the properties of plants and the cure of disease than does the trained botanist or physician who has devoted a lifetime of study to the patient investigation of his specialty, with all the accumulated information contained in the works of his predecessors to build upon, and with all the light thrown upon his pathway by the discoveries of modern science. It is absurd to suppose that the savage, a child in intellect, has reached a higher development in any branch of science than has been attained by the civilized man, the product of long ages of intellectual growth. It would be as unreasonable to suppose that the Indian could be entirely ignorant of the medicinal properties of plants, living as he did in the open air in close communion with nature; but neither in accuracy nor extent can his knowledge be compared for a moment with that of the trained student working upon scientific principles.

Cherokee medicine is an empiric development of the fetich idea. For a disease caused by the rabbit the antidote must be a plant called "rabbit's food," "rabbit's ear," or "rabbit's tail;" for snake dreams the plant used is "snake's tooth;" for worms a plant resembling a worm in appearance, and for inflamed eyes a flower having the appearance and name of "deer's eye." A yellow root must be good when the patient vomits yellow bile, and a black one when dark circles come about his eyes, and in each case the disease and the plant alike are named from the color. A decoction of burs must be a cure for forgetfulness, for there is nothing else that will stick like a bur; and a decoction of the wiry roots of the "devil's shoestrings" must be an efficacious wash to toughen the ballplayer's muscles, for they are almost strong enough to stop the plowshare in the furrow. It must be evident that

under such a system the failures must far outnumber the cures, yet it is not so long since half our own medical practice was based upon the same idea of correspondences, for the mediæval physicians taught that *similia similibus curantur*, and have we not all heard that "the hair of the dog will cure the bite?"

Their ignorance of the true medical principles involved is shown by the regulations prescribed for the patient. With the exception of the fasting, no sanitary precautions are taken to aid in the recovery of the sick man or to contribute to his comfort. Even the fasting is as much religious as sanative, for in most cases where it is prescribed the doctor also must abstain from food until sunset, just as in the Catholic church both priest and communicants remain fasting from midnight until after the celebration of the divine mysteries. As the Indian cuisine is extremely limited, no delicate or appetizing dishes are prepared for the patient, who partakes of the same heavy, sodden cornmeal dumplings and bean bread which form his principal food in health. In most cases certain kinds of food are prohibited, such as squirrel meat, fish, turkey, etc.; but the reason is not that such food is considered deleterious to health, as we understand it, but because of some fanciful connection with the disease spirit. Thus if squirrels have caused the illness the patient must not eat squirrel meat. If the disease be rheumatism, he must not eat the leg of any animal, because the limbs are generally the seat of this malady. Lye, salt, and hot food are always forbidden when there is any prohibition at all; but here again, in nine cases out of ten, the regulation, instead of being beneficial, serves only to add to his discomfort. Lye enters into almost all the food preparations of the Cherokees, the alkaline potash taking the place of salt, which is seldom used among them, having been introduced by the whites. Their bean and chestnut bread, cornmeal dumplings, hominy, and gruel are all boiled in a pot, all contain lye, and are all, excepting the last, served up hot from the fire. When cold their bread is about as hard and tasteless as a lump of yesterday's dough, and to condemn a sick man to a diet of such dyspeptic food, eaten cold without even a pinch of salt to give it a relish, would seem to be sufficient to kill him without any further aid from the doctor. The salt or lye so strictly prohibited is really a tonic and appetizer, and in many diseases acts with curative effect. So much for the health regimen.

In serious cases the patient is secluded and no strangers are allowed to enter the house. On first thought this would appear to be a genuine sanitary precaution for the purpose of securing rest and quiet to the sick man. Such, however, is not the case. The necessity for quiet has probably never occurred to the Cherokee doctor, and this regulation is intended simply to prevent any direct or indirect contact with a woman in a pregnant or menstrual condition. Among all primitive nations, including the ancient Hebrews, we find an elaborate code of rules in regard to the conduct and treatment of women on arriving at the age of puberty, during pregnancy and the menstrual periods, and at childbirth. Among the Cherokees the presence of a woman under any of these conditions, or even the presence of any one who has come from a house where such a woman resides, is considered to neutralize all the effects of the doctor's treatment. For this reason all women, excepting those of the household, are excluded. A man is forbidden to enter, because he may have had intercourse with a tabued woman, or may have come in contact with her in some other way; and children also are shut out, because they may have come from a cabin where dwells a woman subject to exclusion. What is supposed to be the effect of the presence of a menstrual woman in the family of the patient is not clear; but judging from analogous customs in other tribes and from rules still enforced among the Cherokees, notwithstanding their long contact with the whites, it seems probable that in former times the patient was removed to a smaller house or temporary bark lodge built for his accommodation whenever the tabu as to women was prescribed by the doctor. Some of the old men assert that in former times sick persons were removed to the public townhouse, where they remained under the care of the doctors until they either recovered or died. A curious instance of this prohibition is given in the second Didûⁿlĕ 'skĭ (rheumatism) formula from the Gahuni manuscript (see page 350), where the patient is required to abstain from touching a squirrel, a dog, a cat, a mountain trout, or a woman, and must also have a chair appropriated to his use alone during the four days that he is under treatment.

In cases of the children's disease known as Gûⁿwani'gista'ĭ (see formulas) it is forbidden to carry the child outdoors, but this is not to procure rest for the little one, or to guard against exposure to cold air, but because the birds send this disease, and should a bird chance to be flying by overhead at the

moment the napping of its wings would fan the disease back into the body of the patient.

ILLUSTRATION OF THE TABU.

On a second visit to the reservation the writer once had a practical illustration of the gaktû'nta or tabu, which may be of interest as showing how little sanitary ideas have to do with these precautions. Having received several urgent invitations from Tsiskwa (Bird), an old shaman of considerable repute, who was anxious to talk, but confined to his bed by sickness, it was determined to visit him at his house, several miles distant. On arriving we found another doctor named Sû'nkĭ (The Mink) in charge of the patient and were told that he had just that morning begun a four days' gaktû'nta which, among other provisions, excluded all visitors. It was of no use to argue that we had come by the express request of Tsiskwa. The laws of the gaktû'nta were as immutable as those of the Medes and Persians, and neither doctor nor patient could hope for favorable results from the treatment unless the regulations were enforced to the letter. But although we might not enter the house, there was no reason why we should not talk to the old man, so seats were placed for us outside the door, while Tsiskwa lay stretched out on the bed just inside and The Mink perched himself on the fence a few yards distant to keep an eye on the proceedings. As there was a possibility that a white man might unconsciously affect the operation of the Indian medicine, the writer deemed it advisable to keep out of sight altogether, and accordingly took up a position just around the corner of the house, but within easy hearing distance, while the interpreter sat facing the doorway within a few feet of the sick man inside. Then began an animated conversation, Tsiskwa inquiring, through the interpreter, as to the purpose of the Government in gathering such information, wanting to know how we had succeeded with other shamans and asking various questions in regard to other tribes and their customs. The replies were given in the same manner, an attempt being also made to draw him out as to the extent of his own knowledge. Thus we talked until the old man grew weary, but throughout the whole of this singular interview neither party saw the other, nor was the gaktû'nta violated by entering the house. From this example it must be sufficiently evident that the tabu as to visitors is not a hygienic precaution for securing greater quiet to the patient, or to prevent the spread of contagion, but that it is simply a religious observance of the tribe, exactly parallel to many of the regulations among the ancient Jews, as laid down in the book of Leviticus.

NEGLECT OF SANITARY REGULATIONS.

No rules are ever formulated as to fresh air or exercise, for the sufficient reason that the door of the Cherokee log cabin is always open, excepting at night and on the coldest days in winter, while the Indian is seldom in the house during his waking hours unless when necessity compels him. As most of their cabins are still built in the old Indian style, without windows, the open door furnishes the only means by which light is admitted to the interior, although when closed the fire on the hearth helps to make amends for the deficiency. On the other hand, no precautions are taken to guard against cold, dampness, or sudden drafts. During the greater part of the year whole families sleep outside upon the ground, rolled up in an old blanket. The Cherokee is careless of exposure and utterly indifferent to the simplest rules of hygiene. He will walk all day in a pouring rain clad only in a thin shirt and a pair of pants. He goes barefoot and frequently bareheaded nearly the entire year, and even on a frosty morning in late November, when the streams are of almost icy coldness, men and women will deliberately ford the river where the water is waist deep in preference to going a few hundred yards to a foot-log. At their dances in the open air men, women, and children, with bare feet and thinly clad, dance upon the damp ground from darkness until daylight, sometimes enveloped in a thick mountain fog which makes even the neighboring treetops invisible, while the mothers have their infants laid away under the bushes with only a shawl between them and the cold ground. In their ball plays also each young man, before going into the game, is subjected to an ordeal of dancing, bleeding, and cold plunge baths, without food or sleep, which must unquestionably waste his physical energy.

In the old days when the Cherokee was the lord of the whole country from the Savannah to the Ohio, well fed and warmly clad and leading an active life in the open air, he was able to maintain a condition of robust health notwithstanding the incorrectness of his medical ideas and his general disregard of sanitary regulations. But with the advent of the white man and the destruction of the game all this was changed. The East Cherokee of today is a dejected being; poorly fed, and worse clothed, rarely tasting meat, cut off from the old free life, and with no incentive to a better, and constantly bowed down by a sense of helpless degradation in the presence of his conqueror. Considering all the circumstances, it may seem a matter of surprise that any of them are still in existence. As a matter of fact, the best information that could be obtained in the absence of any official statistics indicated a slow but steady decrease during the last five years. Only the constitutional vigor, inherited from their warrior ancestors, has enabled them to sustain the shock of the changed conditions of the last half century. The uniform good health of the children in the training school shows that the case is not hopeless, however, and that under favorable conditions, with a proper food supply and a regular mode of living, the Cherokee can hold his own with the white man.

THE SWEAT BATH—BLEEDING—RUBBING—BATHING.

In addition to their herb treatment the Cherokees frequently resort to sweat baths, bleeding, rubbing, and cold baths in the running stream, to say nothing of the beads and other conjuring paraphernalia generally used in connection with the ceremony. The sweat bath was in common use among almost all the tribes north of Mexico excepting the central and eastern Eskimo, and was considered the great cure-all in sickness and invigorant in health. Among many tribes it appears to have been regarded as a ceremonial observance, but the Cherokees seem to have looked upon it simply as a medical application, while the ceremonial part was confined to the use of the plunge bath. The person wishing to make trial of the virtues of the sweat bath entered the â'sĭ, a small earth-covered log house only high enough to allow of sitting down. After divesting himself of his clothing, some large bowlders, previously heated in a fire, were placed near him, and over them was poured a decoction of the beaten roots of the wild parsnip. The door was closed so that no air could enter from the outside, and the patient sat in the sweltering steam until he was in a profuse perspiration and nearly choked by the pungent fumes of the decoction. In accordance with general Indian practice it may be that he plunged into the river before resuming his clothing; but in modern times this part of the operation is omitted and the patient is drenched with cold water instead. Since the âsĭ has gone out of general use the sweating takes place in the ordinary dwelling, the steam being confined under a blanket wrapped around the patient. During the prevalence of the smallpox epidemic among the Cherokees at the close of the late war the sweat bath was universally called into requisition to stay the progress of the disease, and as the result about three hundred of the band died, while many of the survivors will carry the marks of the visitation to the grave. The sweat bath, with the accompanying cold water application, being regarded as the great panacea, seems to have been resorted to by the Indians in all parts of the country whenever visited by smallpox—originally introduced by the whites—and in consequence of this mistaken treatment they have died, in the language of an old writer, "like rotten sheep" and at times whole tribes have been almost swept away. Many of the Cherokees tried to ward off the disease by eating the flesh of the buzzard, which they believe to enjoy entire immunity from sickness, owing to its foul smell, which keeps the disease spirits at a distance.

Bleeding is resorted to in a number of cases, especially in rheumatism and in preparing for the ball play. There are two methods of performing the operation, bleeding proper and scratching, the latter being preparatory to rubbing on the medicine, which is thus brought into more direct contact with the blood. The bleeding is performed with a small cupping horn, to which suction is applied in the ordinary manner, after scarification with a flint or piece of broken glass. In the blood thus drawn out the shaman claims sometimes to find a minute pebble, a sharpened stick or something of the kind, which he asserts to be the cause of the trouble and to have been conveyed into the body of the patient through the evil spells of an enemy. He frequently pretends to suck out such an object by the application of the lips alone, without any scarification whatever. Scratching is a painful process and is performed with a brier, a flint arrowhead, a rattlesnake's tooth, or even with a piece of glass, according to the nature of the ailment, while in preparing the young men for the ball play the shaman uses an instrument somewhat resembling a comb, having seven teeth made from the sharpened splinters of the leg bone of a turkey. The scratching is usually done according to a particular pattern, the regular method for the ball play being to draw the scratcher four times down the upper part of each arm, thus making twenty-eight scratches each about 6 inches in length, repeating the operation on each arm below the elbow and on each leg above and below the knee. Finally, the instrument is drawn across the breast from the two shoulders so as to form a cross; another curving stroke is made to connect the two upper ends of the cross, and the same pattern is repeated on the back, so that the body is thus gashed in nearly three hundred places. Although very painful for a while, as may well be supposed, the scratches do not penetrate deep enough to result seriously, excepting in some cases where erysipelas sets in. While the blood is still flowing freely the medicine, which in this case is intended to toughen, the muscles of the player, is rubbed into the wounds after which the sufferer plunges into the stream and washes off the blood. In order that the blood may flow the longer without clotting it is frequently scraped off with a small switch as it flows. In rheumatism and other local diseases the scratching is confined to the part affected. The instrument used is selected in accordance with the mythologic theory, excepting in the case of the piece of glass, which is merely a modern makeshift for the flint arrowhead.

Rubbing, used commonly for pains and swellings of the abdomen, is a very simple operation performed with the tip of the finger or the palm of the hand, and can not be dignified with the name of massage. In one of the Gahuni formulas for treating snake bites (page 351) the operator is told to rub in a direction contrary to that in which the snake coils itself, because "this is just the same as uncoiling it." Blowing upon the part affected, as well as upon the head, hands, and other parts of the body, is also an important feature of the ceremonial performance. In one of the formulas it is specified that the doctor must blow first upon the right hand of the patient, then upon the left foot, then upon the left hand, and finally upon the right foot, thus making an imaginary cross.

Bathing in the running stream, or "going to water," as it is called, is one of their most frequent medico-religious ceremonies, and is performed on a great variety of occasions, such as at each new moon, before eating the new food at the green corn dance, before the medicine dance and other ceremonial dances before and after the ball play, in connection with the prayers for long life, to counteract the effects of bad dreams or the evil spells of an enemy, and as a part of the regular treatment in various diseases. The details of the ceremony are very elaborate and vary according to the purpose for which it is performed, but in all cases both shaman and

client are fasting from the previous evening, the ceremony being generally performed just at daybreak. The bather usually dips completely under the water four or seven times, but in some cases it is sufficient to pour the water from the hand upon the head and breast. In the ball play the ball sticks are dipped into the water at the same time. While the bather is in the water the shaman is going through with his part of the performance on the bank and draws omens from the motion of the beads between his thumb and finger, or of the fishes in the water. Although the old customs are fast dying out this ceremony is never neglected at the ball play, and is also strictly observed by many families on occasion of eating the new corn, at each new moon, and on other special occasions, even when it is necessary to break the ice in the stream for the purpose, and to the neglect of this rite the older people attribute many of the evils which have come upon the tribe in later days. The latter part of autumn is deemed the most suitable season of the year for this ceremony, as the leaves which then cover the surface of the stream are supposed to impart their medicinal virtues to the water.

SHAMANS AND WHITE PHYSICIANS.

Of late years, especially since the establishment of schools among them, the Cherokees are gradually beginning to lose confidence in the abilities of their own doctors and are becoming more disposed to accept treatment from white physicians. The shamans are naturally jealous of this infringement upon their authority and endeavor to prevent the spread of the heresy by asserting the convenient doctrine that the white man's medicine is inevitably fatal to an Indian unless eradicated from the system by a continuous course of treatment for four years under the hands of a skillful shaman. The officers of the training school established by the Government a few years ago met with considerable difficulty on this account for some time, as the parents insisted on removing the children at the first appearance of illness in order that they might be treated by the shamans, until convinced by experience that the children received better attention at the school than could possibly be had in their own homes. In one instance, where a woman was attacked by a pulmonary complaint akin to consumption, her husband, a man of rather more than the usual amount of intelligence, was persuaded to call in the services of a competent white physician, who diagnosed the case and left a prescription. On a second visit,

a few days later, he found that the family, dreading the consequences of this departure from old customs, had employed a shaman, who asserted that the trouble was caused by a sharpened stick which some enemy had caused to be imbedded in the woman's side. He accordingly began a series of conjurations for the removal of the stick, while the white physician and his medicine were disregarded, and in due time the woman died. Two children soon followed her to the grave, from the contagion or the inherited seeds of the same disease, but here also the sharpened sticks were held responsible, and, notwithstanding the three deaths under such treatment, the husband and father, who was at one time a preacher, still has faith in the assertions of the shaman. The appointment of a competent physician to look after the health of the Indians would go far to eradicate these false ideas and prevent much sickness and suffering; but, as the Government has made no such provision, the Indians, both on and off the reservation, excepting the children in the home school, are entirely without medical care.

MEDICINE DANCES.

The Cherokees have a dance known as the Medicine Dance, which is generally performed in connection with other dances when a number of people assemble for a night of enjoyment. It possesses no features of special interest and differs in no essential respect from a dozen other of the lesser dances. Besides this, however, there was another, known as the Medicine Boiling Dance, which, for importance and solemn ceremonial, was second only to the great Green Corn Dance. It has now been discontinued on the reservation for about twenty years. It took place in the fall, probably preceding the Green Corn Dance, and continued four days. The principal ceremony in connection with it was the drinking of a strong decoction of various herbs, which acted as a violent emetic and purgative. The usual fasting and going to water accompanied the dancing and medicine-drinking.

DESCRIPTION OF SYMPTOMS.

It is exceedingly difficult to obtain from the doctors any accurate statement of the nature of a malady, owing to the fact that their description of the symptoms is always of the vaguest character, while in general the name given to the disease by the shaman expresses only his opinion as to the occult cause of the trouble. Thus they have definite names for rheumatism, toothache, boils, and a few other ailments of like positive character, but beyond this their description of symptoms generally resolves itself into a statement that the patient has bad dreams, looks black around the eyes, or feels tired, while the disease is assigned such names as "when they dream of snakes," "when they dream of fish," "when ghosts trouble them," "when something is making something else eat them," or "when the food is changed," i.e., when a witch causes it to sprout and grow in the body of the patient or transforms it into a lizard, frog, or sharpened stick.

THE PAY OF THE SHAMAN.

The consideration which the doctor receives for his services is called ugista "tĭ, a word of doubtful etymology, but probably derived from the verb tsĭ 'giû, "I take" or "I eat." In former times this was generally a deer-skin or a pair of moccasins, but is now a certain quantity of cloth, a garment, or a handkerchief. The shamans disclaim the idea that the ugistâ''tĭ is pay, in our sense of the word, but assert that it is one of the agencies in the removal and banishment of the disease spirit. Their explanation is somewhat obscure, but the cloth seems to be intended either as an offering to the disease spirit, as a ransom to procure the release of his intended victim, or as a covering to protect the hand of a shaman while engaged in pulling the disease from the body of the patient. The first theory, which includes also the idea of vicarious atonement, is common to many primitive peoples. Whichever may be the true explanation, the evil influence of the disease is believed to enter into the cloth, which must therefore be sold or given away by the doctor, as otherwise it will cause his death when the pile thus accumulating reaches the height of his head. No evil results seem to follow its transfer from the shaman to a third party. The doctor can not bestow anything thus received upon a member of his own family unless that individual gives him something in return. If the consideration thus received, however, be anything eatable, the doctor may partake along with the rest of the family. As a general rule the doctor makes no charge for his services, and the consideration is regarded as a free-will offering. This remark applies only to the medical practice, as the shaman always demands and receives a fixed remuneration for performing love charms, hunting ceremonials, and other conjurations of a miscellaneous character. Moreover, whenever the beads are used the patient must furnish a certain quantity of new cloth upon which to place them, and at the close of the ceremony the doctor rolls up the cloth, beads and all, and takes them away with him. The cloth thus received by the doctor for working with the beads must not be used by him, but must be sold. In one instance a doctor kept a handkerchief which he received for his services, but instead sold a better one of his own. Additional cloth is thus given each time the ceremony is repeated, each time a second four days' course of treatment is begun, and as often as the doctor sees fit to change his method of procedure. Thus, when he begins to treat a sick man for a disease caused by rabbits, he expects to receive a certain ugista'ti; but, should he decide after a time that the terrapin or the red bird is responsible for the trouble, he adopts a different course of treatment, for which another ugista"tĭ is necessary. Should the sickness not yield readily to his efforts, it is because the disease animal requires a greater ugista'ti, and the quantity of cloth must be doubled, so that on the whole the doctrine is a very convenient one for the shaman. In many of the formulas explicit directions are given as to the pay which the shaman is to receive for performing the ceremony. In one of the Gatigwanasti formulas, after specifying the amount of cloth to be paid, the writer of it makes the additional proviso that it must be "pretty good cloth, too," asserting as a clincher that "this is what the old folks said a long time ago."

The ugista'ti can not be paid by either one of a married couple to the other, and, as it is considered a necessary accompaniment of the application, it follows that a shaman can not treat his own wife in sickness, and vice versa. Neither can the husband or wife of the sick person send for the doctor, but the call must come from some one of the blood relatives of the patient. In one instance within the writer's knowledge a woman complained that her husband was very sick and needed a doctor's attention, but his relatives were taking no steps in the matter and it was not permissible for her to do so.

CEREMONIES FOR GATHERING PLANTS AND PREPARING MEDICINE.

There are a number of ceremonies and regulations observed in connection with the gathering of the herbs, roots, and barks, which can not be given in

detail within the limits of this paper. In searching for his medicinal plants the shaman goes provided with a number of white and red beads, and approaches the plant from a certain direction, going round it from right to left one or four times, reciting certain prayers the while. He then pulls up the plant by the roots and drops one of the beads into the hole and covers it up with the loose earth. In one of the formulas for hunting ginseng the hunter addresses the mountain as the "Great Man" and assures it that he comes only to take a small piece of flesh (the ginseng) from its side, so that it seems probable that the bead is intended as a compensation to the earth for the plant thus torn from her bosom. In some cases the doctor must pass by the first three plants met until he comes to the fourth, which he takes and may then return for the others. The bark is always taken from the east side of the tree, and when the root or branch is used it must also be one which runs out toward the east, the reason given being that these have imbibed more medical potency from the rays of the sun.

When the roots, herbs, and barks which enter into the prescription have been thus gathered the doctor ties them up into a convenient package, which he takes to a running stream and casts into the water with appropriate prayers. Should the package float, as it generally does, he accepts the fact as an omen that his treatment will be successful. On the other hand, should it sink, he concludes that some part of the preceding ceremony has been improperly carried out and at once sets about procuring a new package, going over the whole performance from the beginning. Herb-gathering by moonlight, so important a feature in European folk medicine, seems to be no part of Cherokee ceremonial. There are fixed regulations in regard to the preparing of the decoction, the care of the medicine during the continuance of the treatment, and the disposal of what remains after the treatment is at an end. In the arrangement of details the shaman frequently employs the services of a lay assistant. In these degenerate days a number of upstart pretenders to the healing art have arisen in the tribe and endeavor to impose upon the ignorance of their fellows by posing as doctors, although knowing next to nothing of the prayers and ceremonies, without which there can be no virtue in the application. These impostors are sternly frowned down and regarded with the utmost contempt by the real professors, both men and women, who have been initiated into the sacred mysteries and proudly look upon themselves as conservators of the ancient ritual of the past.

THE CHEROKEE GODS AND THEIR ABIDING PLACES.

After what has been said in elucidation of the theories involved in the medical formulas, the most important and numerous of the series, but little remains to be added in regard to the others, beyond what is contained in the explanation accompanying each one. A few points, however, may be briefly noted.

The religion of the Cherokees, like that of most of our North American tribes, is zootheism or animal worship, with the survival of that earlier stage designated by Powell as hecastotheism, or the worship of all things tangible, and the beginnings of a higher system in which the elements and the great powers of nature are deified. Their pantheon includes gods in the heaven above, on the earth beneath, and in the waters under the earth, but of these the animal gods constitute by far the most numerous class, although the elemental gods are more important. Among the animal gods insects and fishes occupy a subordinate place, while quadrupeds, birds, and reptiles are invoked almost constantly. The uktena (a mythic great horned serpent), the rattlesnake, and the terrapin, the various species of hawk, and the rabbit, the squirrel, and the dog are the principal animal gods. The importance of the god bears no relation to the size of the animal, and in fact the larger animals are but seldom invoked. The spider also occupies a prominent place in the love and life-destroying formulas, his duty being to entangle the soul of his victim in the meshes of his web or to pluck it from the body of the doomed man and drag it way to the black coffin in the Darkening Land.

Among what may be classed as elemental gods the principal are fire, water, and the sun, all of which are addressed under figurative names. The sun is called Une'lanû'hĭ, "the apportioner," just as our word moon means originally "the measurer." Indians and Aryans alike, having noticed how these great luminaries divide and measure day and night, summer and winter, with never-varying regularity, have given to each a name which should indicate these characteristics, thus showing how the human mind constantly moves on along the same channels. Missionaries have naturally, but incorrectly, assumed this apportioner of all things to be the suppositional "Great Spirit" of the Cherokees, and hence the word is used in the Bible translation as synonymous with God. In ordinary conversation and

in the lesser myths the sun is called Nû'ntâ. The sun is invoked chiefly by the ball-player, while the hunter prays to the fire; but every important ceremony—whether connected with medicine, love, hunting, or the ball play—contains a prayer to the "Long Person," the formulistic name for water, or, more strictly speaking, for the river. The wind, the storm, the cloud, and the frost are also invoked in different formulas.

But few inanimate gods are included in the category, the principal being the Stone, to which the shaman prays while endeavoring to find a lost article by means of a swinging pebble suspended by a string; the Flint, invoked when the shaman is about to scarify the patient with a flint arrow-head before rubbing on the medicine; and the Mountain, which is addressed in one or two of the formulas thus far translated. Plant gods do not appear prominently, the chief one seeming to be the ginseng, addressed in the formulas as the "Great Man" or "Little Man," although its proper Cherokee name signifies the "Mountain Climber."

A number of personal deities are also invoked, the principal being the Red Man. He is one of the greatest of the gods, being repeatedly called upon in formulas of all kinds, and is hardly subordinate to the Fire, the Water, or the Sun. His identity is as yet uncertain, but he seems to be intimately connected with the Thunder family. In a curious marginal note in one of the Gahuni formulas (page 350), it is stated that when the patient is a woman the doctor must pray to the Red Man, but when treating a man he must pray to the Red Woman, so that this personage seems to have dual sex characteristics. Another god invoked in the hunting songs is Tsu'l'kalû', or "Slanting Eyes" (see Cherokee Myths), a giant hunter who lives in one of the great mountains of the Blue Ridge and owns all the game. Others are the Little Men, probably the two Thunder boys; the Little People, the fairies who live in the rock cliffs; and even the De'tsata, a diminutive sprite who holds the place of our Puck. One unwritten formula, which could not be obtained correctly by dictation, was addressed to the "Red-Headed Woman, whose hair hangs down to the ground."

The personage invoked is always selected in accordance with the theory of the formula and the duty to be performed. Thus, when a sickness is caused by a fish, the Fish-hawk, the Heron, or some other fish-eating bird is implored to come and seize the intruder and destroy it, so that the patient may find relief. When the trouble is caused by a worm or an insect, some insectivorous bird is called in for the same purpose. When a flock of redbirds is pecking at the vitals of the sick man the Sparrow-hawk is brought down to scatter them, and when the rabbit, the great mischiefmaker, is the evil genius, he is driven out by the Rabbit-hawk. Sometimes after the intruder has been thus expelled "a small portion still remains," in the words of the formula, and accordingly the Whirlwind is called down from the treetops to carry the remnant to the uplands and there scatter it so that it shall never reappear. The hunter prays to the fire, from which he draws his omens; to the reed, from which he makes his arrows; to Tsu T'kalû, the great lord of the game, and finally addresses in songs the very animals which he intends to kill. The lover prays to the Spider to hold fast the affections of his beloved one in the meshes of his web, or to the Moon, which looks down upon him in the dance. The warrior prays to the Red War-club, and the man about to set out on a dangerous expedition prays to the Cloud to envelop him and conceal him from his enemies.

Each spirit of good or evil has its distinct and appropriate place of residence. The Rabbit is declared to live in the broomsage on the hillside, the Fish dwells in a bend of the river under the pendant hemlock branches, the Terrapin lives in the great pond in the West, and the Whirlwind abides in the leafy treetops. Each disease animal, when driven away from his prey by some more powerful animal, endeavors to find shelter in his accustomed haunt. It must be stated here that the animals of the formulas are not the ordinary, everyday animals, but their great progenitors, who live in the upper world (galû'nlati) above the arch of the firmament.

COLOR SYMBOLISM.

Color symbolism plays an important part in the shamanistic system of the Cherokees, no less than in that of other tribes. Each one of the cardinal points has its corresponding color and each color its symbolic meaning, so that each spirit invoked corresponds in color and local habitation with the characteristics imputed to him, and is connected with other spirits of the same name, but of other colors, living in other parts of the upper world and differing widely in their characteristics. Thus the Red Man, living in the

east, is the spirit of power, triumph, and success, but the Black Man, in the West, is the spirit of death. The shaman therefore invokes the Red Man to the assistance of his client and consigns his enemy to the fatal influences of the Black Man.

The symbolic color system of the Cherokees, which will be explained more fully in connection with the formulas, is as follows:

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East = red = success; triumph.

North = blue = defeat; trouble.

West = black = death.

South = white = peace; happiness.

Above? = brown = unascertained, but propitious.

— = yellow = about the same as blue.
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There is a great diversity in the color systems of the various tribes, both as to the location and significance of the colors, but for obvious reasons black was generally taken as the symbol of death; while white and red signified, respectively, peace and war. It is somewhat remarkable that red was the emblem of power and triumph among the ancient Oriental nations no less than among the modern Cherokees.⁹

IMPORTANCE ATTACHED TO NAMES.

In many of the formulas, especially those relating to love and to life-destroying, the shaman mentions the name and clan of his client, of the intended victim, or of the girl whose affections it is desired to win. The Indian regards his name, not as a mere label, but as a distinct part of his personality, just as much as are his eyes or his teeth, and believes that injury will result as surely from the malicious handling of his name as from a wound inflicted on any part of his physical organism. This belief was found among the various tribes from the Atlantic to the Pacific, and has occasioned a number of curious regulations in regard to the concealment and change of names. It may be on this account that both Powhatan and Pocahontas are known in history under assumed appellations, their true names having been concealed from the whites until the pseudonyms were

too firmly established to be supplanted. Should his prayers have no apparent effect when treating a patient for some serious illness, the shaman sometimes concludes that the name is affected, and accordingly goes to water, with appropriate ceremonies, and christens the patient with a new name, by which he is henceforth to be known. He then begins afresh, repeating the formulas with the new name selected for the patient, in the confident hope that his efforts will be crowned with success.

LANGUAGE OF THE FORMULAS.

A few words remain to be said in regard to the language of the formulas. They are full of archaic and figurative expressions, many of which are unintelligible to the common people, and some of which even the shamans themselves are now unable to explain. These archaic forms, like the old words used by our poets, lend a peculiar beauty which can hardly be rendered in a translation. They frequently throw light on the dialectic evolution of the language, as many words found now only in the nearly extinct Lower Cherokee dialect occur in formulas which in other respects are written in the Middle or Upper dialect. The R sound, the chief distinguishing characteristic of the old Lower dialect, of course does not occur, as there are no means of indicating it in the Cherokee syllabary. Those who are accustomed to look to the Bible for all beauty in sacred expression will be surprised to find that these formulas abound in the loftiest nights of poetic imagery. This is especially true of the prayers used to win the love of a woman or to destroy the life of an enemy, in which we find such expressions as—"Now your soul fades away—your spirit shall grow less and dwindle away, never to reappear;" "Let her be completely veiled in loneliness—O Black Spider, may you hold her soul in your web, so that it may never get through the meshes;" and the final declaration of the lover, "Your soul has come into the very center of my soul, never to turn away."

In the translation it has been found advisable to retain as technical terms a few words which could not well be rendered literally, such as ada'wĕhĭ and ugistā''tĭ. These words will be found explained in the proper place. Transliterations of the Cherokee text of the formulas are given, but it must be distinctly understood that the translations are intended only as free

renderings of the spirit of the originals, exact translations with grammatic and glossarial notes being deferred until a more extended study of the language has been made, when it is hoped to present with more exactness of detail the whole body of the formulas, of which the specimens here given are but a small portion.

The facsimile formulas are copies from the manuscripts now in possession of the Bureau of Ethnology, and the portraits are from photographs taken by the author in the field

SPECIMEN FORMULAS.

NOTE ON THE ORTHOGRAPHY AND TRANSLATION.

In the Cherokee text both d and g have a medial sound, approximating the sounds of t and k respectively. The other letters are pronounced in regular accordance with the alphabet of the Bureau of Ethnology. The language abounds in nasal and aspirate sounds, the most difficult of the latter being the aspirate l, which to one familiar only with English sounds like l.

A few words whose meaning could not be satisfactorily ascertained have been distinctively indicated in the Cherokee text by means of italics. In the translation the corresponding expression has been queried, or the space left entirely blank. On examining the text the student can not fail to be struck by the great number of verbs ending in *iga*. This is a peculiar form hardly ever used excepting in these formulas, where almost every paragraph contains one or more such verbs. It implies that the subject has just come and is now performing the action, and that he came for that purpose. In addition to this, many of these verbs may be either assertive or imperative (expressing entreaty), according to the accent. Thus *hatû* "gani 'ga means "you have just come and are listening and it is for that purpose you came." By slightly accenting the final syllable it becomes "come at once to listen." It will thus be seen that the great majority of the formulas are declarative rather than petitional in form—laudatory rhapsodies instead of prayers, in the ordinary sense of the word

MEDICINE.

DIDÛⁿLĚ'SKĭ ADANÛⁿ'WÂTĭ KANÂHĔ'SKĭ.

Sgĕ! Ha-Nûndâgû'nyĭ tsûl'dâ'histĭ, Gi''lĭ Gigage'ĭ, hanâ'gwa hatû'ngani'ga usĭnuli'yu. Hida'wĕhi-gâgû', gahu'stĭ tsan'ultĭ nige'sûnna. Ha-diskwûlti'yû tĭ'nanugagĭ', ase'gwû nige'sûnna tsagista''tĭ adûnni'ga. Ulsg'eta hûnhihyû 'nstani'ga. Ha-usdig'iyu-gwû ha-e'lawastû'n iytû'nta dûhilâ'hĭstani'ga.

Sgĕ! Ha-Uhûntsâ'yĭ tsûl'dâ'histĭ Gi''lĭ Sa'ka'nĭ, hanâ'gwa hatû'ngani'ga usĭnuli'yu. Hida'wĕhi-gâgû', gahu'stĭ tsanu'ltĭ nige'sûnna. Diskwûlti'yû ti 'nanugai', ase'gwû nige'sûnna tsagista''tĭ adûnni'ga. Ulsge'ta hûnhihyûnstani'ga. Ha-usdigi'yu-gwû ha-e'lawastû'n iyû'ta dûhitâ'hĭstani 'ga.

Sgĕ! (Ha)-Usûhi'(-yĭ) tsûl'dâ'histĭ, Gi'l'ĭ Gûⁿnage'ĭ, hanâ'gwa hatû'ⁿgani 'ga usĭnuli'yû. Hida'wĕhi-gâgû', gahu'sti tsanu'ltĭ nige'sû'ⁿna. Diskwûlti 'yû tinanugagĭ', ase'gwû nige'sûⁿna tsagista''tĭ adûⁿni'ga. Ulsg'eta hûⁿhihyûⁿstani'ga. Ha-usdigi'yu-gwû ha-e'lawastû'ⁿ iyû'ⁿta dûhitâ'hĭstani 'ga.

Sgĕ! Wa'hală' tsûl'dâ'histĭ, Gi''lĭ Tsûne'ga, hanâ'gwa hatû'ⁿgani'ga usĭnuli 'yu. Hida'wĕhi-gâgû', gahu'stĭ tsanu'ltĭ nige'sûⁿna. Diskwûlti'yû ti 'nanugagĭ', ase'gwû nige'sûⁿna tsagista''tĭ adûⁿni'ga. Ha-ulsge'ta hûⁿhihyû 'ⁿstani'ga. Ha-usdigi'yu-gwû e'lawastû'ⁿ iyû'ⁿta dûhitâ'hĭstani'ga.

Sgĕ! Wa'hală tsûl'dâ'histĭ Tû'ksĭ Tsûne'ga, hanâ'gwa hatû'ⁿgani'ga usĭnuli 'yu. Hida'wĕhi-gâgû', gahu'stĭ tsanu'ltĭ nige'sûⁿna. Ha-kâ'lû *gayûske'ta* tsatûⁿ'neli'ga. Utsĭna'wa nu'tatănû'ⁿta.

(Degâsisisgû'nĭ.)—Tûksĭ uhya'ska gûnsta'tĭ' na'skĭ igahi'ta gunstâ'ĭ hĭ'skĭ iyuntale'gĭ tsûntûngi'ya. Ûnskwû'ta kĭlû' atsâ'tastĭ sâ'gwa iyûtsâ'tastĭ, nû ''kĭ igû'nkta'tĭ, naski-gwû' diûnlĕ'nĭskâhĭ' igûnyi'yĭ tsale'nihû. Nû''kine ûnskwû'ta kĭlû' nû''kĭ iyatsâ'tastĭ. Uhyaskâ'hi-'nû ade'la degû'la'ĭ tă'lĭ unine'ga-gwû' nû'nwâti-'nû' higûnehâ'ĭ uhyaskâ'hĭ usdi'a-gwû. Une 'lagi-'nû sâĭ' agadâ'ĭ agadi'dĭ û'nti-gwû' yĭkĭ' âsi'yu-gwû na'ski-'nû aganûnli'eskâ'ĭ da'gûnstanehû'nĭ ŭ'taâ'ta. Hiă'-nû' nû'nwâtĭ: Yâ'na-

Unatsĕsdâ'gĭ tsana'sehâ'ĭ sâ'i-'nû Kâ'ga-Asgû'ntagĕ tsana'sehâ'ĭ, sâi-'nû' $Eg\hat{u}''li$ -gwû, sâi-nû' (U)wa'sgilĭ tsĭgĭ' Egû'nlĭ Usdi'a tsĭgĭ', nûnyâ'hi-'nû tsuyĕ'dâ'ĭ Yâ'na-Utsĕsdâgĭ naskiyû' tsĭgĭ', usdi'-gwû tsĭgĭ'. Egû'nlĭ (u)wa 'sgilĭ tsĭgĭ'; sâ'ĭ Wâ'tige Unas(te')tsa tsĭgĭ', sâ'i-'nû Û'nage Tsunaste'tsa, Niga'ta unaste'tsa gesâ'ĭ.

Sunale'-gwû ale'ndĭ adanû'ⁿwâtĭ; tă'line e'ladĭ tsitkala'ĭ; tsâ'ine u'lsaladĭ 'satû'; nû''kine igû' ts'kalâ'ĭ. Yeli'gwû' igesâ'ĭ. Nû'lstâiyanû'na gesâ'ĭ akanûⁿwi'skĭ, nasgwû' nulstaiyanû'na.

Translation.

FORMULA FOR TREATING THE CRIPPLER (RHEUMATISM).

Listen! Ha! In the Sun Land you repose, O Red Dog, O now you have swiftly drawn near to hearken. O great ada'wĕhĭ¹0, you never fail in anything. O, appear and draw near running, for your prey never escapes. You are now come to remove the intruder. Ha! You have settled a very small part of it far off there at the end of the earth.

Listen! Ha! In the Frigid Land you repose, O Blue Dog. O now you have swiftly drawn near to hearken, O great ada'wĕhĭ, you never fail in anything. O, appear and draw near running, for your prey never escapes. You are now come to remove the intruder. Ha! You have settled a very small part of it far off there at the end of the earth.

Listen! Ha! In the darkening land you repose, O Black Dog. O, now you have swiftly drawn near to hearken. O great ada'wĕhĭ, you never fail in anything. O, appear and draw near running, for your prey never escapes. You are now come to remove the intruder. Ha! You have settled a very small part of it far off there at the end of the earth.

Listen! On Wa'hală you repose. O White Dog. Oh, now you have swiftly drawn near to hearken. O great ada'wĕhĭ, you never fail in anything. Oh, appear and draw near running, for your prey never escapes. You are now come to remove the intruder. Ha! You have settled a very small part of it far off there at the end of the earth.

Listen! On Wa'hală, you repose, O White Terrapin. O, now you have swiftly drawn near to hearken. O great ada'wĕhĭ, you never fail in anything. Ha! It is for you to loosen its hold on the bone. Belief is accomplished.

(Prescription.)—Lay a terrapin shell upon (the spot) and keep it there while the five kinds (of spirits) listen. On finishing, then blow once. Repeat four times, beginning each time from the start. On finishing the fourth time, then blow four times. Have two white beads lying in the shell, together with a little of the medicine. Don't interfere with it, but have a good deal boiling in another vessel—a bowl will do very well—and rub it on warm while treating by applying the hands. And this is the medicine: What is called Yâ 'na-Utsĕ'sta ("bear's bed," the Aspidium acrostichoides or Christmas fern); and the other is called Kâ'ga-Asgû'ntagĭ ("crow's shin," the Adianthum pedatum or Maidenhair fern); and the other is the common Egû'nlĭ (another fern); and the other is the Little Soft (-leaved) Egû'nlĭ (Osmunda Cinnamonea or cinnamon fern), which grows in the rocks and resembles Yâna-Utsĕ'sta and is a small and soft (-leaved) Egû'nlĭ. Another has brown roots and another has black roots. The roots of all should be (used).

Begin doctoring early in the morning; let the second (application) be while the sun is still near the horizon; the third when it has risen to a considerable height (10 a.m.); the fourth when it is above at noon. This is sufficient. (The doctor) must not eat, and the patient also must be fasting.

Explanation.

As this formula is taken from the manuscript of Gahuni, who died nearly thirty years ago, no definite statement of the theory of the disease, or its treatment, can be given, beyond what is contained in the formula itself, which, fortunately, is particularly explicit; most doctors contenting themselves with giving only the words of the prayer, without noting the ceremonies or even the medicine used. There are various theories as to the cause of each disease, the most common idea in regard to rheumatism being that it is caused by the spirits of the slain animals, generally the deer, thirsting for vengeance on the hunter, as has been already explained in the myth of the origin of disease and medicine.

The measuring-worm (Catharis) is also held to cause rheumatism, from the resemblance of its motions to those of a rheumatic patient, and the name of the worm *wahhĭlĭ'* is frequently applied also to the disease.

There are formulas to propitiate the slain animals, but these are a part of the hunting code and can only be noticed here, although it may be mentioned in passing that the hunter, when about to return to the settlement, builds a fire in the path behind him, in order that the deer chief may not be able to follow him to his home.

The disease, figuratively called the intruder (ulsgéta), is regarded as a living being, and the verbs used in speaking of it show that it is considered to be long, like a snake or fish. It is brought by the deer chief and put into the body, generally the limbs, of the hunter, who at once begins to suffer intense pain. It can be driven out only by some more powerful animal spirit which is the natural enemy of the deer, usually the dog or the Wolf. These animal gods live up above beyond the seventh heaven and are the great prototypes of which the earthly animals are only diminutive copies. They are commonly located at the four cardinal points, each of which has a peculiar formulistic name and a special color which applies to everything in the same connection. Thus the east, north, west, and south are respectively the Sun Land, the Frigid Land, the Darkening Land, and Wa'hala', while their respective mythologic colors are Red, Blue, Black, and White. Wáhala is

said to be a mountain far to the south. The white or red spirits are generally invoked for peace, health, and other blessings, the red alone for the success of an undertaking, the blue spirits to defeat the schemes of an enemy or bring down troubles upon him, and the black to compass his death. The white and red spirits are regarded as the most powerful, and one of these two is generally called upon to accomplish the final result.

In this case the doctor first invokes the Red Dog in the Sun Land, calling him a great adáwehi, to whom nothing is impossible and who never fails to accomplish his purpose. He is addressed as if out of sight in the distance and is implored to appear running swiftly to the help of the sick man. Then the supplication changes to an assertion and the doctor declares that the Red Dog has already arrived to take the disease and has borne away a small portion of it to the uttermost ends of the earth. In the second, third, and fourth paragraphs the Blue Dog of the Frigid Land, the Black Dog of the Darkening Land, and the White Dog of Wahala are successively invoked in the same terms and each bears away a portion of the disease and disposes of it in the same way. Finally, in the fifth paragraph, the White Terrapin of Wáhălă is invoked. He bears off the remainder of the disease and the doctor declares that relief is accomplished. The connection of the terrapin in this formula is not evident, beyond the fact that he is regarded as having great influence in disease, and in this case the beads and a portion of the medicine are kept in a terrapin shell placed upon the diseased part while the prayer is being recited.

The formulas generally consist of four paragraphs, corresponding to four steps in the medical ceremony. In this case there are five, the last being addressed to the terrapin instead of to a dog. The prayers are recited in an undertone hardly audible at the distance of a few feet, with the exception of the frequent ha, which seems to be used as an interjection to attract attention and is always uttered in a louder tone. The beads—which are here white, symbolic of relief—are of common use in connection with these formulas, and are held between the thumb and finger, placed upon a cloth on the ground, or, as in this case, put into a terrapin shell along with a small portion of the medicine. According to directions, the shell has no other part in the ceremony.

The blowing is also a regular part of the treatment, the doctor either holding the medicine in his mouth and blowing it upon the patient, or, as it seems to be the case here, applying the medicine by rubbing, and blowing his breath upon the spot afterwards. In some formulas the simple blowing of the breath constitutes the whole application. In this instance the doctor probably rubs the medicine upon the affected part while reciting the first paragraph in a whisper, after which he blows once upon the spot. The other paragraphs are recited in the same manner, blowing once after each. In this way the whole formula is repeated four times, with four blows at the end of the final repetition. The directions imply that the doctor blows only at the end of the whole formula, but this is not in accord with the regular mode of procedure and seems to be a mistake.

The medicine consists of a warm decoction of the roots of four varieties of fern, rubbed on with the hand. The awkward description of the species shows how limited is the Indian's power of botanic classification. The application is repeated four times during the same morning, beginning just at daybreak and ending at noon. Four is the sacred number running through every detail of these formulas, there being commonly four spirits invoked in four paragraphs, four blowings with four final blows, four herbs in the decoction, four applications, and frequently four days' gaktun'ta or tabu. In this case no tabu is specified beyond the fact that both doctor and patient must be fasting. The tabu generally extends to salt or lye, hot food and women, while in rheumatism some doctors forbid the patient to eat the foot or leg of any animal, the reason given being that the limbs are generally the seat of the disease. For a similar reason the patient is also forbidden to eat or even to touch a squirrel, a buffalo, a cat, or any animal which "humps" itself. In the same way a scrofulous patient must not eat turkey, as that bird seems to have a scrofulous eruption on its head, while ball players must abstain from eating frogs, because the bones of that animal are brittle and easily broken.

HIĂ'-NÛ' NASGWÛ' DIDÛ"LĔ'SKĬ ADĂNÛ'"WÂTĬ.

Asga				
'ya yûkanû	Yû! Higĕ''ya	Gigage'ĭ tsûdante	´lûhĭ gese´ĭ. Ulsge´ta l	hi′tsanu
	'y'tani'leĭ'.	Ha-Nû ⁿ dâgû' ⁿ yĭ	nûnta'tsûdălenû'hĭ	gese'ĭ.

' ⁿ wĭ	Gasgilâ′	gigage'ĭ	tsusdi'ga	tetsadĭ'ilĕ'	detsala'siditĕ-gĕ'ĭ.
Agĕ	Hanâ'gw	a usĭnuli′y	yu detsaldi	si′yûĭ.	
''ya Giagage					
'ĭ atătĭ';					
agĕ´ʻya-nû					
yûkanû′ ⁿ wĭ					
Asga'ya					
Gigage					
'ĭ atătĭ'.					

Utsĭ(nă')wa nu'tatanû'nta. Usû'hita nutanû'na. Utsĭnă'wa-gwû nigûntisge 'stĭ.

(Degâ'sisisgû'nĭ)—Hiă-gwû' nigaû' kanâhe'ta. Nû''kiba nagû'nkw'tisga' dagû'nstiskû'ĭ. Sâ'gwa nûnskwû'ta gûnstû'nĭ agûnstagi's-kâĭ hûntsatasgâ'ĭ nû''kine-'nû ûnskwû'ta nû''kĭ nûntsâtasgâ'ĭ. Hiă-'nû' nû'nwâtĭ: Egû'nlĭ, Yâ 'na-'nû Utsĕsdâ'gĭ, (U)wa'sgilĭ tsĭgĭ' Egû'nlĭ, tă'lĭ tsinu'dalĕ'ha, Kâ'ga-'nû Asgû'ntagĕ tsiûnnâ'sehâ'ĭ, Da'yĭ-'nû Uwâ'yĭ tsiûnnâ'sehâ'ĭ. Su'talĭ iyutale 'gĭ unaste'tsa agâ'tĭ, uga'nawû'nû' dagûnsta''tisgâ'ĭ nû'nwâtĭ asûnga'la'ĭ. Usû'hĭ adanû'nwâtĭ, nu''kĭ tsusû'hita dulsi'nisû'n adanû'nwâti. Ă'nawa 'gi-'nû dilasula'gĭ gesû'nĭ ûlĕ' tsĭkani'kaga'ĭ gûw'sdi'-gwû utsawa'ta ă'nawa'-gwû-nû'.

Hiă-nû' gaktû'nta gûlkwâ'gĭ tsusû'hita. Gû'nwădana'datlahistĭ' nige'sûnna —Salâ'lĭ, gi''li-'nû, wĕ'sa-'nû, ă'tatsû-nû', a'mă-'nû', anigĕ''ya-nû. Uda'lĭ 'ya'kanûnwi'ya nû''kiha tsusû'hita unădană'lâtsi'-tastĭ nige'sûnna. Gasgilâ 'gi-'nû uwă'sun-gwû' u'skĭladi'stĭ uwă'sû nû''kĭ tsusû'hită'. Disâ'i-'nû dega'sgilâ û'ntsa nû'nă' uwa''tĭ yigesûĭ nû''kĭ tsusû'hita.

Translation.

AND THIS ALSO IS FOR TREATING THE CRIPPLER.

Yû! O Red Woman, you have caused it. You have put the intruder under him. Ha! now you have come from the Sun Land. You have brought the small red seats, with your feet resting upon them. Ha! now they have

swiftly moved away from you. Relief is accomplished. Let it not be for one night alone. Let the relief come at once.

(Prescription)—(corner note at top.) If treating a man one must say Red Woman, and if treating a woman one must say Red Man.

This is just all of the prayer. Repeat it four times while laying on the hands. After saying it over once, with the hands on (the body of the patient), take off the hands and blow once, and at the fourth repetition blow four times. And this is the medicine. Egû'nlǐ (a species of fern). Yâ'-na-Utsĕ'sta ("bear's bed," the Aspidium acrostichoides or Christmas fern), *two* varieties of the soft-(leaved) Egû'nlǐ (one, the small variety, is the Cinnamon fern, Osmunda cinnamonea), and what is called Kâ'ga Asgû'ntagĕ ("crow's shin," the Adiantum pedatum or Maidenhair fern) and what is called Da'yǐ-Uwâ'yǐ ("beaver's paw"—not identified). Boil the roots of the six varieties together and apply the hands warm with the medicine upon them. Doctor in the evening. Doctor four consecutive nights. (The pay) is cloth and moccasins; or, if one does not have them, just a little dressed deerskin and some cloth.

And this is the tabu for seven nights. One must not touch a squirrel, a dog, a cat, the mountain trout, or women. If one is treating a married man they (*sic*) must not touch his wife for four nights. And he must sit on a seat by himself for four nights, and must not sit on the other seats for four nights.

Explanation.

The treatment and medicine in this formula are nearly the same as in that just given, which is also for rheumatism, both being written by Gahuni. The prayer differs in several respects from any other obtained, but as the doctor has been dead for years it is impossible to give a full explanation of all the points. This is probably the only formula in the collection in which the spirit invoked is the "Red Woman," but, as explained in the corner note at the top, this is only the form used instead of "Red Man," when the patient is a man. The Red Man, who is considered perhaps the most powerful god in the Cherokee pantheon, is in some way connected with the thunder, and is invoked in a large number of formulas. The change in the formula,

according to the sex of the patient, brings to mind a belief in Irish folk medicine, that in applying certain remedies the doctor and patient must be of opposite sexes. The Red Man lives in the east, in accordance with the regular mythologic color theory, as already explained. The seats also are red, and the form of the verb indicates that the Red Woman is either standing upon them (plural) or sitting with her feet resting upon the rounds. These seats or chairs are frequently mentioned in the formulas, and always correspond in color with the spirit invoked. It is not clear why the Red Woman is held responsible for the disease, which is generally attributed to the revengeful efforts of the game, as already explained. In agreement with the regular form, the disease is said to be put under (not into) the patient. The assertion that the chairs "have swiftly moved away" would seem from analogy to mean that the disease has been placed upon the seats and thus borne away. The verb implies that the seats move by their own volition. Immediately afterward it is declared that relief is accomplished. The expression "usû'hita nutanû'na" occurs frequently in these formulas, and may mean either "let it not be for one night alone," or "let it not stay a single night," according to the context.

The directions specify not only the medicine and the treatment, but also the doctor's fee. From the form of the verb the tabu, except as regards the seat to be used by the sick person, seems to apply to both doctor and patient. It is not evident why the mountain trout is prohibited, but the dog, squirrel, and cat are tabued, as already explained, from the fact that these animals frequently assume positions resembling the cramped attitude common to persons afflicted by rheumatism. The cat is considered especially uncanny, as coming from the whites. Seven, as well as four, is a sacred number with the tribe, being also the number of their gentes. It will be noted that time is counted by nights instead of by days.

HIÂ' I'NATÛ YUNISKÛ'LTSA ADANÛ'NWÂTĬ.

- 1. *Dûnu'wa*, dûnu'wa, dûnu'wa, dûnu'wa, dûnu'wa, dûnu 'wa (*song*).
 - Sgĕ! Ha-Walâ'sĭ-gwû tsûnlû'ntani'ga.
- 2. *Dayuha*, dayuha, dayuha dayuha (*song*). Sgĕ! Ha-*Usugĭ*-gwû tsûⁿ-lûⁿ′-tani′ga.

(Degâ'sisisgû'nĭ).—Kanâgi'ta nâyâ'ga hiă' dilentisg'ûnĭ. Tă'lĭ igû 'nkw'ta'tĭ, ûlĕ' talinĕ' tsutanû'nna nasgwû' tâ'lĭ igû'nkw'ta'tĭ'. Tsâ'la aganû'nlieskâĭ' tsâ'la yikani'gûngû'âĭ' watsi'la-gwû ganûnli'yĕtĭ uniskûl'tsû 'nĭ. Nû''kĭ nagade'stisgâĭ' aganûnli'esgûnĭ. Akskû'nĭ gadest'a'tĭ, nûû'kĭ nagade' sta hûntsatasgâ'ĭ. Hiă-'nû' i'natû akti'sĭ udestâ'ĭ yigû'n'ka, naski-'nû' tsagadû'lăgisgâ'ĭ iyu'stĭ gatgû'nĭ.

Translation.

THIS IS TO TREAT THEM IF THEY ARE BITTEN BY A SNAKE.

- 1. Dûnu'wa, dûnu'wa, dûnu'wa, dûnu'wa, dûnu'wa, dûnu 'wa.
 - Listen! Ha! It is only a common frog which has passed by and put it (the intruder) into you.
- 2. Dayuha, dayuha, dayuha, dayuha. Listen! Ha! It is only an *Usu' 'gĭ* which has passed by and put it into you.

(Prescription.)—Now this at the beginning is a song. One should say it twice and also say the second line twice. Rub tobacco (juice) on the bite for some time, or if there be no tobacco just rub on saliva once. In rubbing it on, one must go around four times. Go around toward the left and blow four times in a circle. This is because in lying down the snake always coils to the right and this is just the same (*lit*. "means like") as uncoiling it.

Explanation.

This is also from the manuscript book of Gahuni, deceased, so that no explanation could be obtained from the writer. The formula consists of a song of two verses, each followed by a short recitation. The whole is repeated, according to the directions, so as to make four verses or songs; four, as already stated, being the sacred number running through most of these formulas. Four blowings and four circuits in the rubbing are also specified. The words used in the songs are sometimes composed of unmeaning syllables, but in this case dûnuwa and dayuha seem to have a

meaning, although neither the interpreter nor the shaman consulted could explain them, which may be because the words have become altered in the song, as frequently happens. Dûnu'wa appears to be an old verb, meaning "it has penetrated," probably referring to the tooth of the reptile. These medicine songs are always sung in a low plaintive tone, somewhat resembling a lullaby. Usu'gĭ also is without explanation, but is probably the name of some small reptile or batrachian.

As in this case the cause of the trouble is evident, the Indians have no theory to account for it. It may be remarked, however, that when one dreams of being bitten, the same treatment and ceremonies must be used as for the actual bite; otherwise, although perhaps years afterward, a similar inflammation will appear on the spot indicated in the dream, and will be followed by the same fatal consequences. The rattlesnake is regarded as a supernatural being or ada'wehi, whose favor must be propitiated, and great pains are taken not to offend him. In consonance with this idea it is never said among the people that a person has been bitten by a snake, but that he has been "scratched by a brier." In the same way, when an eagle has been shot for a ceremonial dance, it is announced that "a snowbird has been killed," the purpose being to deceive the rattlesnake or eagle spirits which might be listening.

The assertion that it is "only a common frog" or "only an Usu"gi" brings out another characteristic idea of these formulas. Whenever the ailment is of a serious character, or, according to the Indian theory, whenever it is due to the influence of some powerful disease spirit the doctor always endeavors to throw contempt upon the intruder, and convince it of his own superior power by asserting the sickness to be the work of some inferior being, just as a white physician might encourage a patient far gone with consumption by telling him that the illness was only a slight cold. Sometimes there is a regular scale of depreciation, the doctor first ascribing the disease to a rabbit or groundhog or some other weak animal, then in succeeding paragraphs mentioning other still less important animals and finally declaring it to be the work of a mouse, a small fish, or some other insignificant creature. In this instance an ailment caused by the rattlesnake, the most dreaded of the animal spirits, is ascribed to a frog, one of the least importance.

In applying the remedy the song is probably sung while rubbing the tobacco juice around the wound. Then the short recitation is repeated and the doctor blows four times in a circle about the spot. The whole ceremony is repeated four times. The curious directions for uncoiling the snake have parallels in European folk medicine.

GÛⁿWĂNI'GISTÂ'Ĭ ADANU'ⁿWÂTĬ.

Sgĕ! Ha-tsida'wĕiyu, gahus'tĭ aginúl'tĭ nige'sûⁿna. Gûⁿgwădag'anad'diyû' tsida'wĕi'yu. Ha-Wăhuhu'-gwû hitagu'sgastanĕ'hĕĭ. Ha-nâ'gwa hŭ'kikahûⁿû' ha-dusŭ''gahĭ digesû'ⁿĭ, iyû'ⁿta wûⁿ'kidâ'hĭstani'ga.

Sgě! Ha-tsida'wĕi'yu, gahu'stĭ aginu'l'tĭ nige'sûⁿna. Gûⁿgwădaga'nad'diyû 'tsida'wĕi'yu. Ha-Uguku'-gwû hitagu'sgastanĕ'hĕi' udâhi'yu tag'u 'sgastanĕ'hĕi'. Ha-na'gwadi'na hûⁿkikahûⁿnû'. Ha-nânâ'hĭ digesŭ'ⁿĭ iyû'ⁿta wûⁿ'kidâ'hĭstani'ga.

Sgě! Ha-tsida'wĕi'yu, gahu'stĭ aginu'l'tĭ nige'sûnna. Gûngwădaga'nad'diyû tsida'wĕi'yu. Ha-Tsistu-gwû hitagu'sgastanĕ'he'ĭudâhi'yu tag'usgastanĕ 'hĕĭ'. Ha-nâ'gwadi'na hû'nkikahû'nnû. Ha-sunûnda'sĭ iyû'nta kane'skawâ 'dihĭ digesû'nĭ, wûn'kidâ'hĭstani'ga.

Sgĕ! Ha-tsida'wĕi'yu, gahu'stĭ aginu'l'tĭ nige'sûⁿna. Gûⁿgwădaga'nad'di 'yû tsida'wĕi'yu. Ha-De'tsata'-gwû (hi)tagu'sgastanĕ'hĕĭ udâhi'yu tagu 'sgastanĕ'hĕĭ. Ha-nâ'gwadi'na hûⁿkikahû'ⁿa. Ha-udâ'tale'ta digesû'ⁿĭ, iyû 'ⁿta wûⁿ'kidâ'hĭstani'ga.

(Degâ'sisisgû'nĭ)—Hiă'-skĭnĭ' unsdi'ya dĭkanû'nwâtĭ tsa'natsa'yihâ'ĭ tsaniska'iha'ĭ; gûnwani'gista'ĭ hi'anûdĭ'sgaĭ'. Ămă' dûtsati'stĭsgâ'ĭ nû''kĭ tsusû'hita dĭkanû'nwâtĭ Ulsinide'na dakanû'nwisgâ'ĭ. Ŭ'ntsa iyû'nta witunini'dastĭ yigesâ'ĭ.

Translation.

TO TREAT THEM WHEN SOMETHING IS CAUSING SOMETHING TO EAT THEM.

Listen! Ha! I am a great ada'wehi, I never fail in anything. I surpass all others—I am a great ada'wehi. Ha! It is a mere screech owl that has frightened him. Ha! now I have put it away in the laurel thickets. There I compel it to remain.

Listen! Ha! I am a great ada'wehi, I never fail in anything. I surpass all others—I am a great ada'wehi. Ha! It is a mere hooting owl that has frightened him. Undoubtedly that has frightened him. Ha! At once I have put it away in the spruce thickets. Ha! There I compel it to remain.

Listen! Ha! I am a great ada'wehi, I never fail in anything. I surpass all others—I am a great ada'wehi. Ha! It is only a rabbit that has frightened him. Undoubtedly that has frightened him. Ha! Instantly I have put it away on the mountain ridge. Ha! There in the broom sage I compel it to remain.

Listen! Ha! I am a great ada'wehi, I never fail in anything. I surpass all others—I am a great ada'wehi. Ha! It is only a mountain sprite that has frightened him. Undoubtedly that has frightened him. Ha! Instantly I have put it away on the bluff. Ha! There I compel it to remain.

(Prescription)—Now this is to treat infants if they are affected by crying and nervous fright. (Then) it is said that something is causing something to eat them. To treat them one may blow water on them for four nights. Doctor them just before dark. Be sure not to carry them about outside the house.

Explanation.

The Cherokee name for this disease is Guⁿwani'gistâi', which signifies that "something is causing something to eat," or gnaw the vitals of the patient. The disease attacks only infants of tender age and the symptoms are nervousness and troubled sleep, from which the child wakes suddenly crying as if frightened. The civilized doctor would regard these as symptoms of the presence of worms, but although the Cherokee name might seem to indicate the same belief, the real theory is very different.

Cherokee mothers sometimes hush crying children, by telling them that the screech owl is listening out in the woods or that the De'tsata—a malicious little dwarf who lives in caves in the river bluffs—will come and get them.

This quiets the child for the time and is so far successful, but the animals, or the De'tsata, take offense at being spoken of in this way, and visit their displeasure upon the *children born to the mother afterward*. This they do by sending an animal into the body of the child to gnaw its vitals. The disease is very common and there are several specialists who devote their attention to it, using various formulas and prescriptions. It is also called ătawi'něhĭ, signifying that it is caused by the "dwellers in the forest," i.e., the wild game and birds, and some doctors declare that it is caused by the revengeful comrades of the animals, especially birds, killed by the father of the child, the animals tracking the slayer to his home by the blood drops on the leaves. The next formula will throw more light upon this theory.

In this formula the doctor, who is certainly not overburdened with modesty, starts out by asserting that he is a great ada'wehi, who never fails and who surpasses all others. He then declares that the disease is caused by a mere screech owl, which he at once banishes to the laurel thicket. In the succeeding paragraphs he reiterates his former boasting, but asserts in turn that the trouble is caused by a mere hooting owl, a rabbit, or even by the De 'tsata, whose greatest exploit is hiding the arrows of the boys, for which the youthful hunters do not hesitate to rate him soundly. These various mischief-makers the doctor banishes to their proper haunts, the hooting owl to the spruce thicket, the rabbit to the broom sage on the mountain side, and the De'tsata to the bluffs along the river bank.

Some doctors use herb decoctions, which are blown upon the body of the child, but in this formula the only remedy prescribed is water, which must be blown upon the body of the little sufferer just before dark for four nights. The regular method is to blow once each at the end of the first, second, and third paragraphs and four times at the end of the fourth or last. In diseases of this kind, which are not supposed to be of a local character, the doctor blows first upon the back of the head, then upon the left shoulder, next upon the right shoulder, and finally upon the breast, the patient being generally sitting, or propped up in bed, facing the east. The child must not be taken out of doors during the four days, because should a bird chance to fly overhead so that its shadow would fall upon the infant, it would *fan the disease back* into the body of the little one.

GÛⁿWANI'GISTÛ'ⁿĬ DITANÛⁿWÂTI'YĬ

Yû! Sgĕ! Usĭnu'lĭ hatû'ngani'ga, Giya'giya' Sa'ka'nĭ, ew'satâ'gĭ tsûl'da 'histĭ. Usĭnu'lĭ hatlasi'ga. Tsis'kwa-gwû' ulsge'ta uwu'tlani'lĕĭ'. Usĭnuli'yu atsahilu'gĭsi'ga. Utsĭnă'wa nu'tatanû'nta. Yû!

Yû! Sgĕ! Usĭnu'lĭ hatû'ngani'ga, Diga'tiskĭ Wâtige'ĭ, galû'nlatĭ iyû'nta ditsûl'dâ'histĭ. Ha-nâ'gwa usĭnu'lĭ hatlasi'ga. Tsi'skwa-gwû dĭtu'nila 'w'itsû'hĭ higese'ĭ. Usĭnûlĭ kĕ'tati'gû'lahi'ga. Utsĭnă'wa adûnni'ga. Yû!

Translation.

TO TREAT GÛNWANI'GISTÛ'NĬ—(SECOND).

Yû! Listen! Quickly you have drawn near to hearken, O Blue Sparrow-Hawk; in the spreading tree tops you are at rest. Quickly you have come down. The intruder is only a bird which has overshadowed him. Swiftly you have swooped down upon it. Relief is accomplished. Yû!

Yû! Listen! Quickly you have drawn near to hearken, O Brown Rabbit-Hawk; you are at rest there above. Ha! Swiftly now you have come down. It is only the birds which have come together for a council. Quickly you have come and scattered them. Relief is accomplished. Yû!

Explanation.

This formula, also for Gûⁿwani'gistû'ⁿĭ or Atawinĕ'hĭ, was obtained from A'wan'ita (Young Deer), who wrote down only the prayer and explained the treatment orally. He coincides in the opinion that this disease in children is caused by the birds, but says that it originates from the shadow of a bird flying overhead having fallen upon the pregnant mother. He says further that the disease is easily recognized in children, but that it sometimes does not develop until the child has attained maturity, when it is more difficult to discern the cause of the trouble, although in the latter case dark circles around the eyes are unfailing symptoms.

The prayer—like several others from the same source—seems incomplete, and judging from analogy is evidently incorrect in some respects, but yet exemplifies the disease theory in a striking manner. The disease is declared to have been caused by the birds, it being asserted in the first paragraph that a bird has cast its shadow upon the sufferer, while in the second it is declared that they have gathered in council (in his body). This latter is a favorite expression in these formulas to indicate the great number of the disease animals. Another expression of frequent occurrence is to the effect that the disease animals have formed a settlement or established a townhouse in the patient's body. The disease animal, being a bird or birds, must be dislodged by something which preys upon birds, and accordingly the Blue Sparrow-Hawk from the tree tops and the Brown Rabbit-Hawk (Diga'tiski—"One who snatches up"), from above are invoked to drive out the intruders. The former is then said to have swooped down upon them as a hawk darts upon its prey, while the latter is declared to have scattered the birds which were holding a council. This being done, relief is accomplished. Yû! is a meaningless interjection frequently used to introduce or close paragraphs or songs.

The medicine used is a warm decoction of the bark of Kûnstû'tsĭ (Sassafras —Sassafras officinale), Kanûⁿsi'ta (Flowering Dogwood—Cornus florida), Udâ'lana (Service tree—Amelanchier Canadensis), and Uni'kwa (Black Gum—Nyssa multiflora), with the roots of two species (large and small) of Da'yakalĭ'skĭ (Wild Rose—Rosa lucida). The bark in every case is taken from the east side of the tree, and the roots selected are also generally, if not always, those growing toward the east. In this case the roots and barks are not bruised, but are simply steeped in warm water for four days. The child is then stripped and bathed all over with the decoction morning and night for four days, no formula being used during the bathing. It is then made to hold up its hands in front of its face with the palms turned out toward the doctor, who takes some of the medicine in his mouth and repeats the prayer mentally, blowing the medicine upon the head and hands of the patient at the final $Y\hat{u}!$ of each paragraph. It is probable that the prayer originally consisted of four paragraphs, or else that these two paragraphs were repeated. The child drinks a little of the medicine at the end of each treatment

The use of salt is prohibited during the four days of the treatment, the word (amă') being understood to include lye, which enters largely into Cherokee food preparations. No chicken or other feathered animal is allowed to enter the house during the same period, for obvious reasons, and strangers are excluded for reasons already explained.

HIA' DU'NIYUKWATISGÛ'¹Í KANA'HÈHÛ.

Sgě! Nûndâgû'nyĭ tsûl'dâ'histĭ, Kanani'skĭ Gigage. Usĭnu'lĭ nû'nnâ gi'gage hĭnûnni'ga. Hida'wĕhi-gâgû', astĭ' digi'gage usĭnû'lĭ dehĭkssa'ûntani'ga. Ulsge'ta kane'ge kayu''ga gesû'n, tsgâ'ya-gwû higese'ĭ. Ehĭstĭ' hituwa 'saniy'teĭ'. Usĭnu'lĭ astĭ' digi'gage dehada'ûntani'ga, adi'na tsûlstai-yû''tigwû higese'ĭ. Nâ'gwa gânagi'ta da'tsatane'lĭ. Utsĭnă'wa nu'tatanû'nta nûntûneli'ga. Yû!

Hĭgayû'nlĭ Tsûne'ga hatû'ngani'ga. "A'ya-gâgû' gatû'ngisge'stĭ tsûngili'sĭ deagwûlstawĭ'stitege'stĭ," tsadûnû'hĭ. Na'ski-gâgû' itsa'wesû'hĭ nâ'gwa usĭnu'lĭ hatu'ngani'ga. Utsĭnă'wa nútatanû'ta nûntû'neli'ga. Yû!

Sgě! Uhyûⁿtlâ'yĭ tsûl'dâ'histi Kanani'skĭ Sa'ka'nĭ. Usĭnu'lĭ nû'ⁿnâ sa'ka'nĭ hĭnûⁿni'ga. Hida'wĕhi-gâgû', astĭ' (di)sa'ka'nĭ usĭnu'lĭ dehĭksa'ûⁿtani'ga. Ulsge'ta kane'ge kayu''ga gesû'ⁿ, tsgâ'ya-gwû higese'ĭ. Ehĭstĭ' hituwa 'saniy'te(ĭ'). Usĭnu'lĭ astĭ' disa'ka'nige dehada'ûⁿtaniga, adi'na tsûlstai-yû ''ti-gwû higese'ĭ. Nâ'gwa tsgâ'ya gûnagi'ta tsûtûneli'ga. Utsĭnă'wa nu 'tatanû'ⁿta nûⁿtûneli'ga. Yû!

Hĭgayû'nlĭ Tsûne'ga hatûngani'ga. "A'ya-gâgû' gatû'ngisge'stĭ tsûngili'sĭ deagwûlstawĭ'stitege'stĭ," tsadûnû'hĭ. Nas'kigâgû' itsawesû'hĭ nâ'gwa usĭnu'lĭ hatû'ngani'ga. Utsĭnă'wa nutatanû'nta nûntûneli'ga. Yû!

Sgě! Usûhi'yĭ tsûl'dâ'histĭ Kanani'skĭ Û'nage. Usĭnu'lĭ nû'naâ û'nage hĭnûnni'ga. Hida'wĕhi-gâgû', astĭ digû'nage usĭnu'lĭ dehĭksa'ûntani'ga. Ulsge'ta kane'ge kayu''ga gesû'n, tsgâ'ya-gwû higese'ĭ. Ehĭstĭ hituwa 'saniy'teĭ'. Usĭnu'lĭ astĭ digû'nage dehada'ûntani'ga, adi'na tsûlstai-yû''ti-

gwû higese'ĭ. Nâ'gwa tsgâ'ya gûnagi'ta tsûtûneli'ga. Utsĭnă'wa nutatanû 'nta nûntûneli'ga. Yû!

Hĭgayû'nlĭ Tsûne'ga hatûngani'ga. "A'ya-gâgû' gatû'ngisge'stĭ tsûngili'sĭ deagwûlstawĭ'stitege'stĭ," tsadûnû'hĭ. Na'skigâgû' itsawesû'hĭ nâ'gwa usĭnu'lĭ hatû'ngani'ga. Utsĭnă'wa nutatanû'nta nûntûneli'ga. Yû!

Sgě! Galû'nlatĭ tsûl'dâ'histĭ, Kanani'skĭ Tsûne'ga. Usĭnu'lĭ nû'nnâ une'ga hĭnûnni'ga. Hida'wĕhi-gâgû', astĭ' tsune'ga usĭnu'lĭ dehĭksa'ûn tani'ga. Ulsge'ta kane'ge kayu''ga gesû'n, tsgâ'ya-gwû higese'ĭ. Ehĭstĭ' hituwa 'săniy'teĭ'. Usĭnu'lĭ astĭ' tsune'ga dehada'ûntani'ga, adi'na tsûlstai-yû''ti-gwû higese'ĭ. Nâ'gwa tsgâ'ya gûnagi'ta tsûtûneli'ga. Utsĭnă'wa nu'tatanû 'nta, nûntûneli'ga. Yû!

Hĭgayû'nlĭ Tsûne'ga hatû'ngani'ga. "A'ya-gâgû' gatû'ngisge'stĭ tsûngili'sĭ deagwûlstawĭ'stitege'stĭ," tsadûnû'hĭ. Naski-gâgû' itsawesû'hĭ nâ'gwa usĭnu'lĭ hatûngani'ga. U'tsĭna'wa nutatanû'nta nûntûneli'ga. Yû!

(Degasi'sisgû'nĭ)—Hiă' duniyukwa'tisgû'nĭ dĭkanû'nwâtĭ ătanû'nsida'hĭ yĭ 'gĭ. Na'skĭ digû'nstanĕ''ti-gwû ûlĕ' tsĭtsâtû' yie'lisû. Nigûn'-gwû usû'na [for usûnda'na?] gû'ntatĭ nayâ'ga nû'nwatĭ unanû'nskă'la'ĭ. Kane'ska dalâ 'nige unaste'tla tsĭ'gĭ. Se'lu dĭgahû'nû'hĭ tsuni'yahĭstĭ' nû''kĭ tsusû'hita, kanâhe'na-'nû naskĭ' iga'ĭ udanû'stĭ hi'gĭ nayâ'ga.

Translation.

THIS TELLS ABOUT MOVING PAINS IN THE TEETH (NEURALGIA?).

Listen! In the Sunland you repose, O Red Spider. Quickly you have brought and laid down the red path. O great ada'wehi, quickly you have brought down the red threads from above. The intruder in the tooth has spoken and it is only a worm. The tormentor has wrapped itself around the root of the tooth. Quickly you have dropped down the red threads, for it is just what you eat. Now it is for you to pick it up. The relief has been caused to come. Yû!

O Ancient White, you have drawn near to hearken, for you have said, "When I shall hear my grandchildren, I shall hold up their heads." Because you have said it, now therefore you have drawn near to listen. The relief has been caused to come. Yû!

Listen! In the Frigid Land you repose, O Blue Spider. Quickly you have brought and laid down the blue path. O great ada'wehi, quickly you have brought down the blue threads from above. The intruder in the tooth has spoken and it is only a worm. The tormentor has wrapped itself around the root of the tooth. Quickly you have dropped down the blue threads, for it is just what you eat. Now it is for you to pick it up. The relief has been caused to come. Yû!

O Ancient White, you have drawn near to hearken, for you have said, "When I shall hear my grandchildren, I shall hold up their heads." Because you have said it, now therefore you have drawn near to listen. The relief has been caused to come. Yû!

Listen! In the Darkening Land you repose, O Black Spider. Quickly you have brought and laid down the black path. O great ada'wehi, quickly you have brought down the black threads from above. The intruder in the tooth has spoken and it is only a worm. The tormentor has wrapped itself around the root of the tooth. Quickly you have dropped down the black threads, for it is just what you eat. Now it is for you to pick it up. The relief has been caused to come. Yû!

O Ancient White, you have drawn near to hearken, for you have said, "When I shall hear my grandchildren, I shall hold up their heads." Because you have said it, now therefore you have drawn near to listen. The relief has been caused to come. Yû!

Listen! You repose on high, O White Spider. Quickly you have brought and laid down the white path. O great ada'wehi, quickly you have brought down the white threads from above. The intruder in the tooth has spoken and it is only a worm. The tormentor has wrapped itself around the root of the tooth. Quickly you have dropped down the white threads, for it is just what you eat. Now it is for you to pick it up. The relief has been caused to come. Yû!

O Ancient White, you have drawn near to hearken, for you have said, "When I shall hear my grandchildren, I shall hold up their heads." Because you have said it, now therefore you have drawn near to listen. The relief has been caused to come. Yû!

(Prescription)—This is to treat them if there are pains moving about in the teeth. It is only (necessary) to lay on the hands, or to blow, if one should prefer. One may use any kind of a tube, but usually they have the medicine in the mouth. It is the Yellow-rooted Grass (kane' ska dalâ'nige unaste'tla; not identified.) One must abstain four nights from cooked corn (hominy), and kanâhe'na (fermented corn gruel) is especially forbidden during the same period.

Explanation.

This formula is taken from the manuscript book of Gatigwanasti, now dead, and must therefore be explained from general analogy. The ailment is described as "pains moving about in the teeth"—that is, affecting several teeth simultaneously—and appears to be neuralgia. The disease spirit is called "the intruder" and "the tormentor" and is declared to be a mere worm (tsgâ'ya), which has wrapped itself around the base of the tooth. This is the regular toothache theory. The doctor then calls upon the Red Spider of the Sunland to let down the red threads from above, along the red path, and to take up the intruder, which is just what the spider eats. The same prayer is addressed in turn to the Blue Spider in the north, the Black Spider in the west and the White Spider above (galûn'lati). It may be stated here that all these spirits are supposed to dwell above, but when no point of the compass is assigned, galûn'lati is understood to mean directly overhead, but far above everything of earth. The dweller in this overhead galûn'lati may be red, white, or brown in color. In this formula it is white, the ordinary color assigned spirits dwelling in the south. In another toothache formula the Squirrel is implored to take the worm and put it between the forking limbs of a tree on the north side of the mountain.

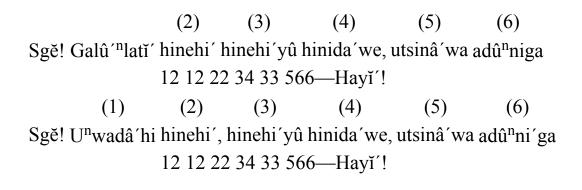
Following each supplication to the spider is another addressed to the Ancient White, the formulistic name for fire. The name refers to its antiquity and light-giving properties and perhaps also to the fact that when

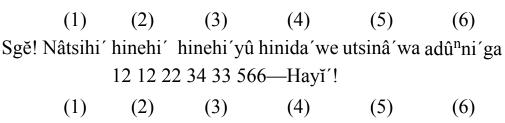
dead it is covered with a coat of white ashes. In those formulas in which the hunter draws omens from the live coals it is frequently addressed as the Ancient Red.

The directions are not explicit and must be interpreted from analogy. "Laying on the hands" refers to pressing the thumb against the jaw over the aching tooth, the hand having been previously warmed over the fire, this being a common method of treating toothache. The other method suggested is to blow upon the spot (tooth or outside of jaw?) a decoction of an herb described rather vaguely as "yellow-rooted grass" either through a tube or from the mouth of the operator. Igawi, a toothache specialist, treats this ailment either by pressure with the warm thumb, or by blowing tobacco smoke from a pipe placed directly against the tooth. Hominy and fermented corn gruel (kanâhe'na) are prohibited for the regular term of four nights, or, as we are accustomed to say, four days, and special emphasis is laid upon the gruel tabu.

The prayer to the Spider is probably repeated while the doctor is warming his hands over the fire, and the following paragraph to the Ancient White (the Fire) while holding the warm thumb upon the aching spot. This reverses the usual order, which is to address the fire while warming the hands. In this connection it must be noted that the fire used by the doctor is never the ordinary fire on the hearth, but comes from four burning chips taken from the hearth fire and generally placed in an earthen vessel by the side of the patient. In some cases the decoction is heated by putting into it seven live coals taken from the fire on the hearth.

UNAWA STÎ EGWA (ADANÛⁿWÂTÏ).





Sgĕ! Amâyi' hinehi', hinehi'yû hinida'we utsinâ'wa adûⁿni'ga 12 12 22 33 33 566—Hayĭ'!

Sgĕ! Ha-nâ'gwa hatû'ngani'ga, Agalu'ga Tsûsdi'ga, hida'wĕhĭ, â'tali tsusdiga'hĭ duda'w'satû'n ditsûldâ'histĭ. (Hida'wĕhĭ, gahu'stĭ tsanu 'lûnhûnsgĭ' nige'sûnna.) Ha-nâ'gwa da'tûlehûngû'. Usdi'gi(yu) utiya'stanûn '(hĭ) (higese'i). (Hûn)hiyala'gistani'ga igâ'tĭ usdigâ'hĭ usa'hĭlagĭ' Igâtu'ltĭ nûnnâ'hĭ wĭte'tsatănûn'ûnsĭ'. A'ne'tsâge'ta *getsatûnĕhĭ* nûngûlstani'ga igûn 'wûlstanita'sti-gwû. Ati'gale'yata tsûtû'neli'ga. Utsĭnâ'wa ll nigûntisge'stĭ.

Sgĕ! Ha-nâ'gwa hûnhatû'ngani'ga, Agalu'ga Hegwahigwû'. Â'talĭ tsegwâ 'hĭ duda'w'satûn iyûnta ditsûldâ'histĭ. Agalu'ga He'gwa, hausĭnu'lĭ da 'tûlehûngû. Usdi'giyu utiya'stanû'nhĭ. Hiyala'gistani'ga ulsge'ta igâ't-egwâ 'hĭ) usa'hĭlagĭ'. (Igat-(egwâ'hĭ iyûn'ta nûnnâ'hĭ wĭtetsatanû'nûnsĭ'. A'ne 'tsâge'ta *getsatûne'litise'sti* igûn'wûlstanita'sti-gwû. Utsĭnâ'wa-gwû nutatanûnta. Nigagĭ' Yû!

(Degâsi'sisgû'ⁿĭ)—Unawa'stĭ e'gwa u'nitlûⁿgâ'ĭ. Ta'ya gû'ⁿtatĭ, ditsa'tista ''ti. Tsâ'l-agayû'ⁿlĭ yă'hă ulû'ⁿkwati-gwû nasgwû'.

Translation.

TO TREAT THE GREAT CHILL.

Listen! On high you dwell, On high you dwell—you dwell, you dwell. Forever you dwell, you anida'we, forever you dwell, forever you dwell. Relief has come—has come. Hayĭ!

Listen! On \hat{U}^n wadâ'hĭ you dwell, On \hat{U}^n wadâhĭ you dwell—you dwell, you dwell. Forever you dwell, you anida'we, forever you dwell, forever you

dwell. Relief has come—has come. Hayĭ!

Listen! In the pines you dwell, In the pines you dwell—you dwell, you dwell. Forever you dwell, you anida'we, forever you dwell, forever you dwell. Relief has come—has come. Hayĭ!

Listen! In the water you dwell, In the water you dwell, you dwell, you dwell. Forever you dwell, you anida'we, forever you dwell, forever you dwell. Relief has come—has come. Hayiĭ!

Listen! O now you have drawn near to hearken, O Little Whirlwind, O ada 'wehi, in the leafy shelter of the lower mountain, there you repose. O ada 'wehi, you can never fail in anything. Ha! Now rise up. A very small portion [of the disease] remains. You have come to sweep it away into the small swamp on the upland. You have laid down your paths near the swamp. It is ordained that you shall scatter it as in play, so that it shall utterly disappear. By you it must be scattered. So shall there be relief.

Listen! O now again you have drawn near to hearken, O Whirlwind, surpassingly great. In the leafy shelter of the great mountain there you repose. O Great Whirlwind, arise quickly. A very small part [of the disease] remains. You have come to sweep the intruder into the great swamp on the upland. You have laid down your paths toward the great swamp. You shall scatter it as in play so that it shall utterly disappear. And now relief has come. All is done. Yû!

(Prescription.)—(This is to use) when they are sick with the great chill. Take a decoction of wild cherry to blow upon them. If you have Tsâ'l-agayû 'nlĭ ("old tobacco"—*Nicotiana rustica*) it also is very effective.

Explanation.

Unawa'stĭ, "that which chills one," is a generic name for intermittent fever, otherwise known as fever and ague. It is much dreaded by the Indian doctors, who recognize several varieties of the disease, and have various theories to account for them. The above formula was obtained from A'yû 'nni (Swimmer), who described the symptoms of this variety, the "Great

Chill," as blackness in the face, with alternate high fever and shaking chills. The disease generally appeared in spring or summer, and might return year after year. In the first stages the chill usually came on early in the morning, but came on later in the day as the disease progressed. There might be more than one chill during the day. There was no rule as to appetite, but the fever always produced an excessive thirst. In one instance the patient fainted from the heat and would even lie down in a stream to cool himself. The doctor believed the disease was caused by malicious tsgâ'ya, a general name for all small insects and worms, excepting intestinal worms. These tsgâ'ya—that is, the disease tsgâ'ya, not the real insects and worms—are held responsible for a large number of diseases, and in fact the tsgâ'ya doctrine is to the Cherokee practitioner what the microbe theory is to some modern scientists. The tsgâ'ya live in the earth, in the water, in the air, in the foliage of trees, in decaying wood, or wherever else insects lodge, and as they are constantly being crushed, burned or otherwise destroyed through the unthinking carelessness of the human race, they are continually actuated by a spirit of revenge. To accomplish their vengeance, according to the doctors, they "establish towns" under the skin of their victims, thus producing an irritation which results in fevers, boils, scrofula and other diseases.

The formula begins with a song of four verses, in which the doctor invokes in succession the spirits of the air, of the mountain, of the forest, and of the water. Galûⁿlatĭ, the word used in the first verse, signifies, as has been already explained, "on high" or "above everything," and has been used by translators to mean heaven. Ûⁿwadâ'hĭ in the second verse is the name of a bald mountain east of Webster, North Carolina, and is used figuratively to denote any mountains of bold outline. The Cherokees have a tradition to account for the name, which is derived from Ûⁿwadâ'lĭ, "provision house." Nâ'tsihĭ' in the third verse signifies "pinery," from nâ''tsĭ, "pine," but is figuratively used to denote a forest of any kind.

In the recitation which follows the song, but is used only in serious cases, the doctor prays to the whirlwind, which is considered to dwell among the trees on the mountain side, where the trembling of the leaves always gives the first intimation of its presence. He declares that a small portion of the disease still remains, the spirits invoked in the song having already taken

the rest, and calls upon the whirlwind to lay down a path for it and sweep it away into the swamp on the upland, referring to grassy marshes common in the small coves of the higher mountains, which, being remote from the settlements, are convenient places to which to banish the disease. Not satisfied with this, he goes on to direct the whirlwind to scatter the disease as it scatters the leaves of the forest, so that it shall utterly disappear. In the Cherokee formula the verb a ne tsâge ta means literally "to play," and is generally understood to refer to the ball play, a ne tsâ, so that to a Cherokee the expression conveys the idea of catching up the disease and driving it onward as a player seizes the ball and sends it spinning through the air from between his ball sticks. Niga gi is a solemn expression about equivalent to the Latin consummatum est.

The doctor beats up some bark from the trunk of the wild cherry and puts it into water together with seven coals of fire, the latter being intended to warm the decoction. The leaves of Tsâl-agayû'nli (Indian tobacco—Nicotiana rustica) are sometimes used in place of the wild cherry bark. The patient is placed facing the sunrise, and the doctor, taking the medicine in his mouth, blows it over the body of the sick man. First, standing between the patient and the sunrise and holding the medicine cup in his hand, he sings the first verse in a low tone. Then, taking some of the liquid in his mouth, he advances and blows it successively upon the top of the head, the right shoulder, left shoulder, and breast or back of the patient, making four blowings in all. He repeats the same ceremony with the second, third, and fourth verse, returning each time to his original position. The ceremony takes place in the morning, and if necessary is repeated in the evening. It is sometimes necessary also to repeat the treatment for several—generally four—consecutive days.

The recitation is not used excepting in the most serious cases, when, according to the formula, "a very small portion" of the disease still lingers. It is accompanied by blowing *of the breath alone*, without medicine, probably in this case typical of the action of the whirlwind. After repeating the whole ceremony accompanying the song, as above described, the doctor returns to his position in front of the patient and recites in a whisper the first paragraph to the Little Whirlwind, after which he advances and blows his breath upon the patient four times as he has already blown the medicine

upon him. Then going around to the north he recites the second paragraph to the Great Whirlwind, and at its conclusion blows in the same manner. Then moving around to the west—behind the patient—he again prays to the Little Whirlwind with the same ceremonies, and finally moving around to the south side he closes with the prayer to the Great Whirlwind, blowing four times at its conclusion. The medicine must be prepared anew by the doctor at the house of the patient at each application morning or evening. Only as much as will be needed is made at a time, and the patient always drinks what remains after the blowing. Connected with the preparation and care of the medicine are a number of ceremonies which need not be detailed here. The wild cherry bark must always be procured fresh; but the Tsâlagayû'nlĭ ("Old Tobacco") leaves may be dry. When the latter plant is used four leaves are taken and steeped in warm water with the fire coals, as above described.

HIĂ' TSUNSDI'GA DIL'TADI'NATANTI'YĬ. I.

Sgě! Hĭsga'ya Ts'sdi'ga ha-nâ'gwa da'tûlehûⁿgû' kĭlû-gwû'. Iyû'ⁿta agayû 'ⁿlinasĭ' taya'ĭ. Eska'niyŭ unayĕ'histĭ' nûⁿta-yu'tanatĭ'. Sgĕ'! tinû'lĭtgĭ'! Tleki'yu tsûtsestâ'gĭ hwĭnagĭ'. Yû!

Sgĕ! Hige'cya ts'sdi'ga ha-nâ'gwa da'tûlehûⁿgû' kĭlû-gwû'. Iyûⁿ'ta tsûtu 'tunasĭ' tăya'ĭ. Eska'niyŭ unayĕ'histĭ nûⁿtayu'tanatĭ'. Sgĕ! tinû'lĭtgĭ'! Tleki 'yu tsûtsestâ' hwĭnagĭ'. Yû!

Translation.

THIS IS TO MAKE CHILDREN JUMP DOWN.

Listen! You little man, get up now at once. There comes an old woman. The horrible [old thing] is coming, only a little way off. Listen! Quick! Get your bed and let us run away. Yû!

Listen! You little woman, get up now at once. There comes your grandfather. The horrible old fellow is coming only a little way off. Listen! Quick! Get your bed and let us run away. Yû!

Explanation.

In this formula for childbirth the idea is to frighten the child and coax it to come, by telling it, if a boy, that an ugly old woman is coming, or if a girl, that her grandfather is coming only a short distance away. The reason of this lies in the fact that an old woman is the terror of all the little boys of the neighborhood, constantly teasing and frightening them by declaring that she means to live until they grow up and then compel one of them to marry her, old and shriveled as she is. For the same reason the maternal grandfather, who is always a privileged character in the family, is especially dreaded by the little girls, and nothing will send a group of children running into the house more quickly than the announcement that an old "granny," of either sex is in sight.

As the sex is an uncertain quantity, the possible boy is always first addressed in the formulas, and if no result seems to follow, the doctor then concludes that the child is a girl and addresses her in similar tones. In some cases an additional formula with the beads is used to determine whether the child will be born alive or dead. In most instances the formulas were formerly repeated with the appropriate ceremonies by some old female relative of the mother, but they are now the property of the ordinary doctors, men as well as women.

This formula was obtained from the manuscript book of A'yû'ninĭ, who stated that the medicine used was a warm decoction of a plant called Dalâ 'nige Unaste'tsĭ ("yellow root"—not identified), which was blown successively upon the top of the mother's head, upon the breast, and upon the palm of each hand. The doctor stands beside the woman, who is propped up in a sitting position, while repeating the first paragraph and then blows. If this produces no result he then recites the paragraph addressed to the girl and again blows. A part of the liquid is also given to the woman to drink. A'yû'ninĭ claimed this was always effectual.

(HIĂ' TSUNSDI'GA DIL'TADI'NATANTI'YI. II.)

Hitsutsa, hitsu'tsa, tleki'yu, tleki'yu, ĕ'hinugâ'ĭ, ĕ'hinugâ'ĭ! Hi'tsu'tsa, tleki 'yu, gûltsû'tĭ, gûltsû'tĭ, tinagâ'na, tinagâ'na!

Higĕ'yu'tsa, higĕ'yu'tsa, tleki'yu, tleki'yu, ĕ'hinugâ'ĭ, ĕ'hinugâ'ĭ! Higĕ'yu 'tsa, tleki'yu, gûⁿgu'stĭ, gûⁿgu'stĭ, tinagâ'na, tinagâ'na!

Translation.

THIS IS TO MAKE CHILDREN JUMP DOWN.

Little boy, little boy, hurry, hurry, come out, come out! Little boy, hurry; a bow, a bow; let's see who'll get it, let's see who'll get it!

Little girl, little girl, hurry, come out, come out. Little girl, hurry; a sifter, a sifter; let's see who'll get it, let's see who'll get it!

Explanation.

This formula was obtained from Takwati'hĭ, as given to him by a specialist in this line. Takwatihi himself knew nothing of the treatment involved, but a decoction is probably blown upon the patient as described in the preceding formula. In many cases the medicine used is simply cold water, the idea being to cause a sudden muscular action by the chilling contact. In this formula the possible boy or girl is coaxed out by the promise of a bow or a meal-sifter to the one who can get it first. Among the Cherokees it is common, in asking about the sex of a new arrival, to inquire, "Is it a bow or a sifter?" or "Is it ball sticks or bread?"

DALÂ'NI ÛⁿNĂGE'Ĭ ADANÛ'ⁿWÂTĬ.

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Yuha'ahi', (yuha'ahi', yuha'ahi', yuha'ahi',)
Yuha'ahi', (yuha'ahi', yuha'ahi'), Yû!
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Sgě! Ûⁿtal-e'gwâhĭ' didultâ'hĭstĭ ulsge'ta. Usĭnu'lĭ dâtitu'lene'ĭ. Usĭnu'lĭ dunu'y'tani'leĭ'.

Sgě! Ha-nâ'gwa statû'ngani'ga, nûndâ'yĭ distul'tâ'histĭ, Stisga'ya Dĭst'sdi 'ga, stida'wehi-gâgû. Ûntal-e'gwa dâtitulene'(ĭ) ulsge'ta. Usĭnu'lĭ detĭstû 'l'tani'ga ulsge'ta. Ditu'talenû'nitsa nûnna'hĭ wi'de'tutanû'ntasĭ', nûntadu 'ktahû'nstĭ nige'sûnna. Nû''gĭ iyayû'nlatăgĭ' ayâwe'sâlû'nta de'dudûneli 'sestĭ', Gû'ntsatâtagi'yû tistadi'gûlahi'sestĭ. Tiduda'le'nû'(ĭ) û'ntale'gwâ witĭ'stûl'tati'nûntani'ga. Na''nă witûl'tâ'hĭstani'ga, tadu'ktahû'nstĭ nige 'sûnna. Ha-na''nă wid'ultâhiste'stĭ. (Yû!)

(Degasisisgû'nĭ)—Hiă' anine'tsĭ ga''tiskĭ adanû'nwâtĭ. Ŭ'ntla atsi'la tĭ''tĭ yĭ 'gĭ.

Translation.

TO TREAT THE BLACK YELLOWNESS.

Yuha'ahi', yuha'ahi', yuha'ahi', yuha'ahi', Yuha'ahi', yuha'ahi', yuha'ahi' Yû!

Listen! In the great lake the intruder reposes. Quickly he has risen up there. Swiftly he has come and stealthily put himself (under the sick man).

Listen! Ha! Now you two have drawn near to hearken, there in the Sun Land you repose, O Little Men, O great anida'wehi! The intruder has risen up there in the great lake. Quickly you two have lifted up the intruder. His paths have laid themselves down toward the direction whence he came. Let him never look back (toward us). When he stops to rest at the four gaps you will drive him roughly along. Now he has plunged into the great lake from which he came. There he is compelled to remain, never to look back. Ha! there let him rest. (Yû!)

(Directions.)—This is to treat them when their breast swells. Fire (coals) is not put down.

Explanation.

This formula, from A'yûnini's manuscript, is used in treating a disease known as Dalâni, literally, "yellow." From the vague description of symptoms given by the doctors, it appears to be an aggravated form of biliousness, probably induced by late suppers and bad food. According to the Indian theory it is caused by revengeful animals, especially by the terrapin and its cousin, the turtle.

The doctors recognize several forms of the disease, this variety being distinguished as the "black dalâni" (Dalâni Ûnage 1) and considered the most dangerous. In this form of dalâni, according to their account, the navel and abdomen of the patient swell, the ends of his fingers become black, dark circles appear about his eyes, and the throat contracts spasmodically and causes him to fall down suddenly insensible. A'yûnini's method of treatment is to rub the breast and abdomen of the patient with the hands, which have been previously rubbed together in the warm infusion of wild cherry (ta'ya) bark. The song is sung while rubbing the hands together in the liquid, and the prayer is repeated while rubbing the swollen abdomen of the patient. The operation may be repeated several times on successive days.

The song at the beginning has no meaning and is sung in a low plaintive lullaby tone, ending with a sharp *Yu!* The prayer possesses a special interest, as it brings out several new points in the Cherokee mythologic theory of medicine. The "intruder," which is held to be some amphibious animal—as a terrapin, turtle, or snake—is declared to have risen up from his dwelling place in the great lake, situated toward the sunset, and to have come by stealth under the sick man. The verb implies that the disease spirit *creeps under* as a snake might crawl under the coverlet of a bed.

The two Little Men in the Sun Land are now invoked to drive out the disease. Who these Little Men are is not clear, although they are regarded as

most powerful spirits and are frequently invoked in the formulas. They are probably the two Thunder Boys, sons of Kanati.

The Little Men come instantly when summoned by the shaman, pull out the intruder from the body of the patient, turn his face toward the sunset, and begin to drive him on by threats and blows (expressed in the word gû 'ntsatatagi'yû) to the great lake from which he came. On the road there are four gaps in the mountains, at each of which the disease spirit halts to rest, but is continually forced onward by his two pursuers, who finally drive him into the lake, where he is compelled to remain, without being permitted even to look back again. The four gaps are mentioned also in other formulas for medicine and the ball play and sometimes correspond with the four stages of the treatment. The direction "No fire (coals) is put down" indicates that no live coals are put into the decoction, the doctor probably using water warmed in the ordinary manner.

Takwati'hĭ uses for this disease a decoction of four herbs applied in the same manner. He agrees with A'yûninĭ in regard to the general theory and says also that the disease may be contracted by neglecting to wash the hands after handling terrapin shells, as, for instance, the shell rattles used by women in the dance. The turtle or water tortoise (seligu'gĭ) is considered as an inferior being, with but little capacity for mischief, and is feared chiefly on account of its relationship to the dreaded terrapin or land tortoise (tûksĭ'). In Takwatihĭ's formula he prays to the Ancient White (the fire), of which these cold-blooded animals are supposed to be afraid, to put the fish into the water, the turtle into the mud, and to send the terrapin and snake to the hillside.

TSUNDAYE LIGAKTANÛ 'HĬ ADANÛ 'NWÂTĬ.

Sgě! Hanâ'gwa hatû'nganiga, galû'nlatĭ hetsadâ'histĭ, Kâ'lanû Û'nnage, gahu'stĭ tsanu'lahû'nsgĭ nige'sûnna. Ha-nâ'gwa (hetsatsa'ûntani'ga. Hanigû 'nwatûnnigwălâe'stigwû tsalâsû'nĭ. Asgin-u'danû higes'eĭ. Sanigala'gĭ gesû 'nĭ hastigû''lani'ga, duwâlu'wa'tû'tĭ nige'sûnna, nitû'neli'ga. Ha-Usûhi'yĭ wititâ'hĭstani'ga. Dadu'satahû'nstĭ nige'sûnna nitû'neli'ga. Utsĭnă'wa nu 'tatanû'nta.

Sgě! Ha-nâ'gwa hatû'ngani'ga, Kâ'lanû Gĭgage'ĭ, hidawěhi'yu. Ha-gahu'stĭ tsanu'lahû'nsgĭ nige'sûnna, etsanetse'lûhĭ, Ha-galûnlati'tsa hetsatâ'histĭ. Nâ 'gwa hetsatsâ'ûntani'ga. Nigû'nwatû'nnigwalâe'sti-gwû tsalâsû'nĭ. Asginudanû'hi-gwû higese'ĭ. Ha-Sanigalâgĭ gesû'n hâstigû''lani'ga ulsge'ta, hautsĭnă'wa-gwû' nigû'ntisge'stĭ. Usûhi'yĭ wĭntûnĕ'dû. Usûhi'yĭ wĭtitâ'hĭstani 'ga. Utsĭnă'wa adûnni'ga.

Sgě! Ha-nâ'gwa hatû'ngani'ga, Kâ'lanû Sa'ka'ni; galû'latĭ hetsadâ'histĭ, hida'wĕhĭ. Gahu'stĭ tsanu'lahû'nsgĭ nige'sûnna, etsanetse'lûhĭ. Ha-nâ'gwa hetsatsâ'ûntani'ga. Nigû'nwatû'nnigwalâe'sti-gwû tsalâsû'nĭ. Sanigalâ'gĭ gesu'n hastigû''lani'ga ulsge'ta. Duwâlu'watû'tĭ nige'sûnna, nitû'neli'ga. Usûhi'yĭ wĭtitâ'hĭstani'ga, dadu'satahû'nstĭ nige'sûnna nitû'neli'ga. Utsĭnă 'wa adûnni'ga.

Sgĕ! Ha-nâ'gwa hatû'ngani'ga, Wa'hĭlĭ galûnlti'tsa hetsadâ'histĭ, Kâ'lanû Tsûne'ga, hida'wĕhĭ. Gahu'stĭ tsanu'l'tĭ nige'sûnna. Hanâ'gwa hetsatsâ 'ûntani'ga. Nigû'nwatû'nigwalâe'sti-gwû tsalâsû'nĭ. Ha-nâ'gwa detal'tani 'ga. Sanigalâ'gĭ gesû'n hastig'û'lani'ga ulsge'ta, duwâlu'watû''tĭ nige 'sûnna nitû'neli'ga. Usûhi'yĭ wĭtitâ'hĭstani'ga. Dadu'satahû'nstĭ nige'sûnna nitû'neli'ga. Utsĭnă'wa adûnni'ga.

(Dega'sisisgû'nĭ)—Hiă'agi'li'ya unitlûngû'nĭ adanû'wâtĭ. Askwanu'tsastĭ'. Tsâ'l(a) Agayû'nlĭunitsi'lûnnû'hĭgû'ntatĭ, anû'nsga'lâ'-gwû; Kanasâ'la-'nû unali'gâhû, ade'la'-'nû nû''gi-gwû ani'gage'ĭ dahâ'ĭ, Tsâliyu'stĭ-'nû Usdi'ga. Gahu'sti-''nu yuta'suyû'nna sâwatu'hi-gwû atĭ' dawâ'hila-gwû iyû'nta.

Translation.

TO TREAT FOR ORDEAL DISEASES.

Listen! Ha! Now you have drawn near to hearken and are resting directly overhead. O Black Raven, you never fail in anything. Ha! Now you are brought down. Ha! There shall be left no more than a trace upon the ground where you have been. It is an evolute ghost. You have now put it into a

crevice in Sanigalagi, that it may never find the way back. You have put it to rest in the Darkening Land, so that it may never return. Let relief come.

Listen! Ha! Now you have drawn near to hearken, O Red Raven, most powerful ada'wehi. Ha! You never fail in anything, for so it was ordained of you. Ha! You are resting directly overhead. Ha! Now you are brought down. There shall remain but a trace upon the ground where you have been. It is an evolute ghost. Ha! You have put the Intruder into a crevice of Sanigalagi and now the relief shall come. It (the Intruder) is sent to the Darkening Land. You have put it to rest in the Darkening Land. Let the relief come.

Listen! Ha! Now you have drawn near to hearken, O Blue Raven; you are resting directly overhead, ada'wehi. You never fail in anything, for so it was ordained of you. Ha! Now you are brought down. There shall be left but a trace upon the ground where you have been. You have put the Intruder into a crevice in Sanigalagi, that it may never find the way back. You have put it to rest in the Darkening Land, so that it may never return. Let the relief come.

Listen! Ha! Now you have drawn near to hearken; you repose on high on Wa'hĭlĭ, O White Raven, ada'wehi. You never fail in anything. Ha! Now you are brought down. There shall be left but a trace upon the ground where you have been. Ha! Now you have taken it up. You have put the Intruder into a crevice in Sanigalagi, that it may never find the way back. You have put it to rest in the Darkening Land, never to return. Let the relief come.

(Directions)—This is to treat them for a painful sickness. One must suck. Use Tsâ'lagayûn'-li ("Old Tobacco"—Nicotiana rustica), blossoms, and just have them in the mouth, and Kanasâ'la (Wild Parsnip), goes with it, and four red beads also must lie there, and Tsâliyu'sti Usdi'ga ("Little (plant) Like Tobacco"—Indian Tobacco—Lobelia inflata.) And if there should be anything mixed with it (i.e., after sucking the place), just put it about a hand's-length into the mud.

Explanation.

The Cherokee name for this disease gives no idea whatever of its serious nature. The technical term, Tsundaye'liga'ktanû'hĭ, really refers to the enthusiastic outburst of sociability that ensues when two old friends meet. In this instance it might be rendered "an ordeal." The application of such a name to what is considered a serious illness is in accordance with the regular formulistic practice of making light of a dangerous malady in order to convey to the disease spirit the impression that the shaman is not afraid of him. A'yûninĭ, from whom the formula was obtained, states also that the disease is sometimes sent to a man by a friend or even by his parents, in order to test his endurance and knowledge of counter spells.

As with most diseases, the name simply indicates the shaman's theory of the occult cause of the trouble, and is no clue to the symptoms, which may be those usually attendant upon fevers, indigestion, or almost any other ailment.

In some cases the disease is caused by the conjurations of an enemy, through which the patient becomes subject to an inordinate appetite, causing him to eat until his abdomen is unnaturally distended. By the same magic spells tobacco may be conveyed into the man's body, causing him to be affected by faintness and languor. The enemy, if bitterly revengeful, may even put into the body of his victim a worm or insect (tsgâya), or a sharpened stick of black locust or "fat" pine, which will result in death if not removed by a good doctor. Sometimes a weed stalk is in some occult manner conveyed into the patient's stomach, where it is transformed into a worm. As this disease is very common, owing to constant quarrels and rival jealousies, there are a number of specialists who devote their attention to it.

The prayer is addressed to the Black, Red, Blue, and White Ravens, their location at the four cardinal points not being specified, excepting in the case of the white raven of Wa'hilĭ, which, as already stated, is said to be a mountain in the south, and hence is used figuratively to mean the south. The ravens are each in turn declared to have put the disease into a crevice in Sanigala'gi—the Cherokee name of Whiteside Mountain, at the head of Tuckasegee River, in North Carolina, and used figuratively for any high precipitous mountain—and to have left no more than a trace upon the ground where it has been. The adjective translated "evolute" (udanûhĭ) is of

frequent occurrence in the formulas, but has no exact equivalent in English. It signifies springing into being or life from an embryonic condition. In this instance it would imply that whatever object the enemy has put into the body of the sick man has there developed into a ghost to trouble him.

The directions are expressed in a rather vague manner, as is the case with most of A'yûnini's attempts at original composition. The disease is here called by another name, agi'li ya unitlûngû'nĭ, signifying "when they are painfully sick." The treatment consists in sucking the part most affected, the doctor having in his mouth during the operation the blossoms of Tsâ'lagayû'nlĭ (Nicotiana rustica), Kanasâ'la (wild parsnip,) and Tsâliyusti Usdiga (Lobelia inflata.) The first and last of these names signify "tobacco" and "tobacco-like," while the other seems to contain the same word, tsâ'la, and the original idea may have been to counteract the witchcraft by the use of the various species of "tobacco," the herb commonly used to drive away a witch or wizard. During the sucking process four red beads lie near upon a piece of (white) cloth, which afterward becomes the perquisite of the doctor. Though not explicitly stated, it is probable that the doctor holds in his mouth a decoction of the blossoms named, rather than the blossoms themselves. On withdrawing his mouth from the spot and ejecting the liquid into a bowl, it is expected that there will be found "mixed" with it a small stick, a pebble, an insect, or something of the kind, and this the shaman then holds up to view as the cause of the disease. It is afterward buried a "hand's length" (awâ'hilû)¹² deep in the mud. No directions were given as to diet or tabu.

HUNTING.

GÛNÂ'HILÛ''TA UGÛ''WA'LĬ.

Una'lelŭ' eskiska'l'tasi'. Iskwa'lelŭ eskiska'l'tasi'. Yû! Ela-Kana'tĭ tsûlda 'hĭstû'ⁿ, tsûwatsi'la astû'ⁿ detsatasi'ga. Ts'skwâ'lĭ uda'nisă''testĭ, ugwala 'ga udu'yaheti'dege'stĭ. Sunûsi'ya-gwû udanisă''testĭ, ts'su'lti-gwû nige 'sûⁿna.

Hĭkayû'nlĭ Gi'gage-gâgû', tsine'tsĭ gesû'n aw'stitege'stĭ. *Tsăstû' utatiyĭ*, nâ 'gwa *tsăs'tû gasû'hisă'tĭ atisge'stĭ*. Ha-nâ'gwa nûnnâ tsusdi' tutana'wategû' *digana'watû'nta* atisge'stĭ. Utalĭ' udanû'hĭ ugwala'ga gûnwatuy'ahĭti 'tege'stĭ, hĭlahiyû'nta-gwû wustû''stĭ nige'sûnna. D'stiskwâ'lĭ deudû'nisă'te 'stĭ. Yû!

Translation.

CONCERNING HUNTING.

Give me the wind. Give me the breeze. Yû! O Great Terrestrial Hunter, I come to the edge of your spittle where you repose. Let your stomach cover itself; let it be covered with leaves. Let it cover itself at a single bend, and may you never be satisfied.

And you, O Ancient Red, may you hover above my breast while I sleep. Now let good (dreams?) develop; let my experiences be propitious. Ha! Now let my little trails be directed, as they lie down in various directions(?). Let the leaves be covered with the clotted blood, and may it never cease to be so. You two (the Water and the Fire) shall bury it in your stomachs. Yû!

Explanation.

This is a hunting formula, addressed to the two great gods of the hunter, Fire and Water. The evening before starting the hunter "goes to water," as already explained, and recites the appropriate formula. In the morning he sets out, while still fasting, and travels without eating or drinking until nightfall. At sunset he again goes to water, reciting this formula during the ceremony, after which he builds his camp fire, eats his supper and lies down for the night, first rubbing his breast with ashes from the fire. In the morning he starts out to look for game.

"Give me the wind," is a prayer that the wind may be in his favor, so that the game may not scent him. The word rendered here "Great Terrestrial Hunter," is in the original "Ela-Kana'tĭ." In this *e'la* is the earth and *kana'tĭ* is a term applied to a successful hunter. The great Kanatĭ, who, according to

the myth, formerly kept all the game shut up in his underground caverns, now dwells above the sky, and is frequently invoked by hunters. The raven also is often addressed as Kanatĭ in these hunting formulas. Ela-Kana'tĭ, the Great Terrestrial Hunter—as distinguished from the other two—signifies the river, the name referring to the way in which the tiny streams and rivulets search out and bring down to the great river the leaves and débris of the mountain forests. In formulas for medicine, love, the ball play, etc., the river is always addressed as the Long Person (Yû'nwĭ Gûnahi'ta). The "spittle" referred to is the foam at the edge of the water. "Let your stomach be covered with leaves" means, let the blood-stained leaves where the stricken game shall fall be so numerous as to cover the surface of the water. The hunter prays also that sufficient game may be found in a single bend of the river to accomplish this result without the necessity of searching through the whole forest, and to that end he further prays that the river may never be satisfied, but continually longing for more. The same idea is repeated in the second paragraph. The hunter is supposed to feed the river with blood washed from the game. In like manner he feeds the fire, addressed in the second paragraph as the "Ancient Red," with a piece of meat cut from the tongue of the deer. The prayer that the fire may hover above his breast while he sleeps and brings him favorable dreams, refers to his rubbing his breast with ashes from his camp fire before lying down to sleep, in order that the fire may bring him dream omens of success for the morrow. The Fire is addressed either as the Ancient White or the Ancient Red, the allusion in the first case being to the light or the ashes of the fire; in the other case, to the color of the burning coals. "You two shall bury it in your stomachs" refers to the blood-stained leaves and the piece of meat which are cast respectively into the river and the fire. The formula was obtained from A'vûⁿinĭ, who explained it in detail.

HIĂ' TSI'SKWA GANÂHILIDASTI YĬ.

Tsĭgĕ'! Hĭkayû'nl-Une'ga, tsûltâ'histû'n gûlitâ'hĭstani'ga. Nâ'gwa tsûda'ntâ talehĭ'sani'ga. Sâ'gwa igûnsi'ya ts'skwâlĭ' udû'nisate'stĭ, ts'su'ltĭ nige 'sûna. Wane'(ĭ) tigi'gage(ĭ) tali'kanĕli'ga. U'ntalĭ udanû'hĭ tsăgista''tĭ.

Hĭkayû'ⁿl-Une'ga, *anu'ya uwâtatâ'gĭ agi'stĭ tătsiskâ'ltane'lûhĭ*. ^{U'n}talĭ u 'danû' *te'tûlskew'si'ga*.

Hĭkayû'nl-Une'ga, nûnna'(hĭ) kana'tĭ skwatetâ'stani'ga. Unigwalû'ngĭ te 'gatûntsi'ga. Nûnâ'(hĭ) kana'tĭ tati'kiyû'ngwita'watise'stĭ. Unigwalû'ngĭ tigû 'nwatû'tsanû'hĭ.

Hĭkayû'ⁿl-Une'ga, Kana'tĭ, sk'salatâ'titege'stĭ, sa'ka'ni ginu't'tĭ nige'sûⁿna. Sgĕ!

Translation.

THIS IS FOR HUNTING BIRDS.

Listen! O Ancient White, where you dwell in peace I have come to rest. Now let your spirit arise. Let it (the game brought down) be buried in your stomach, and may your appetite never be satisfied. The red hickories have tied themselves together. The clotted blood is your recompense.

O Ancient White, * * * Accept the clotted blood (?)

O Ancient White, put me in the successful hunting trail. Hang the mangled things upon me. Let me come along the successful trail with them doubled up (under my belt). It (the road) is clothed with the mangled things.

O Ancient White, O Kanati, support me continually, that I may never become blue. Listen!

Explanation.

This formula, from A'yûⁿinĭ's manuscript, is recited by the bird-hunter in the morning while standing over the fire at his hunting camp before starting out for the day's hunt. A'yûⁿinĭ stated that seven blowgun arrows are first prepared, including a small one only a "hand-length" (awâ'hilû) long. On rising in the morning the hunter, standing over the fire, addresses it as the "Ancient White." rubbing his hands together while repeating the prayer. He then sets out for the hunting ground, where he expects to spend the day, and

on reaching it he shoots away the short arrow at random, without attempting to trace its flight. There is of course some significance attached to this action and perhaps an accompanying prayer, but no further information upon this point was obtainable. Having shot away the magic arrow, the hunter utters a peculiar hissing sound, intended to call up the birds, and then goes to work with his remaining arrows. On all hunting expeditions it is the regular practice, religiously enforced, to abstain from food until sunset.

A favorite method with the bird-hunter during the summer season is to climb a gum tree, which is much frequented by the smaller birds on account of its berries, where, taking up a convenient position amid the branches with his noiseless blowgun and arrows, he deliberately shoots down one bird after another until his shafts are exhausted, when he climbs down, draws out the arrows from the bodies of the birds killed, and climbs up again to repeat the operation. As the light darts used make no sound, the birds seldom take the alarm, and are too busily engaged with the berries to notice their comrades dropping to the ground from time to time, and pay but slight attention even to the movements of the hunter.

The prayer is addressed to the Ancient White (the Fire), the spirit most frequently invoked by the hunter, who, as before stated, rubs his hands together over the fire while repeating the words. The expressions used are obscure when taken alone, but are full of meaning when explained in the light of the hunting customs. The "clotted blood" refers to the bloodstained leaves upon which the fallen game has lain. The expression occurs constantly in the hunting formulas. The hunter gathers up these bloody leaves and casts them upon the fire, in order to draw omens for the morrow from the manner in which they burn. A part of the tongue, or some other portion of the animal, is usually cast upon the coals also for the same purpose. This subject will be treated at length in a future account of the hunting ceremonies.

"Let it be buried in your stomach" refers also to the offering made the fire. By the red hickories are meant the strings of hickory bark which the bird hunter twists about his waist for a belt. The dead birds are carried by inserting their heads under this belt. Red is, of course, symbolic of his success. "The mangled things" (unigwalû'ngĭ) are the wounded birds. Kana

'tĭ is here used to designate the fire, on account of its connection with the hunting ceremonies.

INAGĚ HĬ AYÂSTIⁿYĬ.

Usĭnuli'yu Selagwû'tsĭ Gigage'ĭ getsû'nneliga tsûdandâgi'hĭ aye'li'yu, usĭnuli'yu. Yû!

Translation.

TO SHOOT DWELLERS IN THE WILDERNESS.

Instantly the Red Selagwû'tsĭ strike you in the very center of your soul—instantly. Yû!

Explanation.

This short formula, obtained from \hat{A} 'wani'ta, is recited by the hunter while taking aim. The bowstring is let go—or, rather, the trigger is pulled—at the final $Y\hat{u}$! He was unable to explain the meaning of the word selagwû'tsĭ further than that it referred to the bullet. Later investigation, however, revealed the fact that this is the Cherokee name of a reed of the genus Erianthus, and the inference follows that the stalk of the plant was formerly used for arrow shafts. Red implies that the arrow is always successful in reaching the mark aimed at, and in this instance may refer also to its being bloody when withdrawn from the body of the animal. Inagĕ'hĭ, "dwellers in the wilderness," is the generic term for game, including birds, but A'wani 'ta has another formula intended especially for deer.

(YÂ'NA TĬ'KANÂGI'TA.)

He+! Hayuya'haniwă', hayuya'haniwă', hayuya'haniwă', hayuya'haniwă'.

Tsistuyi' nehandu'yanû, Tsistuyi' nehandu'yanû—Yoho'+!

He+! Hayuya'haniwă', hayuya'haniwă', hayuya'haniwă', hayuya'haniwă'.

- Kuwâhi' nehandu'yanû', Kuwâhi' nehandu'yanû—Yoho'+!
- He+! Hayuya'haniwă', hayuya'haniwă', hayuya'haniwă', hayuya'haniwă'.
- Uyâ'ye' nehandu'yanû', Uya'ye' nehahdu'yanû'—Yoho'+!
- He+! Hayuya'haniwa', hayuya'haniwa', hayuya'haniwa', hayuya'haniwa'.
- Gâtekwâ'(hĭ) nehandu'yanû', Gâtekwâ'(hĭ) nehandu'yanû '—Yoho'+!
- Ûlĕ-'nû' asĕhĭ' tadeya'statakûhĭ' gû'ⁿnage astû'tsĭkĭ'.

Translation.

BEAR SONG.

- He! Hayuya'haniwa', hayuya'haniwa', hayuya'haniwa', hayuya'haniwa'.
 - In Rabbit Place you were conceived (repeat)—Yoho'+!
- He! Hayuya'haniwă', hayuya'haniwă', hayuya'haniwă', hayuya'haniwă'.
 - In Mulberry Place you were conceived (repeat)—Yoho'+!
- He! Hayuya'haniwa', hayuya'haniwa', hayuya'haniwa', hayuya'haniwa'.
 - In Uyâ''yĕ you were conceived (repeat)—Yoho'+!
- He! Hayuya'haniwă', hayuya'haniwă', hayuya'haniwă', hayuya'haniwă'.
 - In the Great Swamp (?) you were conceived (repeat)—Yoho'+!
- And now surely we and the good black things, the best of all, shall see each other.

Explanation.

This song, obtained from A'yû'ninĭ in connection with the story of the Origin of the Bear, as already mentioned, is sung by the bear hunter, in order to attract the bears, while on his way from the camp to the place where he expects to hunt during the day. It is one of those taught the

Cherokees by the Ani-Tsâ'kahĭ before they lost their human shape and were transformed into bears. The melody is simple and plaintive.

The song consists of four verses followed by a short recitation. Each verse begins with a loud prolonged He+! and ends with Yoho'+! uttered in the same manner. Hayuya'haniwă' has no meaning. Tsistu'yĭ, Kuwâ'hĭ, Uyâ'yĕ, and Gâte'kwâhĭ are four mountains, in each of which the bears have a townhouse and hold a dance before going into their dens for the winter. The first three named are high peaks in the Smoky Mountains, on the Tennessee line, in the neighborhood of Clingman's Dome and Mount Guyot. The fourth is southeast of Franklin, North Carolina, toward the South Carolina line, and may be identical with Fodderstack Mountain. In Kuwahi dwells the great bear chief and doctor, in whose magic bath the wounded bears are restored to health. They are said to originate or be conceived in the mountains named, because these are their headquarters. The "good black things" referred to in the recitation are the bears.

HIĂ' ATSÛ'TI'YĬ TSUN'TANÛ.

Sgě! Nâ'gwa hitsatû'ngani'ga hitsiga'tugĭ'. Titsila'wisû'nhĭ uwâgi''lĭ tege 'tsûts'gû''lawĭstĭ'. Tsuli'stana'lû ûlĕ' waktûĭ, agi'stĭ une'ka itsû'nyatanilû 'ĭstani'ga. Gûnwatu'hwĭtû' nûnnâ'hĭ degûndâltsi'dâhe'stĭ. uWâ'hisâ'nahĭ tigiwatsi'la. Tutsegû''lawistĭ'tege'stĭ. Ûntalĭ' degû'nwatanûhĭ, uhisa''tĭ nige 'sûnna. Tsuwatsi'la dadâl'tsi'ga. A'yû A'yû'ninĭ tigwadâ'ita. Yû!

Translation.

THIS IS FOR CATCHING LARGE FISH.

Listen! Now you settlements have drawn near to hearken. Where you have gathered in the foam you are moving about as one. You Blue Cat and the others, I have come to offer you freely the white food. Let the paths from every direction recognize each other. Our spittle shall be in agreement. Let them (your and my spittle) be together as we go about. They (the fish) have become a prey and there shall be no loneliness. Your spittle has become agreeable. I am called Swimmer. Yû!

Explanation.

This formula, from A'yûnini's' book, is for the purpose of catching large fish. According to his instructions, the fisherman must first chew a small piece of Yugwilû' (Venus' Flytrap—Dionæa muscipula) and spit it upon the bait and also upon the hook. Then, standing facing the stream, he recites the formula and puts the bait upon the hook. He will be able to pull out a fish at once, or if the fish are not about at the moment they will come in a very short time.

The Yugwilû' is put upon the bait from the idea that it will enable the hook to attract and hold the fish as the plant itself seizes and holds insects in its cup. The root is much prized by the Cherokees for this purpose, and those in the West, where the plant is not found, frequently send requests for it to their friends in Carolina.

The prayer is addressed directly to the fish, who are represented as living in settlements. The same expression as has already been mentioned is sometimes used by the doctors in speaking of the tsgâ'va or worms which are supposed to cause sickness by getting under the skin of the patient. The Blue Cat (Amiurus, genus) is addressed as the principal fish and the bait is spoken of as the "white food," an expression used also of the viands prepared at the feast of the green corn dance, to indicate their wholesome character. "Let the paths from every direction recognize each other," means let the fishes, which are supposed to have regular trails through the water, assemble together at the place where the speaker takes his station, as friends recognizing each other at a distance approach to greet each other, "Wâhisâ 'nahı tigiwatsi'la, rendered "our spittle shall be in agreement," is a peculiar archaic expression that can not be literally translated. It implies that there shall be such close sympathy between the fisher and the fish that their spittle shall be as the spittle of one individual. As before stated, the spittle is believed to exert an important influence upon the whole physical and mental being. The expression "your spittle has become agreeable" is explained by A'yûninĭ as an assertion or wish that the fish may prove palatable, while the words rendered "there shall be no loneliness" imply that there shall be an abundant catch.

LOVE.

(YÛⁿWĔ'HĬ UGÛ'ⁿWA'LĬ I.)

Ku! Sgĕ! *Alahi'yĭ* tsûl'dâ'histĭ, Higĕ''ya tsûl'di'yĭ, hatû'ngani'ga. *Elahi'yĭ* iyû'nta ditsûl'da'histĭ, Higĕ''ya Tsûne'ga. Tsisa''tĭ nige'sûnna. Tsâduhi'yĭ. Nâ'gwa-skĭn'ĭ usĭnuli'yu hûnskwane''lûngû' tsisga'ya agine'ga. Agisa''tĭ nige'sûnna. Nâ'gwa nû'nnâ, une'ga hûnskwanûnneli'ga. Uhisa''tĭ nige 'sûnna. Nâ'gwa skwade'tastani'ga. Sa'ka'ni u'tatĭ nige'sûnna. Nûnnâ une'ga skiksa''ûntaneli'ga. Elaye''lĭ iyû'nta skwalewistă''tani'ga E'latĭ gesû'n tsĭtage'stĭ. Agisa''tĭ nige'sûnna. Agwâ'duhi'yu. Kûltsâ'te une'ga skiga''tani 'ga. Uhisa''tĭ nige'sûnna, gûnkwatsâti'tege'stĭ. Tsi-sa'ka'ni agwă'tatĭ nige 'sûnna. Usĭnuli'yu hûnskwane''lûngû'.

Ha-nâ'gwûlĕ *Elahi'yĭ* iyû'ntă dûhiyane''lûngû' a'gĕ''ya sa'ka'ni. Nâ'gwa nûnnâ'hĭ sa'ka'ni hûntane''laneli'ga. Uhisa''tĭ-gwû u'danû dudusa'gĭ tanela 'sĭ. Nûnnâ'hĭ sa'ka'ni tade'tâstani'ga. Nâgwûlĕ' hûnhiyatsâ'ûntaniga. E'latĭ gesû'n tû'l'taniga. Dedu'laskû'n-gwû igû'nwa'lawĭ'stĭ uhi'sa'ti'yĭ widaye 'la'ni'ga. Dedulaskû'n-gwû igû'nwa'lawĭ'stĭ uhi'sa'ti'yĭ nitû'nneli'ga.

Ha-sâgwahi'yu itsilasta'lagĭ + + uwă'sahi'yu, etsane''laneli'ga. Agisa''tĭ nige'sûⁿna. Agwâ'duhĭ. A'yû agwadantâ'gĭ aye'li'yu d'ka''lani'lĭ duda'ntâ, uktahû'ⁿstĭ nige'sûⁿna. Yû'ⁿwĭ tsu'tsatûⁿ widudante''tĭ nige'sûⁿna, nitû 'ⁿneli'ga. Sâ'gwahĭ itsilasta'lagĭ, etsane''laneli'ga kûlkwâ'gi-nasĭ' igûlstû ''lĭ gegane''lanû'ⁿ.

Anisga'ya anewadi'sûⁿ unihisa'ti'yĭ. Tsu'nada'neilti'yĭ. Dĭ'la-gwû degû 'ⁿwănatsegû''lawi'sdidegû'. Ayâ'ise'ta-gwû u'danû. Tsunada'neilti'yĭ. Utse 'tsti-gwû degû'ⁿwănatsegû''lawis'didegû'. Tsunada'neilti'yĭ. Ka'ga-gwû degû'ⁿwănatsegû''awisdidegû'. Tsunada'neilti'yĭ. Da'l'ka-gwû degû 'ⁿwănatsegû''lawisdidegû'.

Kûlkwâ'gĭ igûlsta'lagĭ unihisa'ti'yu. Ige'ski-gwû nige'sûⁿna. Ayâ'ise'ta-gwû u'danû degû'ⁿwănatsûn'ti-degû'. K'si-gwû degû'ⁿwănatsûn'ti-degû'. A'yagâgû' tsisga'ya agine'ga ûⁿgwane''lanû'hĭ + Nûⁿdâgû'ⁿyĭ iti'tsa

ditsidâ'ga. Agisa''tĭ nige'sûⁿna. Agwâduhi'yu. Tsi-sa'ka'nĭ agwă'tatĭ nige 'sûⁿna. Kûltsâ'te une'ga ûⁿni'tagâgû' gûkwatsâ'nti-degû'. Agisă''tĭ nige 'sûⁿna. A'yû agwadantâ'gĭ aye'li'yu gûlasi'ga tsûda'ntâ, uktahû'ⁿstĭ nige 'sûⁿna. A'yû tsĭ'gĭ tsûda'nta 0 0. Sgĕ!

Translation.

CONCERNING LIVING HUMANITY (LOVE).

Kû! Listen! In Alahi'yĭ you repose, O Terrible Woman, O you have drawn near to hearken. There in Elahiyĭ you are at rest, O White Woman. No one is ever lonely when with you. You are most beautiful. Instantly and at once you have rendered me a white man. No one is ever lonely when with me. Now you have made the path white for me. It shall never be dreary. Now you have put me into it. It shall never become blue. You have brought down to me from above the white road. There in mid-earth (mid-surface) you have placed me. I shall stand erect upon the earth. No one is ever lonely when with me. I am very handsome. You have put me into the white house. I shall be in it as it moves about and no one with me shall ever be lonely. Verily, I shall never become blue. Instantly you have caused it to be so with me.

And now there in Elahiyi you have rendered the woman blue. Now you have made the path blue for her. Let her be completely veiled in loneliness. Put her into the blue road. And now bring her down. Place her standing upon the earth. Where her feet are now and wherever she may go, let loneliness leave its mark upon her. Let her be marked out for loneliness where she stands.

Ha! I belong to the (Wolf) (++) clan, that one alone which was allotted into for you. No one is ever lonely with me. I am handsome. Let her put her soul the very center of my soul, never to turn away. Grant that in the midst of men she shall never think of them. I belong to the one clan alone which was allotted for you when the seven clans were established.

Where (other) men live it is lonely. They are very loathsome. The common polecat has made them so like himself that they are fit only for his

company. They have became mere refuse. They are very loathsome. The common opossum has made them so like himself that they are fit only to be with him. They are very loathsome. Even the crow has made them so like himself that they are fit only for his company. They are very loathsome. The miserable rain-crow has made them so like himself that they are fit only to be with him.

The seven clans all alike make one feel very lonely in their company. They are not even good looking. They go about clothed with mere refuse. They even go about covered with dung. But I—I was ordained to be a white man. I stand with my face toward the Sun Land. No one is ever lonely with me. I am very handsome. I shall certainly never become blue. I am covered by the everlasting white house wherever I go. No one is ever lonely with me. Your soul has come into the very center of my soul, never to turn away. I— (Gatigwanasti,) (0 0)—I take your soul. Sgĕ!

Explanation.

This unique formula is from one of the loose manuscript sheets of Gatigwanasti, now dead, and belongs to the class known as Yûnwe'hi or love charms (literally, concerning "living humanity"), including all those referring in any way to the marital or sexual relation. No explanation accompanies the formula, which must therefore be interpreted from analogy. It appears to be recited by the lover himself—not by a hired shaman—perhaps while painting and adorning himself for the dance. (See next two formulas.)

The formula contains several obscure expressions which require further investigation. Elahiyi or Alahiyi, for it is written both ways in the manuscript, does not occur in any other formula met with thus far, and could not be explained by any of the shamans to whom it was submitted. The nominative form may be Elahi, perhaps from *ela*, "the earth," and it may be connected with Wa'hili, the formulistic name for the south. The spirit invoked is the White Woman, white being the color denoting the south.

Uhisa''tĭ, rendered here "lonely," is a very expressive word to a Cherokee and is of constant recurrence in the love formulas. It refers to that intangible something characteristic of certain persons which inevitably chills and depresses the spirits of all who may be so unfortunate as to come within its influence. Agisa''tĭ nige'sûna, "I never render any one lonely," is an intensified equivalent for, "I am the best company in the world," and to tell a girl that a rival lover is uhisa''tĭ is to hold out to her the sum of all dreary prospects should she cast in her lot with him.

The speaker, who evidently has an exalted opinion of himself, invokes the aid of the White Woman, who is most beautiful and is never uhisa''tī. She at once responds by making him a white—that is, a happy—man, and placing him in the white road of happiness, which shall never become blue with grief or despondency. She then places him standing in the middle of the earth, that he may be seen and admired by the whole world, especially by the female portion. She finally puts him into the white house, where happiness abides forever. The verb implies that the house shelters him like a cloak and goes about with him wherever he may go.

There is something comical in the extreme self-complacency with which he asserts that he is very handsome and will never become blue and no one with him is ever lonely. As before stated, white signifies peace and happiness, while blue is the emblem of sorrow and disappointment.

Having thus rendered himself attractive to womankind, he turns his attention to the girl whom he particularly desires to win. He begins by filling her soul with a sense of desolation and loneliness. In the beautiful language of the formula, her path becomes blue and she is veiled in loneliness. He then asserts, and reiterates, that he is of the one only clan which was allotted for her when the seven clans were established.

He next pays his respects to his rivals and advances some very forcible arguments to show that she could never be happy with any of them. He says that they are all "lonesome" and utterly loathsome—the word implies that they are mutually loathsome—and that they are the veriest trash and refuse. He compares them to so many polecats, opossums, and crows, and finally likens them to the rain-crow (cuckoo; *Coccygus*), which is regarded with disfavor on account of its disagreeable note. He grows more bitter in his

denunciations as he proceeds and finally disposes of the matter by saying that all the seven clans alike are uhisa''tĭ and are covered with filth. Then follows another glowing panegyric of himself, closing with the beautiful expression, "your soul has come into the very center of mine, never to turn away," which reminds one forcibly of the sentiment in the German love song, "Du liegst mir im Herzen." The final expression, "I take your soul," implies that the formula has now accomplished its purpose in fixing her thoughts upon himself.

When successful, a ceremony of this kind has the effect of rendering the victim so "blue" or lovesick that her life is in danger until another formula is repeated to make her soul "white" or happy again. Where the name of the individual or clan is mentioned in these formulas the blank is indicated in the manuscript by crosses + + or ciphers 0 0 or by the word iyu'stĭ, "like."

HĬ'Ă ĂMA'YĬ Ă'TAWASTI'YĬ KANÂ'HEHÛ.

Sgě! Ha-nâ'gwa usĭnuli'yu hatû'ngani'ga *Higĕ''yagu'ga*, tsûwatsi'la gi 'gage tsiye'la skĭna'dû'lani'ga. 0 0 digwadâ'ita. Sa'ka'nĭ tûgwadûne'lûhĭ. Atsanû'ngĭ gi'gage skwâsû'hisa'tani'ga. + kûlstă'lagĭ + sa'ka'nĭ nu'tatanû 'nta. Ditu'nûnâ'gĭ dagwû'laskû'n-gwû deganu'y'tasi'ga. Galâ'nûntse'tagwû dagwadûne'lidise'stĭ. Sgĕ!

Translation.

THIS TELLS ABOUT GOING INTO THE WATER.

Listen! O, now instantly, you have drawn near to hearken, O Age ''yagu'ga. You have come to put your red spittle upon my body. My name is (Gatigwanasti.) The blue had affected me. You have come and clothed me with a red dress. She is of the (Deer) clan. She has become blue. You have directed her paths straight to where I have my feet, and I shall feel exultant. Listen!

Explanation.

This formula, from Gatigwanasti's book, is also of the Yûnwe'hi class, and is repeated by the lover when about to bathe in the stream preparatory to painting himself for the dance. The services of a shaman are not required, neither is any special ceremony observed. The technical word used in the heading, a'tawasti'yi, signifies plunging or going entirely into a liquid. The expression used for the ordinary "going to water," where the water is simply dipped up with the hand, is ama'yi dita'ti'yi, "taking them to water."

The prayer is addressed to Agĕ´ʻyaguga, a formulistic name for the moon, which is supposed to exert a great influence in love affairs, because the dances, which give such opportunities for love making, always take place at night. The shamans can not explain the meaning of the term, which plainly contains the word agĕ´ʻya, "woman," and may refer to the moon's supposed influence over women. In Cherokee mythology the moon is a man. The ordinary name is nû´ndâ, or more fully, nû´ndâ sûnnâyĕ´hĭ, "the sun living in the night," while the sun itself is designated as nû´ndâ igĕ´hĭ, "the sun living in the day."

By the red spittle of Agĕ´ʻyagu´ga and the red dress with which the lover is clothed are meant the red paint which he puts upon himself. This in former days was procured from a deep red clay known as ela-wâ´tĭ, or "reddish brown clay." The word red as used in the formula is emblematic of success in attaining his object, besides being the actual color of the paint. Red, in connection with dress or ornamentation, has always been a favorite color with Indians throughout America, and there is some evidence that among the Cherokees it was regarded also as having a mysterious protective power. In all these formulas the lover renders the woman blue or disconsolate and uneasy in mind as a preliminary to fixing her thoughts upon himself. (See next formula.)

(YÛ'nWĔ'HĬ UGÛ'nWA'LĬ II.)

Yû'nwĕhĭ, yû'nwĕhĭ, yû'nwĕhĭ, yû'nwĕhĭ.

Galû'nlatĭ, datsila'ĭ—Yû'nwĕhĭ, yû'nwĕhĭ, yû'nwĕhĭ, yû 'nwĕhĭ.

Nûⁿdâgû'ⁿyĭ gatla'ahĭ—Yû'ⁿwĕhĭ.

Ge'yagu'ga Gi'gage, tsûwatsi'la gi'gage tsiye'la skĭna 'dû'lani'ga—

Yû'nwĕhĭ, yû'nwĕhĭ, yû'nwĕhĭ.

Hiă-'nû' atawe'ladi'yĭ kanâ'hĕhû galûⁿlti'tla.

Translation.

SONG FOR PAINTING.

Yû "wĕhĭ, yû "wĕhĭ, yû "wĕhĭ, yû "wĕhĭ.

I am come from above— $Y\hat{u}^m w \check{e} h \check{i}$, $y\hat{u}^m w \check{e} h \check{i}$, $y\hat{u}^m w \check{e} h \check{i}$, $y\hat{u}^m w \check{e} h \check{i}$.

I am come down from the Sun Land—Yû "wĕhĭ.

O Red Agĕʻyaguʻga, you have come and put your red spittle upon my body—Yû'nwĕhĭ, yû'nwĕhĭ, yû'nwĕhĭ.

And this above is to recite while one is painting himself.

Explanation.

This formula, from Gatigwanasti, immediately follows the one last given, in the manuscript book, and evidently comes immediately after it also in practical use. The expressions used have been already explained. The one using the formula first bathes in the running stream, reciting at the same time the previous formula "Amâ'yĭ Ă'tawasti'yĭ." He then repairs to some convenient spot with his paint, beads, and other paraphernalia and proceeds to adorn himself for the dance, which usually begins about an hour after dark, but is not fairly under way until nearly midnight. The refrain, yû 'nwěhĭ, is probably *sung* while mixing the paint, and the other portion is recited while applying the pigment, or vice versa. Although these formula

are still in use, the painting is now obsolete, beyond an occasional daubing of the face, without any plan or pattern, on the occasion of a dance or ball play.

ADALANI'STA'TI'YĬ, Ĭ.

Sgĕ! Ha-nâ'gwa hatû' ⁿ gani'ga nihĭ'—
—Tsa'watsi'lû tsĭkĭ' tsĭkû' ayû'.
—Hiyelû´ tsĭkĭ´ tsĭkû´ ayû´.
—Tsăwiyû' tsĭkĭ' tsĭkû' ayû'.
—Tsûnahu' tsĭkĭ' tsĭkû' ayû'.

Sgĕ! Nâ'gwa hatû'ngani'ga, Hĭkayû'nlige. Hiā' asga'ya uda'ntâ tsa'ta'hisi 'ga [Hĭkayû'nlige] hiye'lastûn. Tsaskûlâ'hĭsti-gwû' nige'sûnna. Dĭkana'watû 'nta-gwû tsûtû'neli'ga. Hĭlû dudantĕ''tĭ nige'sûnna. Duda'ntâ dûskalûn'tseli 'ga. Astĭ' digû'nnage tagu'talûntani'ga.

Translation.

TO ATTRACT AND FIX THE AFFECTIONS.

Listen! O, now you have drawn near to hearken—

—Your spittle, I take it, I eat it.

—Your body, I take it, I eat it,

—Your flesh, I take it, I eat it,

—Your heart, I take it, I eat it.

Listen! O, now you have drawn near to hearken, O, Ancient One. This man's (woman's) soul has come to rest at the edge of your body. You are never to let go your hold upon it. It is ordained that you shall do just as you are requested to do. Let her never think upon any other place. Her soul has faded within her. She is bound by the black threads.

Explanation.

This formula is said by the young husband, who has just married an especially engaging wife, who is liable to be attracted by other men. The same formula may also be used by the woman to fix her husband's affections. On the first night that they are together the husband watches until his wife is asleep, when, sitting up by her side, he recites the first words: Sgĕ! Ha-nâ'gwa hatû'ngani'ga nihĭ', and then sings the next four words: Tsawatsi'lû tsĭkĭ' tsĭkû' ayû', "Your spittle, I take it, I eat it," repeating the words four times. While singing he moistens his fingers with spittle, which he rubs upon the breast of the woman. The next night he repeats the operation, this time singing the words, "I take your body." The third night, in the same way, he sings, "I take your flesh," and the fourth and last night, he sings "I take your heart," after which he repeats the prayer addressed to the Ancient One, by which is probably meant the Fire (the Ancient White). A'yû'ninĭ states that the final sentences should be masculine, i.e., His soul has faded, etc., and refer to any would-be seducer. There is no gender distinction in the third person in Cherokee. He claimed that this ceremony was so effective that no husband need have any fears for his wife after performing it.

ADAYE'LIGA'GTA'TĬ'.

Yû! Galû'nlatĭ tsûl'da'histĭ, Giya'giya' Sa'ka'ni, nâ'gwa nûntalûn i'yû'nta. Tsâ'la Sa'ka'ni tsûgistâ''tĭ adûnni'ga. Nâ'gwa nidâtsu'l'tanû'nta, nû'ntātagû ' hisa'hasi'ga. Tani'dâgûn' aye''lĭ dehidâ'siga. Unada'ndâ dehiyâ'staneli 'ga. Nidugale'ntanû'nta nidûhûnneli'ga.

Tsisga'ya agine'ga, nûndâgû'nyĭ ditsidâ''stĭ. Gû'nĭ âstû' uhisa''tĭ nige 'sûnna. Agĕ''ya une'ga hi'ă iyu'stĭ gûlstû''lĭ, iyu'stĭ tsûdâ'ita. Uda'ndâ usĭnu'lĭ dâdatinilû'gûnelĭ'. Nûndâgû'nyitsû' dâdatinilugûstanelĭ. Tsisga'ya agine'ga, ditsidâstû'nĭ nû'nû' kana'tlani'ga. Tsûnkta' tegă'la'watege'stĭ. Tsiye'lûn gesû'nĭ uhisa''tĭ nige'sûnna.

Translation.

FOR SEPARATION (OF LOVERS).

Yû! On high you repose, O Blue Hawk, there at the far distant lake. The blue tobacco has come to be your recompense. Now you have arisen at once and come down. You have alighted midway between them where they two are standing. You have spoiled their souls immediately. They have at once become separated.

I am a white man; I stand at the sunrise. The good sperm shall never allow any feeling of loneliness. This white woman is of the Paint (iyustǐ) clan; she is called (iyustǐ) Wâyǐ'. We shall instantly turn her soul over. We shall turn it over as we go toward the Sun Land. I am a white man. Here where I stand it (her soul) has attached itself to (literally, "come against") mine. Let her eyes in their sockets be forever watching (for me). There is no loneliness where my body is.

Explanation.

This formula, from A'yûⁿinĭ's book, is used to separate two lovers or even a husband and wife, if the jealous rival so desires. In the latter case the preceding formula, from the same source, would be used to forestall this spell. No explanation of the ceremony is given, but the reference to tobacco may indicate that tobacco is smoked or thrown into the fire during the recitation. The particular hawk invoked (giya'giya') is a large species found in the coast region but seldom met with in the mountains. Blue indicates that it brings trouble with it, while white in the second paragraph indicates that the man is happy and attractive in manner.

In the first part of the formula the speaker calls upon the Blue Hawk to separate the lovers and spoil their souls, *i.e.*, change their feeling toward each other. In the second paragraph he endeavors to attract the attention of the woman by eulogizing himself. The expression, "we shall turn her soul over," seems here to refer to turning her affections, but as generally used, to turn one's soul is equivalent to killing him.

(ADALANĬ'STĂ'TI'YĬ II.)

Yû! Ha-nâ'gwa ada'ntĭ dătsâsi'ga, * * hĭlû(stû''lĭ), (* *) ditsa(dâ'ita). A'yû 0 0 tsila(stû''lĭ). Hiye'la tsĭkĭ' tsĭkû'. (Yû!)

Yû! Ha-nâ'gwa ada'ntĭ dătsâsi'ga. * * hĭlû(stû''lĭ), * * ditsa(dâ'íta). A'yû 0 0 tsûwi'ya tsĭkĭ' tsĭkû'. Yû!

Yû! Ha-nâ'gwa ada'ntĭ dătsâsi'ga. * * hĭlû(stû''lĭ) * * ditsa(dâ'íta). A'yû 0 0 tsûwatsi'la tsĭkĭ' tsĭkû' a'yû. Yû!

Yû! Ha-nâ'gwa ada'ntĭ dătsâsi'ga. * * hĭlû(stû''lĭ), * * ditsadâ'(ita). A'yû 0 0 tsûnahŭ' tsĭkĭ' tsĭkû'. Yû!

Sgě! "Ha-nâ'gwa ada'ntĭ dutsase', tsugale'ntĭ nige'sûna," tsûdûneĭ, Hĭkayû 'nlige galû'nlatĭ. Kananĕ'skĭ Û'nnage galû'nlatĭ (h)etsatsâ'ûntănile'ĭ. Tsănilta 'gĭ tsûksâ'ûntanile'ĭ. ** gûla(stû''lĭ), ** ditsadâ'(ita). Dudantâ'gĭ uhani'latâ tĭkwenû'ntani'ga. Kûlkwâ'gĭ igûlsta'lagĭ iyû'nta yû'nwĭ adayû'nlatawă' dudûne'lida'lûn uhisa''tĭ nige'sûna.

Sgě! Ha-nâ'gwatĭ uhisa''tĭ dutlû'ntani'ga. Tsû'nkta daskâ'lûntsi'ga. Sâ 'gwahĭ di'kta de'gayelûntsi'ga. Ga'tsa igûnû'nugâ'ĭstû uda'ntâ? Usû'hita nudanû'nna ûltûnge'ta gûnwadûneli'dege'stĭ. Igûnwûlsta''ti-gwû duwâlu 'wa'tûntĭ nige'sûna. Kananĕ'skĭ Ûnnage'ĭ tsanildew'se'stĭ ada'ntâ uktûnlesi 'dastĭ nige'sûna. Gadâyu'stĭ tsûdâ'ita ada'ntĭ tside'atsasi'ga. A'ya a 'kwatseli'ga.

Sgĕ! Ha-nâ'gwûlĕ' hûnhatûnga'ga, Hĭkayû'nlĭ Gi'gage. Tsetsûli'sĭ hiye 'lastûn a'ta'hisi'ga. Ada'ntâ hasû'gû''lawĭ'stani'ga, tsa'skaláhĭstĭ nige 'sûna. Hĭkayû'nlige denătsegû'la'wĭstani'ga. Agĕ''ya gĭ'nsûngû'lawĭs'tani 'ga uda'ntâ *uwahisĭ'sata*. Dĭgĭnaskûlâ'hĭstĭ nige'sûna. Yû!

Hi'ănasgwû' u'tlâ'yi-gwû dĭgalû'ⁿwistan'tĭ snûⁿâ'yĭ hani''lihûⁿ gûnasgi'stĭ. Gane'tsĭ aye''lĭ asi'tadis'tĭ watsi'la, ganûⁿli'yetĭ aguwaye'nĭ andisgâ'ĭ. Sâi 'yĭ tsika'nâhe itsu'laha'gwû.

Translation.

TO FIX THE AFFECTIONS.

Yû! Ha! Now the souls have come together. You are of the Deer (x x) clan. Your name is (x x) Ayâsta, I am of the Wolf (o-o) clan. Your body, I take it, I eat it. Yû! Ha! Now the souls have come together. You are of the Deer clan. Your name is Ayâsta. I am of the Wolf clan. Your flesh I take, I eat. Yû!

Yû! Ha! Now the souls have come together. You are of the Deer clan. Your name is Ayâsta. I am of the Wolf clan. Your spittle I take, I eat. I! Yû!

Yû! Ha! Now the souls have come together. You are of the Deer clan. Your name is Ayâsta. I am of the Wolf clan. Your heart I take, I eat. Yû!

Listen! "Ha! Now the souls have met, never to part," you have said, O Ancient One above. O Black Spider, you have been brought down from on high. You have let down your web. She is of the Deer clan; her name is Ayâsta. Her soul you have wrapped up in (your) web. There where the people of the seven clans are continually coming in sight and again disappearing (i.e. moving about, coming and going), there was never any feeling of loneliness.

Listen! Ha! But now you have covered her over with loneliness. Her eyes have faded. Her eyes have come to fasten themselves on one alone. Whither can her soul escape? Let her be sorrowing as she goes along, and not for one night alone. Let her become an aimless wanderer, whose trail may never be followed. O Black Spider, may you hold her soul in your web so that it shall never get through the meshes. What is the name of the soul? They two have come together. It is mine!

Listen! Ha! And now you have hearkened, O Ancient Red. Your grandchildren have come to the edge of your body. You hold them yet more firmly in your grasp, never to let go your hold. O Ancient One, we have become as one. The woman has put her (x x x) soul into our hands. We shall never let it go! Yû!

(Directions.)—And this also is for just the same purpose (the preceding formula in the manuscript book is also a love charm). It must be done by

stealth at night when they are asleep. One must put the hand on the middle of the breast and rub on spittle with the hand, they say. The other formula is equally good.

Explanation.

This formula to fix the affections of a young wife is taken from the manuscript sheets of the late Gatigwanasti. It very much resembles the other formula for the same purpose, obtained from. A'yû'ninĭ, and the brief directions show that the ceremony is alike in both. The first four paragraphs are probably sung, as in the other formula, on four successive nights, and, as explained in the directions and as stated verbally by A'vû'ninĭ, this must be done stealthily at night while the woman is asleep, the husband rubbing his spittle on her breast with his hand while chanting the song in a low tone, hardly above a whisper. The prayer to the Ancient One, or Ancient Red (Fire), in both formulas, and the expression, "I come to the edge of your body," indicate that the hands are first warmed over the fire, in accordance with the general practice when laying on the hands. The prayer to the Black Spider is a beautiful specimen of poetic imagery, and hardly requires an explanation. The final paragraph indicates the successful accomplishment of his purpose. "Your grandchildren" (tsetsûli'sĭ) is an expression frequently used in addressing the more important deities.

MISCELLANEOUS FORMULAS.

SÛⁿNÂ'YĬ EDÂ'HĬ E'SGA ASTÛⁿTI'YĬ.

Sgĕ! Uhyûⁿtsâ'yĭ galûⁿlti'tla tsûltâ'histĭ, Hĭsgaya Gigage'ĭ, usĭnu'lĭ di 'tsakûnĭ' denatlûⁿhi'sani'ga Uy-igawa'stĭ duda'ntĭ. Nûⁿnâ'hĭ tatuna'watĭ. Usĭnu'lĭ duda'ntâ dani'yûⁿstanilĭ'.

Sgĕ! Uhyûⁿtlâ'yĭ galûⁿlti'tla tsûltâ'histĭ, Hĭsga'ya Tĕ'halu, *hinaw'sŭ''ki*. Ha-usĭnu'lĭ nâ'gwa di'tsakûnĭ' denatlûⁿhisani'ga uy-igawa'stĭ duda'ntĭ. Nûⁿnâ'hĭ tătuna'wătĭ. Usĭnu'lĭ duda'ntâ dani'galĭstanĭ'.

Translation.

TO SHORTEN A NIGHT-GOER ON THIS SIDE.

Listen! In the Frigid Land above you repose, O Red Man, quickly we two have prepared your arrows for the soul of the Imprecator. He has them lying along the path. Quickly we two will take his soul as we go along.

Listen! In the Frigid Land above you repose, O Purple Man, * * * *. Ha! Quickly now we two have prepared your arrows for the soul of the Imprecator. He has them lying along the path. Quickly we two will cut his soul in two.

Explanation.

This formula, from A'yû'ninĭs' book, is for the purpose of driving away a witch from the house of a sick person, and opens up a most interesting chapter of Cherokee beliefs. The witch is supposed to go about chiefly under cover of darkness, and hence is called sûnnâ'yǐ edâ'hǐ, "the night goer." This is the term in common use; but there are a number of formulistic expressions to designate a witch, one of which, u'ya igawa'stĭ, occurs in the body of the formula and may be rendered "the imprecator," i.e., the sayer of evil things or curses. As the counteracting of a deadly spell always results in the death of its author, the formula is stated to be not merely to drive away the wizard, but to kill him, or, according to the formulistic expression, "to shorten him (his life) on this side."

When it becomes known that a man is dangerously sick the witches from far and near gather invisibly about his house after nightfall to worry him and even force their way in to his bedside unless prevented by the presence of a more powerful shaman within the house. They annoy the sick man and thus hasten his death by stamping upon the roof and beating upon the sides of the house; and if they can manage to get inside they raise up the dying sufferer from the bed and let him fall again or even drag him out upon the floor. The object of the witch in doing this is to prolong his term of years by adding to his own life as much as he can take from that of the sick man. Thus it is that a witch who is successful in these practices lives to be very old. Without going into extended details, it may be sufficient to state that the one most dreaded, alike by the friends of the sick man and by the lesser

witches, is the Kâ'lana-ayeli'skĭ or Raven Mocker, so called because he flies through the air at night in a shape of fire, uttering sounds like the harsh croak of a raven.

The formula here given is short and simple as compared with some others. There is evidently a mistake in regard to the Red Man, who is here placed in the north, instead of in the east, as it should be. The reference to the arrows will be explained further on. Purple, mentioned in the second paragraph, has nearly the same symbolic meaning as blue, viz: Trouble, vexation and defeat; hence the Purple Man is called upon to frustrate the designs of the witch.

To drive away the witch the shaman first prepares four sharpened sticks, which he drives down into the ground outside the house at each of the four corners, leaving the pointed ends projecting upward and outward. Then, about noontime he gets ready the Tsâlagayû'nlĭ or "Old Tobacco" (Nicotiana rustica), with which he fills his pipe, repeating this formula during the operation, after which he wraps the pipe thus filled in a black cloth. This sacred tobacco is smoked only for this purpose. He then goes out into the forest, and returns just before dark, about which time the witch may be expected to put in an appearance. Lighting his pipe, he goes slowly around the house, puffing the smoke in the direction of every trail by which the witch might be able to approach, and probably repeating the same or another formula the while. He then goes into the house and awaits results. When the witch approaches under cover of the darkness, whether in his own proper shape or in the form of some animal, the sharpened stick on that side of the house shoots up into the air and comes down like an arrow upon his head, inflicting such a wound as proves fatal within seven days. This explains the words of the formula, "We have prepared your arrows for the soul of the Imprecator. He has them lying along the path". A'yû'ninĭ said nothing about the use of the sharpened sticks in this connection, mentioning only the tobacco, but the ceremony, as here described, is the one ordinarily used. When wounded the witch utters a groan which is heard by those listening inside the house, even at the distance of half a mile. No one knows certainly who the witch is until a day or two afterward, when some old man or woman, perhaps in a remote settlement, is suddenly seized with a mysterious illness and before seven days elapse is dead.

GAHU'STĬ A'GIYAHU'SA.

Sgĕ! Ha-nâ'gwa hatû'ngani'ga Nû'nya Wâtige'ĭ, gahu'stĭ tsûtska'dĭ nige 'sûnna. Ha-nâ'gwa dû'ngihya'lĭ. Agiyahu'sa sĭ'kwa, haga' tsûn-nû' iyû'nta dătsi'waktû'hĭ. Tla-'ke' a'ya a'kwatseli'ga. 0 0 digwadâi'ta.

Translation.

I HAVE LOST SOMETHING.

Listen! Ha! Now you have drawn near to hearken, O Brown Rock; you never lie about anything. Ha! Now I am about to seek for it. I have lost a hog and now tell me about where I shall find it. For is it not mine? My name is ——.

Explanation.

This formula, for finding anything lost, is so simple as to need but little explanation. Brown in this instance has probably no mythologic significance, but refers to the color of the stone used in the ceremony. This is a small rounded water-worn pebble, in substance resembling quartz and of a reddish-brown color. It is suspended by a string held between the thumb and finger of the shaman, who is guided in his search by the swinging of the pebble, which, according to their theory, will swing farther in the direction of the lost article than in the contrary direction! The shaman, who is always fasting, repeats the formula, while closely watching the the motions of the swinging pebble. He usually begins early in the morning, making the first trial at the house of the owner of the lost article. After noting the general direction toward which it seems to lean he goes a considerable distance in that direction, perhaps half a mile or more, and makes a second trial. This time the pebble may swing off at an angle in another direction. He follows up in the direction indicated for perhaps another half mile, when on a third trial the stone may veer around toward the starting point, and a fourth attempt may complete the circuit. Having thus arrived at the conclusion that the missing article is somewhere within a certain circumscribed area, he advances to the center of this space and

marks out upon the ground a small circle inclosing a cross with arms pointing toward the four cardinal points. Holding the stone over the center of the cross he again repeats the formula and notes the direction in which the pebble swings. This is the final trial and he now goes slowly and carefully over the whole surface in that direction, between the center of the circle and the limit of the circumscribed area until in theory, at least, the article is found. Should he fail, he is never at a loss for excuses, but the specialists in this line are generally very shrewd guessers well versed in the doctrine of probabilities.

There are many formulas for this purpose, some of them being long and elaborate. When there is reason to believe that the missing article has been stolen, the specialist first determines the clan or settlement to which the thief belongs and afterward the name of the individual. Straws, bread balls, and stones of various kinds are used in the different formulas, the ceremony differing according to the medium employed. The stones are generally pointed crystals or antique arrowheads, and are suspended as already described, the point being supposed to turn finally in the direction of the missing object. Several of these stones have been obtained on the reservation and are now deposited in the National Museum. It need excite no surprise to find the hog mentioned in the formula, as this animal has been domesticated among the Cherokees for more than a century, although most of them are strongly prejudiced against it.

HIA' UNÁLE (ATESTI'YĬ).

Yuhahi', yuhahi', yuhahi', yuhahi', yuhahi', yuhahi', yuhahi', yuhahi', yuhahi', yuhahi'—Yû!

Sgĕ! Ha-nâ'gwa hĭnahûn'ski tayĭ'. Ha-tâ'sti-gwû gûnska'ihû. Tsûtali'i-gwati 'na halu''nĭ. Kû'nigwati'na dula'ska galû'nlati-gwû witu'ktĭ. Wigûnyasĕ 'hĭsĭ. Â'talĭ tsugû'nyĭ wite'tsatanû'nûnsĭ' nûnnâhĭ tsane'lagĭ de'gatsana 'wadise'stĭ. Kûnstû' dutsasû'nĭ atû'nwasûtĕ'hahĭ' tsûtûneli'sestĭ. Sgĕ!

Translation.

THIS IS TO FRIGHTEN A STORM.

Yuhahi', yuhahi', yuhahi', yuhahi', yuhahi', Yuhahi', yuhahi', yuhahi', yuhahi', yuhahi'—Yû!

Listen! O now you are coming in rut. Ha! I am exceedingly afraid of you. But yet you are only tracking your wife. Her footprints can be seen there directed upward toward the heavens. I have pointed them out for you. Let your paths stretch out along the tree tops (?) on the lofty mountains (and) you shall have them (the paths) lying down without being disturbed, Let (your path) as you go along be where the waving branches meet. Listen!

Explanation.

This formula, from A'yû'nini's book, is for driving away, or "frightening" a storm, which threatens to injure the growing corn. The first part is a meaningless song, which is sung in a low tone in the peculiar style of most of the sacred songs. The storm, which is not directly named, is then addressed and declared to be coming on in a fearful manner on the track of his wife, like an animal in the rutting season. The shaman points out her tracks directed toward the upper regions and begs the storm spirit to follow her along the waving tree tops of the lofty mountains, where he shall be undisturbed.

The shaman stands facing the approaching storm with one hand stretched out toward it. After repeating the song and prayer he gently blows in the direction toward which he wishes it to go, waving his hand in the same direction as though pushing away the storm. A part of the storm is usually sent into the upper regions of the atmosphere. If standing at the edge of the field, he holds a blade of corn in one hand while repeating the ceremony.

DANAWÛ' TSUNEDÂLÛ'HĬ NUNATÛ'NELI'TALÛ''HĬ U 'NALSTELTA''TANÛ'HĬ.

Hayĭ! Yû! Sgĕ! Nâ'gwa usĭnuli'yu A'tasu Gi'gage'ĭ hinisa'latani'ga. Usĭnu 'lĭ duda'ntâ u'nanugâ'tsidastĭ' nige'sûⁿna. Duda'ntâ e'lawi'nĭ iyû'ⁿta ă'tasû

digûⁿnage'ĭ degûⁿlskwĭ'tahise'stĭ, anetsâge'ta unanugâ'istĭ nige'sûⁿna, nitinû'ⁿneli'ga. Ă'tasû dusa'ladanû'ⁿstĭ nige'sûⁿna, nitinû'ⁿneli'ga. E'lawi 'nĭ iyû'ⁿta ă'tasû ûⁿnage' ugûⁿ'hatû ûⁿnage' sâ'gwa da'liyĕ'kû'lani'ga *unadutlâ'gĭ*. Unanugâ'tsida'stĭ nige'sûⁿna, nûⁿeli'ga.

Usĭnuli'yu tsunada'ntâ kul'kwâ'gine tigalû'nltiyû'n iyû'nta ada'ntâ tega 'yĕ'ti'tege'stĭ. Tsunada'ntâ tsuligalĭ'stĭ nige'sûnna dudûni'tege'stĭ. Usĭnu'lĭ deniû'neli'ga galû'nlatĭ iyû'nta widu'l'tâhĭsti'tege'stĭ. Ă'tasû gigage'ĭ dĕhatagû'nyastani'ga. Tsunada'ntâ tsudastû'nilida'stĭ nige'sûnna nûneli'ga. Tsunada'ntâ galû'nlatĭ iyû'nta witĕ''titege'stĭ. Tsunada'ntâ anigwalu'gĭ une 'ga gûnwa'nadagû'nyastitege'stĭ. Sa'ka'nĭ udûnu'hĭ nige'sûnna usĭnuli'yu. Yû!

Translation.

WHAT THOSE WHO HAVE BEEN TO WAR DID TO HELP THEMSELVES.

Hayĭ! Yû! Listen! Now instantly we have lifted up the red war club. Quickly his soul shall be without motion. There under the earth, where the black war clubs shall be moving about like ball sticks in the game, there his soul shall be, never to reappear. We cause it to be so. He shall never go and lift up the war club. We cause it to be so. There under the earth the black war club (and) the black fog have come together as one for their covering. It shall never move about (*i.e.*, the black fog shall never be lifted from them). We cause it to be so.

Instantly shall their souls be moving about there in the seventh heaven. Their souls shall never break in two. So shall it be. Quickly we have moved them (their souls) on high for them, where they shall be going about in peace. You (?) have shielded yourselves (?) with the red war club. Their souls shall never be knocked about. Cause it to be so. There on high their souls shall be going about. Let them shield themselves with the white war whoop. Instantly (grant that) they shall never become blue. Yû!

Explanation.

This formula, obtained from A'wani'ta, may be repeated by the doctor for as many as eight men at once when about to go to war. It is recited for four consecutive nights, immediately before setting out. There is no tabu enjoined and no beads are used, but the warriors "go to water" in the regular way, that is, they stand at the edge of the stream, facing the east and looking down upon the water, while the shaman, standing behind them, repeats the formula. On the fourth night the shaman gives to each man a small charmed root which has the power to confer invulnerability. On the eve of battle the warrior after bathing in the running stream chews a portion of this and spits the juice upon his body in order that the bullets of the enemy may pass him by or slide off from his skin like drops of water. Almost every man of the three hundred East Cherokees who served in the rebellion had this or a similar ceremony performed before setting out—many of them also consulting the oracular ulûⁿsû'tĭ stone at the same time—and it is but fair to state that not more than two or three of the entire number were wounded in actual battle.

In the formula the shaman identifies himself with the warriors, asserting that "we" have lifted up the red war club, red being the color symbolic of success and having no reference to blood, as might be supposed from the connection. In the first paragraph he invokes curses upon the enemy, the future tense verb *It shall be*, etc., having throughout the force of *let it be*. He puts the souls of the doomed enemy in the lower regions, where the black war clubs are constantly waving about, and envelops them in a black fog, which shall never be lifted and out of which they shall never reappear. From the expression in the second paragraph, "their souls shall never be knocked about," the reference to the black war clubs moving about like ball sticks in the game would seem to imply that they are continually buffeting the doomed souls under the earth. The spirit land of the Cherokees is in the west, but in these formulas of malediction or blessing the soul of the doomed man is generally consigned to the underground region, while that of the victor is raised by antithesis to the seventh heaven.

Having disposed of the enemy, the shaman in the second paragraph turns his attention to his friends and at once raises their souls to the seventh heaven, where they shall go about in peace, shielded by (literally, "covered with") the red war club of success, and never to be knocked about by the

blows of the enemy. "Breaking the soul in two" is equivalent to snapping the thread of life, the soul being regarded as an intangible something having length, like a rod or a string. This formula, like others written down by the same shaman, contains several evident inconsistencies both as to grammar and mythology, due to the fact that A'wanita is extremely careless with regard to details and that this particular formula has probably not been used for the last quarter of a century. The warriors are also made to shield themselves with the white war whoop, which should undoubtedly be the red war whoop, consistent with the red war club, white being the color emblematic of peace, which is evidently an incongruity. The war whoop is believed to have a positive magic power for the protection of the warrior, as well as for terrifying the foe.

The mythologic significance of the different colors is well shown in this formula. Red, symbolic of success, is the color of the war club with which the warrior is to strike the enemy and also of the other one with which he is to shield or "cover" himself. There is no doubt that the war whoop also should be represented as red. In conjuring with the beads for long life, for recovery from sickness, or for success in love, the ball play, or any other undertaking, the red beads represent the party for whose benefit the magic spell is wrought, and he is figuratively clothed in red and made to stand upon a red cloth or placed upon a red seat. The red spirits invoked always live in the east and everything pertaining to them is of the same color.

Black is always typical of death, and in this formula the soul of the enemy is continually beaten about by black war clubs and enveloped in a black fog. In conjuring to destroy an enemy the shaman uses black beads and invokes the black spirits—which always live in the west—bidding them tear out the man's soul, carry it to the west, and put it into the black coffin deep in the black mud, with a black serpent coiled above it.

Blue is emblematic of failure, disappointment, or unsatisfied desire. "They shall never become blue" means that they shall never fail in anything they undertake. In love charms the lover figuratively covers himself with red and prays that his rival shall become entirely blue and walk in a blue path. The formulistic expression, "He is entirely blue," closely approximates in

meaning the common English phrase, "He feels blue." The blue spirits live in the north.

White—which occurs in this formula only by an evident error—denotes peace and happiness. In ceremonial addresses, as at the green corn dance and ball play, the people figuratively partake of white food and after the dance or the game return along the white trail to their white houses. In love charms the man, in order to induce the woman to cast her lot with his, boasts "I am a white man," implying that all is happiness where he is. White beads have the same meaning in the bead conjuring and white was the color of the stone pipe anciently used in ratifying peace treaties. The white spirits live in the south (Wa'hală).

Two other colors, brown and yellow, are also mentioned in the formulas. Wâtige ĭ, "brown," is the term used to include brown, bay, dun, and similar colors, especially as applied to animals. It seldom occurs in the formulas and its mythologic significance is as yet undetermined. Yellow is of more frequent occurrence and is typical of trouble and all manner of vexation, the yellow spirits being generally invoked when the shaman wishes to bring down calamities upon the head of his victim, without actually destroying him. So far as present knowledge goes, neither brown nor yellow can be assigned to any particular point of the compass.

Usĭnuli'yu, rendered "instantly," is the intensive form of usĭnu'lĭ "quickly," both of which words recur constantly in the formulas, in some entering into almost every sentence. This frequently gives the translation an awkward appearance. Thus the final sentence above, which means literally "they shall never become blue instantly," signifies "Grant that they shall never become blue", i.e., shall never fail in their purpose, and grant our petition instantly.

DIDA'LATLI'TĬ.

Sgě! Nâ'gwa tsûdantâ'gĭ tegû'nyatawâ'ilateli'ga. Iyustĭ (0 0) tsilastû''lĭ Iyu 'stĭ (0 0) ditsadâ'ita. Tsûwatsi'la elawi'nĭ tsidâ'hĭstani'ga. Tsûdantâgĭ elawi 'nĭ tsidâ'hĭstani'ga. Nû'nya gû'nage gûnyu'tlûntani'ga. Ă'nûwa'gĭ gû 'nage' gûnyu'tlûntani'ga. Sûntalu'ga gû'nage degû'nyanu'galû'ntani'ga,

tsû'nanugâ'istĭ nige'sûnna. Usûhi'yĭ nûnnâ'hĭ wite'tsatanû'nûnsĭ gûne'sâ gû 'nnage asahalagĭ'. Tsûtû'neli'ga. Elawâ'tĭ asa'halagĭ'a'dûnni'ga. Usĭnuli'yu Usûhi'yĭ gûltsâ'tĕ digû'nnagesta'yĭ, elawâ'ti gû'nnage tidâ'hĭstĭ wa'yanu 'galûntsi'ga. Gûne'sa gû'nage sûntalu'ga gû'nnage gayu'tlûntani'ga. Tsûdantâ'gĭ ûska'lûntsi'ga. Sa'ka'nĭ adûnni'ga. Usû'hita atanis'se'tĭ, ayâ 'lâtsi'sestĭ tsûdantâ'gĭ, tsû'nanugâ'istĭ nige'sûnna. Sgĕ!

Translation.

TO DESTROY LIFE.

Listen! Now I have come to step over your soul. You are of the (wolf) clan. Your name is (A'yû'ninĭ). Your spittle I have put at rest under the earth. Your soul I have put at rest under the earth. I have come to cover you over with the black rock. I have come to cover you over with the black cloth. I have come to cover you with the black slabs, never to reappear. Toward the black coffin of the upland in the Darkening Land your paths shall stretch out. So shall it be for you. The clay of the upland has come (to cover you. (?)) Instantly the black clay has lodged there where it is at rest at the black houses in the Darkening Land. With the black coffin and with the black slabs I have come to cover you. Now your soul has faded away. It has become blue. When darkness comes your spirit shall grow less and dwindle away, never to reappear. Listen!

Explanation.

This formula is from the manuscript book of A'yû'ninĭ, who explained the whole ceremony. The language needs but little explanation. A blank is left for the name and clan of the victim, and is filled in by the shaman. As the purpose of the ceremony is to bring about the death of the victim, everything spoken of is symbolically colored black, according to the significance of the colors as already explained. The declaration near the end, "It has become blue," indicates that the victim now begins to feel in himself the effects of the incantation, and that as darkness comes on his spirit will shrink and gradually become less until it dwindles away to nothingness.

When the shaman wishes to destroy the life of another, either for his own purposes or for hire, he conceals himself near the trail along which the victim is likely to pass. When the doomed man appears the shaman waits until he has gone by and then follows him secretly until he chances to spit upon the ground. On coming up to the spot the shaman collects upon the end of a stick a little of the dust thus moistened with the victim's spittle. The possession of the man's spittle gives him power over the life of the man himself. Many ailments are said by the doctors to be due to the fact that some enemy has by this means "changed the spittle" of the patient and caused it to breed animals or sprout corn in the sick man's body. In the love charms also the lover always figuratively "takes the spittle" of the girl in order to fix her affections upon himself. The same idea in regard to spittle is found in European folk medicine.

The shaman then puts the clay thus moistened into a tube consisting of a joint of the Kanesâ'la or wild parsnip, a poisonous plant of considerable importance in life-conjuring ceremonies. He also puts into the tube seven earthworms beaten into a paste, and several splinters from a tree which has been struck by lightning. The idea in regard to the worms is not quite clear, but it may be that they are expected to devour the soul of the victim as earthworms are supposed to feed upon dead bodies, or perhaps it is thought that from their burrowing habits they may serve to hollow out a grave for the soul under the earth, the quarter to which the shaman consigns it. In other similar ceremonies the dirt-dauber wasp or the stinging ant is buried in the same manner in order that it may kill the soul, as these are said to kill other more powerful insects by their poisonous sting or bite. The wood of a tree struck by lightning is also a potent spell for both good and evil and is used in many formulas of various kinds.

Having prepared the tube, the shaman goes into the forest to a tree which has been struck by lightning. At its base he digs a hole, in the bottom of which he puts a large yellow stone slab. He then puts in the tube, together with seven yellow pebbles, fills in the earth, and finally builds a fire over the spot to destroy all traces of his work. The yellow stones are probably chosen as the next best substitute for black stones, which are not always easy to find. The formula mentions "black rock," black being the emblem

of death, while yellow typifies trouble. The shaman and his employer fast until after the ceremony.

If the ceremony has been properly carried out, the victim becomes blue, that is, he feels the effects in himself at once, and, unless he employs the countercharms of some more powerful shaman, his soul begins to shrivel up and dwindle, and within seven days he is dead. When it is found that the spell has no effect upon the intended victim it is believed that he has discovered the plot and has taken measures for his own protection, or that, having suspected a design against him—as, for instance, after having won a girl's affections from a rival or overcoming him in the ball play—he has already secured himself from all attempts by counterspells. It then becomes a serious matter, as, should he succeed in turning the curse aside from himself, it will return upon the heads of his enemies.

The shaman and his employer then retire to a lonely spot in the mountains, in the vicinity of a small stream, and begin a new series of conjurations with the beads. After constructing a temporary shelter of bark laid over poles, the two go down to the water, the shaman taking with him two pieces of cloth, a yard or two yards in length, one white, the other black, together with seven red and seven black beads. The cloth is the shaman's pay for his services, and is furnished by his employer, who sometimes also supplies the beads. There are many formulas for conjuring with the beads, which are used on almost all important occasions, and differences also in the details of the ceremony, but the general practice is the same in all cases. The shaman selects a bend in the river where his client can look toward the east while facing up stream. The man then takes up his position on the bank or wades into the stream a short distance, where—in the ceremonial language—the water is a "hand length" (awâ'hilû) in depth and stands silently with his eyes fixed upon the water and his back to the shaman on the bank. The shaman then lays upon the ground the two pieces of cloth, folded into convenient size, and places the red beads—typical of success and his client upon the white cloth, while the black beads—emblematic of death and the intended victim—are laid upon the black cloth. It is probable that the first cloth should properly be red instead of white, but as it is difficult to get red cloth, except in the shape of handkerchiefs, a substitution has been made, the two colors having a close mythologic relation. In former days a piece of buckskin and the small glossy, seeds of the Viper's Bugloss (*Echium vulgare*) were used instead of the cloth and beads. The formulistic name for the bead is $s\hat{u}'n\tilde{t}kta$, which the priests are unable to analyze, the ordinary word for beads or coin being $ad\acute{e}l\hat{a}$.

The shaman now takes a red bead, representing his client, between the thumb and index finger of his right hand, and a black bead, representing the victim, in like manner, in his left hand. Standing a few feet behind his client he turns toward the east, fixes his eyes upon the bead between the thumb and finger of his right hand, and addresses it as the Sû'nĭkta Gigăge'ĭ, the Red Bead, invoking blessings upon his client and clothing him with the red garments of success. The formula is repeated in a low chant or intonation, the voice rising at intervals, after the manner of a revival speaker. Then turning to the black bead in his left hand he addresses it in similar manner, calling down the most withering curses upon the head of the victim. Finally looking up he addresses the stream, under the name of Yû'nwĭ Gûnahi'ta, the "Long Person," imploring it to protect his client and raise him to the seventh heaven, where he will be secure from all his enemies. The other, then stooping down, dips up water in his hand seven times and pours it upon his head, rubbing it upon his shoulders and breast at the same time. In some cases he dips completely under seven times, being stripped, of course, even when the water is of almost icy coldness. The shaman, then stooping down, makes a small hole in the ground with his finger, drops into it the fatal black bead, and buries it out of sight with a stamp of his foot. This ends the ceremony, which is called "taking to water."

While addressing the beads the shaman attentively observes them as they are held between the thumb and finger of his outstretched hands. In a short time they begin to move, slowly and but a short distance at first, then faster and farther, often coming down as far as the first joint of the finger or even below, with an irregular serpentine motion from side to side, returning in the same manner. Should the red bead be more lively in its movements and come down lower on the finger than the black bead, he confidently predicts for the client the speedy accomplishment of his desire. On the other hand, should the black bead surpass the red in activity, the spells of the shaman employed by the intended victim are too strong, and the whole ceremony must be gone over again with an additional and larger quantity of cloth.

This must be kept up until the movements of the red beads give token of success or until they show by their sluggish motions or their failure to move down along the finger that the opposing shaman can not be overcome. In the latter case the discouraged plotter gives up all hope, considering himself as cursed by every imprecation which he has unsuccessfully invoked upon his enemy, goes home and—theoretically—lies down and dies. As a matter of fact, however, the shaman is always ready with other formulas by means of which he can ward off such fatal results, in consideration, of a sufficient quantity of cloth.

Should the first trial, which takes place at daybreak, prove unsuccessful, the shaman and his client fast until just before sunset. They then eat and remain awake until midnight, when the ceremony is repeated, and if still unsuccessful it may be repeated four times before daybreak (or the following noon?), both men remaining awake and fasting throughout the night. If still unsuccessful, they continue to fast all day until just before sundown. Then they eat again and again remain awake until midnight, when the previous night's programme is repeated. It has now become a trial of endurance between the revengeful client and his shaman on the one side and the intended victim and his shaman on the other, the latter being supposed to be industriously working countercharms all the while, as each party must subsist upon one meal per day and abstain entirely from sleep until the result has been decided one way or the other. Failure to endure this severe strain, even so much as closing the eyes in sleep for a few moments or partaking of the least nourishment excepting just before sunset, neutralizes all the previous work and places the unfortunate offender at the mercy of his more watchful enemy. If the shaman be still unsuccessful on the fourth day, he acknowledges himself defeated and gives up the contest. Should his spells prove the stronger, his victim will die within seven days, or, as the Cherokees say, seven nights. These "seven nights," however, are frequently interpreted, figuratively, to mean seven years, a rendering which often serves to relieve the shaman from a very embarrassing position.

With regard to the oracle of the whole proceeding, the beads do move; but the explanation is simple, although the Indians account for it by saying that the beads become alive by the recitation of the sacred formula. The shaman is laboring under strong, though suppressed, emotion. He stands with his hands stretched out in a constrained position, every muscle tense, his breast heaving and voice trembling from the effort, and the natural result is that before he is done praying his fingers begin to twitch involuntarily and thus cause the beads to move. As before stated, their motion is irregular; but the peculiar delicacy of touch acquired by long practice probably imparts more directness to their movements than would at first seem possible.

HIĂ' A'NE'TSÂ UGÛ'"WA'LĬ AMÂ'YĬ DITSÛ'"STA'TĬ.

Sgĕ! Ha-nâgwa ă'stĭ une'ga aksâ'ûⁿtanû'ⁿ usĭnu'lĭ a'ne'tsâ unatsâ'nûⁿtse 'lahĭ akta''tĭ adûⁿni'ga.

Iyu'stĭ utadâ'ta, iyu'stĭ tsunadâ'ita. Nûⁿnâ'hĭ anite'lahĕhû' ige'skĭ nige 'sûⁿna. Dû'ksi-gwu' dedu'natsgû'la'wate'gû. Da''sûⁿ unilâtsi'satû. Sa'ka'ni unati'satû'.

Nûⁿnâ'hĭ dâ'tadu'nina'watĭ' a'yû-'nû' digwatseli'ga a'ne'tsâ unatsâ'nûⁿtse 'lahĭ. Tla'mehû Gigage'ĭ sâ'gwa danûtsgû''lani'ga. Igû'ⁿyĭ galû'ⁿlâ ge'sûⁿ i 'yûⁿ kanû'ⁿlagĭ ^uwâhâ'hĭstâ'gĭ. Ta'line galû'ⁿlâ ge'suⁿ i'yûⁿ kanû'ⁿlagĭ ^uwâhâ'hĭstâ'gĭ. He'nilû danûtsgû''lani'ga. Tla'ma ûⁿni'ta a'nigwalu'gĭ gûⁿtla''tisge'stĭ, ase'gwû nige'sûⁿna.

Du'talĕ a'ne'tsâ unatsâ'nûntse'lahĭ saligu'gi-gwû dedu'natsgû''lawĭsti'tegû '. Elawi'nĭ da''sûn unilâtsi'satû.

Tsâ'ine digalû'nlatiyu'n Să'niwă Gi'gageĭ sâ'gwa danûtsgû''lani'ga, asĕ'gâ 'gĭ nige'sûnna. Kanû'nlagĭ u*wâhâ'hĭstâ'gĭ nû''gine digalû'nlatiyû'n. Gulĭ 'sgulĭ' Sa'ka'ni sâ'gwa danûtsgû''lani'ga, asĕ'gâ'gĭ nige'sûnna. Kanû'nlagĭ uwâhâ'hĭstâgĭ hĭ'skine digalû'nlatiyû'n. Tsŭtsŭ' Sa'ka'ni sâ'gwa danûtsgû ''lani'ga, asĕ'gâ'gĭ nige'sûnna.

Du'talĕ a'ne'tsâ utsâ'nûntse'lahĭ Tĭne'gwa Sa'ka'ni sâ'gwa danûtsgû''lani 'ga, ige'skĭ nige'sûnna. Da''sûn unilâtsi'satû. Kanû'nlagĭ uwâhâ'hĭstâ'gĭ sutali'ne digalû'nlatiyû'n. A'nigâsta'ya sâ'gwa danûtsgu''lani'ga, asĕ'gâ'gĭ

nige'suⁿna. Kanû'ⁿlagĭ ^uwâhâ'hĭstâ'gĭ kûl'kwâgine digalû'ⁿlatiyû'ⁿ. Wâtatû 'ga Sa'ka'ni sâ'gwa danûtsgû''lani'ga, asĕ'gâ'gĭ nige'sûⁿna.

Du'talĕ a'ne'tsâ unatsâ'nûⁿtse'lahĭ, Yâ'na dedu'natsgû''lawĭstani'ga, ige 'skĭ nige'sûⁿna. Da'sûⁿ du'nilâtsi'satû. Kanû'ⁿlagĭ de'tagaskalâ'ûⁿtanû'ⁿ, igûⁿ'wûlstanûhi-gwûdi'na tsuye'listi gesû'ⁿĭ. Akta''tĭ adûⁿni'ga.

Sgĕ! Nâ'gwa t'skĭ'nâne'lĭ ta'lădŭ' iyû'nta a'gwatseli'ga, Wătatu'ga Tsûne 'ga. Tsuye'listĭ gesû'nĭ skĭ'nâhûnsĭ' a'gwatseli'ga—kanû'nlagĭ a'gwatseli 'ga. Nă'nâ utadâ'ta kanû'nlagĭ dedu'skalâ'asi'ga.

Dedû'ndagû'nyastani'ga, gûnwâ'hisâ'nûhĭ. Yû!

Translation.

THIS CONCERNS THE BALL PLAY—TO TAKE THEM TO WATER WITH IT.

Listen! Ha! Now where the white thread has been let down, quickly we are about to examine into (the fate of) the admirers of the ball play.

They are of—such a (iyu'stĭ) descent. They are called—so and so (iyu'stĭ). They are shaking the road which shall never be joyful. The miserable Terrapin has come and fastened himself upon them as they go about. They have lost all strength. They have become entirely blue.

But now my admirers of the ball play have their roads lying along in this direction. The Red Bat has come and made himself one of them. There in the first heaven are the pleasing stakes. There in the second heaven are the pleasing stakes. The Pewee has come and joined them. The immortal ball stick shall place itself upon the whoop, never to be defeated.

As for the lovers of the ball play on the other side, the common Turtle has come and fastened himself upon them as they go about. Under the earth they have lost all strength.

The pleasing stakes are in the third heaven. The Red Tlăniwă has come and made himself one of them, that they may never be defeated. The pleasing stakes are in the fourth heaven. The Blue Fly-catcher has made himself one of them, that they may never be defeated. The pleasing stakes are in the fifth heaven. The Blue Martin has made himself one of them, that they may never be defeated.

The other lovers of the ball play, the Blue Mole has come and fastened upon them, that they may never be joyous. They have lost all strength.

The pleasing stakes are there in the sixth heaven. The Chimney Swift has made himself one of them, that they may never be defeated. The pleasing stakes are in the seventh heaven. The Blue Dragon-fly has made himself one of them, that they may never be defeated.

As for the other admirers of the ball play, the Bear has just come and fastened him upon them, that they may never be happy. They have lost all strength. He has let the stakes slip from his grasp and there shall be nothing left for their share.

The examination is ended.

Listen! Now let me know that the twelve are mine, O White Dragon-fly. Tell me that the share is to be mine—that the stakes are mine. As for the player there on the other side, he has been forced to let go his hold upon the stakes.

Now they are become exultant and happy. Yû!

Explanation.

This formula, from the A'yûninĭ manuscript is one of those used by the shaman in taking the ball players to water before the game. The ceremony is performed in connection with red and black beads, as described in the formula just given for destroying life. The formulistic name given to the ball players signifies literally, "admirers of the ball play." The Tla'niwa (sa 'niwa in the Middle dialect) is the mythic great hawk, as large and powerful as the roc of Arabian tales. The shaman begins by declaring that it is his

purpose to examine or inquire into the fate of the ball players, and then gives his attention by turns to his friends and their opponents, fixing his eyes upon the red bead while praying for his clients, and upon the black bead while speaking of their rivals. His friends he raises gradually to the seventh or highest galû "latĭ. This word literally signifies height, and is the name given to the abode of the gods dwelling above the earth, and is also used to mean heaven in the Cherokee bible translation. The opposing players, on the other hand, are put down under the earth, and are made to resemble animals slow and clumsy of movement, while on behalf of his friends the shaman invokes the aid of swift-flying birds, which, according to the Indian belief, never by any chance fail to secure their prey. The birds invoked are the He'nilû or wood pewee (Contopus virens), the Tlăniwă or mythic hawk, the Guli'sguli' or great crested flycatcher (Myiarchus crinitus), the Tsûtsû or martin (Progne subis), and the A'nigâsta'ya or chimney swift (Chætura pelasgia). In the idiom of the formulas it is said that these "have just come and are sticking to them" (the players), the same word (danûtsgû'lani'ga) being used to express the devoted attention of a lover to his mistress. The Watatuga, a small species of dragon-fly, is also invoked, together with the bat, which, according to a Cherokee myth, once took sides with the birds in a great ball contest with the four-footed animals, and won the victory for the birds by reason of his superior skill in dodging. This myth explains also why birds, and no quadrupeds, are invoked by the shaman to the aid of his friends. In accordance with the regular color symbolism the flycatcher, martin, and dragon-fly, like the bat and the tla 'niwă, should be red, the color of success, instead of blue, evidently so written by mistake. The white thread is frequently mentioned in the formulas, but in this instance the reference is not clear. The twelve refers to the number of runs made in the game.

Footnote 1: (return)

To appear later with the collection of Cherokee myths.

Footnote 2: (return)

Brinton, D.G.: The books of Chilan Balam 10, Philadelphia, n.d., (1882).

Footnote 3: (return)

Brinton, D.G.: Names of the Gods in the Kiché Myths, in Proc. Am. Philos. Soc., Philadelphia, 1881, vol. 19, p. 613.

Footnote 4: (return)

One of the High peaks of the Smoky Mountains, on the Tennessee line, near Clingman's Dome.

Footnote 5: (return)

Haywood, John: Natural and Aboriginal History of East Tennessee, 267-8, Nashville, 1823.

Footnote 6: (return)

Ibid., p. 281.

Footnote 7: (return)

Wood, T.B., and Bache, F.: Dispensatory of the United States of America, 14th ed., Philadelphia, 1877.

Footnote 8: (return)

The Cherokee plant names here given are generic names, which are the names commonly used. In many cases the same name is applied to several species and it is only when it is necessary to distinguish between them that the Indians use what might be called specific names. Even then the descriptive term used serves to distinguish only the particular plants under discussion and the introduction of another variety bearing the same generic name would necessitate a new classification of species on a different basis, while hardly any two individuals would classify the species by the same characteristics.

Footnote 9: (return)

For more in regard to color symbolism, see Mallery's Pictographs of the North American Indians in Fourth Report of the Bureau of Ethnology, pp. 53-37, Washington, 1886; Gatschet's Creek Migration Legend, vol. 3, pp. 31-41, St. Louis, 1888; Brinton's Kiche Myths in Proceedings of the American Philosophical Society, vol. 19, pp. 646-647, Philadelphia, 1882.

Footnote 10: (return)

Ada'wěhĭ is a word used to designate one supposed to have supernatural powers, and is applied alike to human beings and to the spirits invoked in the formulas. Some of the mythic heroes famous for their magic deeds are spoken of as ada 'wěhĭ (plural anida'wěhĭ or anida'we), but in its application to mortals the term is used only of the very greatest shamans. None of those now belonging to the band are considered worthy of being thus called, although the term was sometimes applied to one, Usawĭ, who died some years ago. In speaking of himself as an ada'wěhĭ, as occurs in some of the formulas, the shaman arrogates to himself the same powers that belong to the gods. Our nearest equivalent is the word magician, but this falls far short of the idea conveyed by the Cherokee word. In the bible translation the word is used as the equivalent of angel or spirit.

Footnote 11: (return)

So written and pronounced by $A'y\hat{u}^{n'}$ ini instead of utsĭnă'wa.

Footnote 12: (<u>return</u>)

This word, like the expression "seven days," frequently has a figurative meaning. Thus the sun is said to be seven awâ'hilû above the earth.

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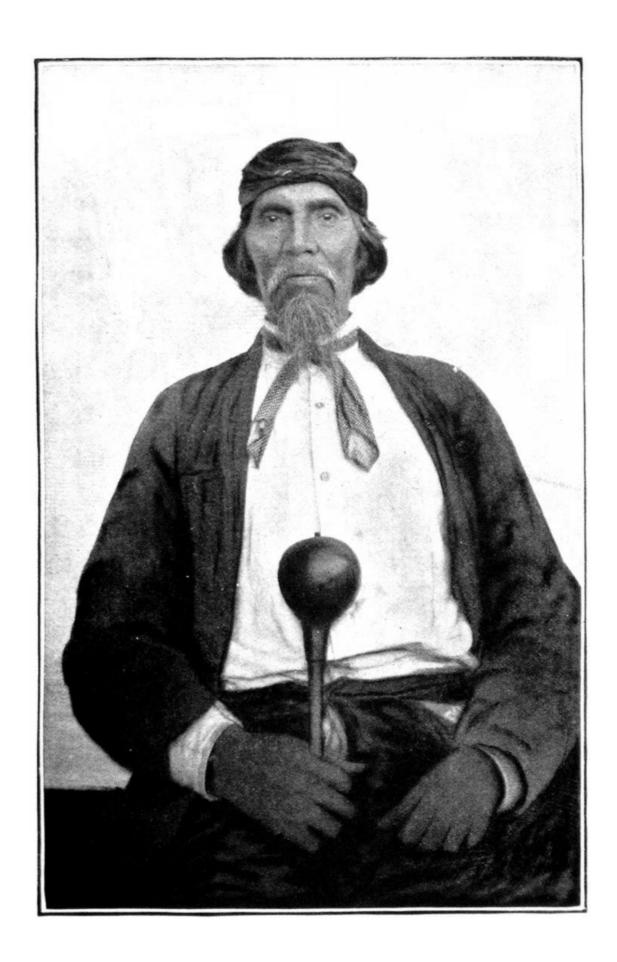
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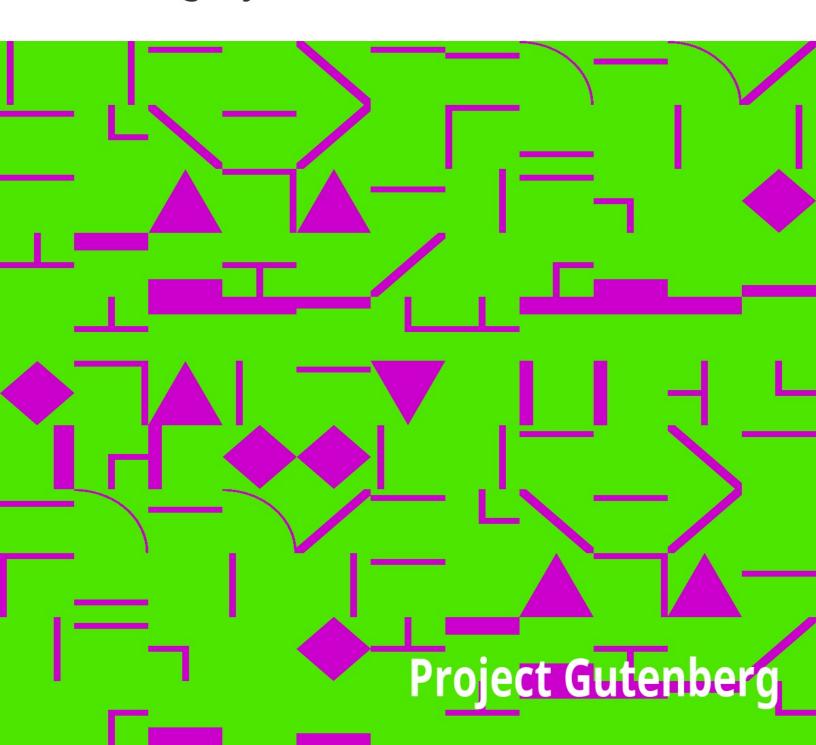
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The Medicine-Men of the Apache. (1892 N 09 / 1887-1888 (pages 443-604))

John Gregory Bourke



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Title: The Medicine-Men of the Apache. (1892 N 09 / 1887-1888 (pages 443-604))

Author: John G. Bourke

Release Date: April 29, 2013 [EBook #42616]

Language: English

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THE MEDICINE-MEN OF THE APACHE.

BY

JOHN G. BOURKE, Captain, Third Cavalry, U. S. Army.

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LETTER OF TRANSMITTAL.

Washington, D. C., February 27, 1891.

Sir: Herewith I have the honor to submit a paper upon the paraphernalia of the medicine-men of the Apache and other tribes.

Analogues have been pointed out, wherever possible, especially in the case of the hoddentin and the izze-kloth, which have never to my knowledge previously received treatment.

Accompanying the paper is a bibliography of the principal works cited.

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

JOHN G. BOURKE, Captain, Third Cavalry, U. S. Army.

Hon. J. W. Powell, *Director Bureau of Ethnology*.

THE MEDICINE-MEN OF THE APACHE.

By John G. Bourke.

CHAPTER I.

THE MEDICINE-MEN, THEIR MODES OF TREATING DISEASE, THEIR SUPERSTITIONS, PARAPHERNALIA, ETC.

The Caucasian population of the United States has been in intimate contact with the aborigines for a period of not less than two hundred and fifty years. In certain sections, as in Florida and New Mexico, this contact has been for a still greater period; but claiming no earlier date than the settlement of New England, it will be seen that the white race has been slow to learn or the red man has been skillful in withholding knowledge which, if imparted, would have lessened friction and done much to preserve and assimilate a race that, in spite of some serious defects of character, will for all time to come be looked upon as "the noble savage."

Recent deplorable occurrences in the country of the Dakotas have emphasized our ignorance and made clear to the minds of all thinking people that, notwithstanding the acceptance by the native tribes of many of the improvements in living introduced by civilization, the savage has remained a savage, and is still under the control of an influence antagonistic to the rapid absorption of new ideas and the adoption of new customs.

This influence is the "medicine-man."

Who, and what are the medicine-men (or medicine-women), of the American Indians? What powers do they possess in time of peace or war? How is this power obtained, how renewed, how exercised? What is the character of the remedies employed? Are they pharmaceutical, as we employ the term, or are they the superstitious efforts of

empirics and charlatans, seeking to deceive and to misguide by pretended consultations with spiritual powers and by reliance upon mysterious and occult influences?

Such a discussion will be attempted in this paper, which will be restricted to a description of the personality of the medicine-men, the regalia worn, and the powers possessed and claimed. To go farther, and enter into a treatment of the religious ideas, the superstitions, omens, and prayers of these spiritual leaders, would be to open a road without end.

As the subject of the paraphernalia of the medicine-men has never, to my knowledge, been comprehensively treated by any writer, I venture to submit what I have learned during the twenty-two years of my acquaintance with our savage tribes, and the studies and conclusions to which my observations have led. While treating in the main of the medicine-men of the Apache, I do not intend to omit any point of importance noted among other tribes or peoples.

First, in regard to the organization of the medicine-men of the Apache, it should be premised that most of my observations were made while the tribe was still actively engaged in hostilities with the whites, and they cannot be regarded as, and are not claimed to be, conclusive upon all points. The Apache are not so surely divided into medicine lodges or secret societies as is the case with the Ojibwa, as shown by Dr. W. J. Hoffman; the Siouan tribes, as related by Mr. J. Owen Dorsey; the Zuñi, according to Mr. F. H. Cushing; the Tusayan, as shown by myself, and other tribes described by other authorities.

The Navajo, who are the full brothers of the Apache, seem to have well defined divisions among their medicine-men, as demonstrated by Dr. Washington Matthews, U. S. Army; and I myself have seen great medicine lodges, which must have

contained at least a dozen Apache medicine-men, engaged in some of their incantations. I have also been taken to several of the sacred caves, in which solemn religious dances and other ceremonies were conducted under the same superintendence, but never have I witnessed among the Apache any rite of religious significance in which more than four or five, or at the most six, of the medicine-men took part.

The difficulty of making an accurate determination was increased by the nomadic character of the Apache, who would always prefer to live in small villages containing only a few brush shelters, and not needing the care of more than one or two of their "doctors." These people show an unusual secretiveness and taciturnity in all that relates to their inner selves, and, living as they do in a region filled with caves and secluded nooks, on cliffs, and in deep canyons, have not been compelled to celebrate their sacred offices in "estufas," or "plazas," open to the inspection of the profane, as has been the case with so many of the Pueblo tribes.

Diligent and persistent inquiry of medicine-men whose confidence I had succeeded in gaining, convinced me that any young man can become a "doctor" ("diyi" in the Apache language, which is translated "sabio" by the Mexican captives). It is necessary to convince his friends that he "has the gift," as one of my informants expressed it; that is, he must show that he is a dreamer of dreams, given to long fasts and vigils, able to interpret omens in a satisfactory manner, and do other things of that general nature to demonstrate the possession of an intense spirituality. Then he will begin to withdraw, at least temporarily, from the society of his fellows and devote himself to long absences, especially by night, in the "high places" which were interdicted to the Israelites. Such sacred fanes, perched in dangerous and hidden retreats, can be, or until lately could

be, found in many parts in our remote western territory. In my own experiences I have found them not only in the country of the Apache, but two-thirds of the way up the vertical face of the dizzy precipice of Tâaiyalana, close to Zuñi, where there is a shrine much resorted to by the young men who seek to divine the result of a contemplated enterprise by shooting arrows into a long cleft in the smooth surface of the sandstone; I have seen them in the Wolf Mountains, Montana; in the Big Horn range, Wyoming; on the lofty sides of Cloud Peak, and elsewhere. Maj. W.S. Stanton, Corps of Engineers, U. S. Army, ascended the Cloud Peak twice, and, reaching the summit on the second attempt, he found that beyond the position first attained and seeming then to be the limit of possible ascent, some wandering Indian had climbed and made his "medicine."

While it is regarded as a surer mode of learning how to be a medicine-man to seek the tuition of some one who has already gained power and influence as such, and pay him liberally in presents of all kinds for a course of instruction lasting a year or longer, I could learn of nothing to prohibit a man from assuming the rôle of a prophet or healer of the sick, if so disposed, beyond the dread of punishment for failure to cure or alleviate sickness or infirmity. Neither is there such a thing as settled dogma among these medicinemen. Each follows the dictates of his own inclinations. consulting such spirits and powers as are most amenable to his supplications and charms; but no two seem to rely upon identically the same influences. Even in the spirit dance, which is possibly the most solemn function in which the Apache medicine-men can engage, the head-dresses and kilts adhered closely enough to the one pattern, but the symbolism employed by each medicine-man was entirely different from that adopted by his neighbors.

Schultze, Perrin du Lac, Adair, and others allude to "houses of mercy," the "right of asylum" in certain lodges and buildings, or even whole villages, to which if the pursued of the tribe or even an enemy could obtain admission his life was secure. Frank Gruard and others who have lived for years among the Sioux, the Cheyenne, and other tribes of the plains have assured me that the same right of asylum obtains among them for the fugitive who takes shelter in the medicine lodge or the council lodge, and almost parallel notions prevail among the Apache. I have heard that the first American who came into one of their villages, tired and hungry, was not molested in the slightest degree.

It is stated by Kelly[1] that all warriors who go through the sun dance of the Sioux rank thereafter as medicine-men. This statement seems to me to be overdrawn. Nothing of the kind was learned by me at the sun dance of the Sioux which I noted in 1881, and in any event the remark would scarcely apply to the medicine-men of the Apache, who have nothing clearly identifiable with the sun dance, and who do not cut, gash, or in any manner mutilate themselves, as did the principal participants in the sun dance, or as was done in still earlier ages by the galli (the priests of Cybele) or the priests of Mexico.

Herodotus tells us that the priests of Egypt, or rather the doctors, who were at one time identified with them, were separated into classes; some cured the eyes, some the ears, others the head or the belly. Such a differentiation is to be observed among the Apache, Mohave, and other tribes; there are some doctors who enjoy great fame as the bringers of rain, some who claim special power over snakes, and some who profess to consult the spirits only, and do not treat the sick except when no other practitioner may be available. Among the Mohave, the relatives of a dead man will consult one of these spirit-doctors and get him to

interview the ghosts who respond to his call and learn from them whether the patient died from ignorance or neglect on the part of the doctor who had charge of the case. If the spirits assert that he did, then the culprit doctor must either flee for his life or throw the onus of the crime upon some witch. This differentiation is not carried so far that a medicine-man, no matter what his class, would decline a large fee.

The right of sanctuary was conceded to all criminals who sought shelter in the vanquech or temple of Chinigchinich.[2]

The castration of the galli, or priests of Cybele, is described by Dupuis.[3]

Diego Duran asserts that the Mexican priests "se endian por medio los miembros viriles y se hacian mil cosas para volverse impotentes por no ofender á sus Dioses."[4]

The hierophants at Athens drank of the hemlock to render themselves impotent, that when they came to the pontificate they might cease to be men.[5]

One class of the Peruvian priests, the Huachus, made auguries from grains of corn or the excrement of animals.[6]

Balboa tells us[6] that the Peruvian priesthood was divided into classes, each with its appropriate functions—the Guacos made the idols for the temples, or rather, they made the idols speak; the others were necromancers and spoke only with the dead; the Huecheoc divined by means of tobacco and coco; the Caviocac became drunk before they attempted to divine, and after them came the Rumatinguis and the Huachus already mentioned.

The Oregon tribes have spirit doctors and medicine doctors.
[7]

The Chinese historians relate that the shamans of the Huns possessed the power "to bring down snow, hail, rain, and wind."[8]

In all nations in the infancy of growth, social or mental, the power to coax from reluctant clouds the fructifying rain has been regarded with highest approval and will always be found confided to the most important hierophants or devolving upon some of the most prominent deities; almighty Jove was a deified rain-maker or cloud-compeller. Rain-makers flourished in Europe down to the time of Charlemagne, who prohibited these "tempestiarii" from plying their trade.

One of the first requests made of Vaca and his comrades by the people living in fixed habitations near the Rio Grande was "to tell the sky to rain," and also to pray for it.[9]

The prophet Samuel has been alluded to as a rain-maker.[10]

There does not seem to have been any inheritance of priestly functions among the Apache or any setting apart of a particular clan or family for the priestly duties.

Francis Parkman is quoted as describing a certain family among the Miami who were reserved for the sacred ritualistic cannibalism perpetrated by that tribe upon captives taken in war. Such families devoted more or less completely to sacred uses are to be noted among the Hebrews (in the line of Levi) and others; but they do not occur in the tribes of the Southwest.

One of the ceremonies connected with the initiation, as with every exercise of spiritual functions by the medicine-man, is the "ta-a-chi," or sweat-bath, in which, if he be physically able, the patient must participate. The Apache do not, to my knowledge, indulge in any poisonous intoxicants during their medicine ceremonies; but in this they differ to a perceptible degree from other tribes of America. The "black drink" of the Creeks and the "wisoccan" of the Virginians may be cited as cases in point; and the Walapai of Arizona, the near neighbors of the Apache, make use of the juice, or a decoction of the leaves, roots, and flowers of the Datura stramonium to induce frenzy and exhilaration. The laurel grows wild on all the mountain tops of Sonora and Arizona, and the Apache credit it with the power of setting men crazy, but they deny that they have ever made use of it in their medicine or religion. Picart[11] speaks of the drink (wisoccan) which took away the brains of the young men undergoing initiation as medicine-men among the tribes of Virginia, but he does not say what this "wisoccan" was.

In Guiana,[12] the candidate for the office of medicine-man must, among other ordeals, "drink fearfully large drafts of tobacco juice, mixed with water." The medicine-men of Guiana are called peaiman.

I have never seen tobacco juice drank by medicine-men or others, but I remember seeing Shunca-Luta (Sorrel Horse), a medicine-man of the Dakota, chewing and swallowing a piece of tobacco and then going into what seemed to be a trance, all the while emitting deep grunts or groans. When he revived he insisted that those sounds had been made by a spirit which he kept down in his stomach. He also pretended to extract the quid of tobacco from underneath his ribs, and was full of petty tricks of legerdemain and other means of mystifying women and children.

All medicine-men claim the power of swallowing spear heads or arrows and fire, and there are at times many really wonderful things done by them which have the effect of strengthening their hold upon the people. The medicine-men of the Ojibwa thrust arrows and similar instruments down their throats. They also allow themselves to be shot at with marked bullets.[13]

While I was among the Tusayan, in 1881, I learned of a young boy, quite a child, who was looked up to by the other Indians, and on special occasions made his appearance decked out in much native finery of beads and gewgaws, but the exact nature of his duties and supposed responsibilities could not be ascertained.

Diego Duran[14] thought that the priesthood among the Mexicans was to a great extent hereditary, much like the right of primogeniture among the people of Spain. Speaking of the five assistants who held down the human victim at the moment of sacrifice, he says:

Los nombres de los cinco eran Chachalmeca, que en nuestra Lengua quiere tanto decir como Levita ó ministro de cosa divina ó sagrada. Era esta dignidad entre ellos muy suprema y en mucha tenida, la cual se heredaba de hijos á padres como cosa de mayorazgo, sucediendo los hijos á los Padres en aquella sangrienta Dignidad endemoniada y cruel.

Concerning the medicine-men of Peru, Dorman[15] says:

The priestly office among the Peruvians appears to have been hereditary; some attained it by election; a man struck by lightning was considered as chosen by heaven; also those who became suddenly insane. Mr. Southey says that among the Moxos of Brazil, who worshiped the tiger, a man who was rescued from but marked by the claws of the animal, was set apart for the priesthood, and none other.

I shall have occasion to introduce a medicine-woman of the Apache, Tze-go-juni, or "Pretty-mouth," whose claims to preeminence among her people would seem to have had no better foundation than her escape from lightning stroke and from the bites of a mountain lion, which had seized her during the night and had not killed her.

I remember the case of an old Navajo medicine-man who was killed by lightning. The whole tribe participated in the singing, drumming, and dancing incident to so important an event, but no white men were allowed to be present. My information was derived from the dead man's young nephew, while I was among that tribe.

Among the Arawak of South America there are hereditary conjurers who profess to find out the enemy who by the agency of an evil spirit has killed the deceased.[16]

Picart says of the medicine-men of the tribes along Rio de la Plata: "Pour être Prêtre ou Médecin parmi eux, il faut avoir jeûné longtems & souvent. Il faut avoir combatu plusieurs fois contre les bêtes Sauvages, principalement contre les Tigres, & tout au moins en avoir été mordu ou égratigné. Après cela on peut obtenir l'Ordre, de Prêtrise; car le Tigre est chez eux un animal presque divin."[17]

The medicine-men of the Apache are not confined to one gens or clan, as among the Shawnee and Cherokee, according to Brinton,[18] neither do they believe, as the Cherokee do, according to the same authority, that the seventh son is a natural-born prophet with the gift of healing by touch, but upon this latter point I must be discreet, as I have never known an Apache seventh son.

The Cherokee still preserve the custom of consecrating a family of their tribe to the priesthood, as the family of Levi was consecrated among the Jews.[19]

The neophytes of the isthmus of Darien were boys from ten to twelve years "selected for the natural inclination or the peculiar aptitude and intelligence which they displayed for the service."[20]

Peter Martyr says of the Chiribchis of South America: "Out of the multitude of children they chuse some of 10 or 12 yeeres old, whom they know by conjecture to be naturally inclined to that service."[21]

The peculiarity of the Moxos was that they thought none designated for the office of medicine-man but such as had escaped from the claws of the South American tiger which, indeed, it is said they worshiped as a god.[22]

Contrary to what Spencer says, the chiefs of the tribes of the Southwest, at least, are not ipso facto medicine-men; but among the Tonto Apache the brother of the head chief, Cha-ut-lip-un, was the great medicine-man, and generally the medicine-men are related closely to the prominent chiefs, which would seem to imply either a formal deputation of priestly functions from the chiefs to relatives, or what may be practically the same thing, the exercise of family influence to bring about a recognition of the necromantic powers of some aspirant; but among the Apache there is no priest caste; the same man may be priest, warrior, etc.[23]

"The juice of the Datura seed is employed by the Portuguese women of Goa: they mix it, says Linschott, in the liquor drank by their husbands, who fall, for twenty-four hours at least, into a stupor accompanied by continued laughing; but so deep is the sleep that nothing passing before them affects them; and when they recover their senses, they have no recollection of what has taken place."[24]

"The Darien Indians used the seeds of the *Datura sanguinea* to bring on in children prophetic delirium, in which they revealed hidden treasure. In Peru the priests who talked with the 'huaca' or fetishes used to throw themselves into an ecstatic condition by a narcotic drink called 'tonca,' made from the same plant."[25]

The medicine-men of the Walapai, according to Charlie Spencer, who married one of their women and lived among them for years, were in the habit of casting bullets in molds which contained a small piece of paper. They would allow these bullets to be fired at them, and of course the missile would split in two parts and do no injury. Again, they would roll a ball of sinew and attach one end to a small twig, which was inserted between the teeth. They would then swallow the ball of sinew, excepting the end thus attached to the teeth, and after the heat and moisture of the stomach had softened and expanded the sinew they would begin to draw it out yard after yard, saying to the frightened squaws that they had no need of intestines and were going to pull them all out. Others among the Apache have claimed the power to shoot off guns without touching the triggers or going near the weapons; to be able to kill or otherwise harm their enemies at a distance of 100 miles. In nearly every boast made there is some sort of a saving clause, to the effect that no witchcraft must be made or the spell will not work, no women should be near in a delicate state from any cause, etc.

Mickey Free has assured me that he has seen an Apache medicine-man light a pipe without doing anything but hold his hands up toward the sun. This story is credible enough if we could aver that the medicine-man was supplied, as I suspect he was, with a burning glass.

That the medicine-man has the faculty of transforming himself into a coyote and other animals at pleasure and

then resuming the human form is as implicitly believed in by the American Indians as it was by our own forefathers in Europe. This former prevalence of lycanthropy all over Europe can be indicated in no more forcible manner than by stating that until the reign of Louis XIV, in France, the fact of being a were-wolf was a crime upon which one could be arraigned before a court; but with the discontinuance of the crime the were-wolves themselves seem to have retired from business.[26] In Abyssinia, at the present day, blacksmiths are considered to be were-wolves, according to Winstanley. The Apache look upon blacksmiths as being allied to the spirits and call them "pesh-chidin"—the witch, spirit, or ghost, of the iron. The priestly powers conceded to the blacksmith of Gretna Green need no allusion here.

According to Sir Walter Scott,[27] trials for lycanthropy were abolished in France by an edict of Louis XIV.

Parkman[28] describes, from the Relations of Pére Le Jeune, how the Algonkin medicine-man announced that he was going to kill a rival medicine-man who lived at Gaspé, 100 leagues distant.

The Abipones of Paraguay, according to Father Dobrizhoffer, "credit their medicine-men with power to inflict disease and death, to cure all disorders, to make known distant and future events; to cause rain, hail, and tempest; to call up the shades of the dead and consult them concerning hidden matters; to put on the form of a tiger; to handle every kind of serpent without danger, etc.; which powers they imagine are not obtained by art, but imparted to certain persons by their grandfather, the devil."

The medicine-men of Honduras claimed the power of turning themselves into lions and tigers and of wandering in the mountains.[29]

"Grandes Hechiceros i Bruxos, porque se hacian Perros, Puercos i Ximios."[30]

Gomara also calls attention to the fact that the medicinemen, "hechiceros" and "brujos," as he calls them, of the Nicaraguans, possessed the power of lycanthropy; "segun ellos mismos decian, se hacen perros, puercos y gimias."[31]

Great as are the powers claimed by the medicine-men, it is admitted that baleful influences may be at work to counteract and nullify them. As has already been shown, among these are the efforts of witches, the presence of women who are sometimes supposed to be so "antimedicinal," if such a term may be applied, that the mere stepping over a warrior's gun will destroy its value.

There may be other medicine-men at work with countercharms, and there may be certain neglects on the part of the person applying for aid which will invalidate all that the medicine-man can do for him. For example, while the "hoop-me-koff" was raging among the Mohave the fathers of families afflicted with it were forbidden to touch coffee or salt, and were directed to bathe themselves in the current of the Colorado. But the whooping cough ran its course in spite of all that the medicine-men could do to check its progress. When the Walapai were about to engage in a great hunt continence was enjoined upon the warriors for a certain period.

Besides all these accidental impairments of the vigor of the medicine-men, there seems to be a gradual decadence of their abilities which can be rejuvenated only by rubbing the back against a sacred stone projecting from the ground in the country of the Walapai, not many miles from the present town of Kingman, on the Atlantic and Pacific Railroad. Another stone of the same kind was formerly used for the same purpose by the medicine-men of the pueblos of

Laguna and Acoma, as I have been informed by them. I am unable to state whether or not such recuperative properties were ever ascribed to the medicine stone at the Sioux agency near Standing Rock, S. Dak., or to the great stone around which the medicine-men of Tusayan marched in solemn procession in their snake dance, but I can say that in the face of the latter, each time that I saw it (at different dates between 1874 and 1881), there was a niche which was filled with votive offerings.

Regnard, a traveler in Lapland, makes the statement that when the shamans of that country began to lose their teeth they retired from practice. There is nothing of this kind to be noted among the Apache or other tribes of North America with which I am in any degree familiar. On the contrary, some of the most influential of those whom I have known have been old and decrepit men, with thin, gray hair and teeth gone or loose in their heads. In a description given by Corbusier of a great "medicine" ceremony of the Apache-Yuma at Camp Verde, it is stated that the principal officer was a "toothless, gray-haired man."[32]

Among many savage or barbarous peoples of the world albinos have been reserved for the priestly office. There are many well marked examples of albinism among the Pueblos of New Mexico and Arizona, especially among the Zuñi and Tusayan; but in no case did I learn that the individuals thus distinguished were accredited with power not ascribable to them under ordinary circumstances. Among the Cheyenne I saw one family, all of whose members had the crown lock white. They were not medicine-men, neither were any of the members of the single albino family among the Navajo in 1881.

It is a well known fact that among the Romans epilepsy was looked upon as a disease sent direct from the gods, and that it was designated the "sacred disease"—morbus sacer.

Mahomet is believed to have been an epileptic. The nations of the East regard epileptics and the insane as inspired from on high.

Our native tribes do not exactly believe that the mildly insane are gifted with medical or spiritual powers; but they regard them with a feeling of superstitious awe, akin to reverence. I have personally known several cases of this kind, though not within late years, and am not able to say whether or not the education of the younger generation in our schools has as yet exercised an influence in eradicating this sentiment.

Strange to say, I was unable to find any observance of lucky or unlucky days among the Apache. The Romans in the period of their greatest enlightenment had their days, both "fasti" and "nefasti." Neither was I able to determine the selection of auspicious days for marriage; indeed, it was stated that the medicine-men had nothing to do with marriage. Among the Zapotecs the wedding day was fixed by the priests.[33] In this the Apache again stands above the Roman who would not marry in the month dedicated to the goddess Maia (May), because human sacrifice used to be offered in that month. This superstition survived in Europe until a comparatively recent period. According to Picart the Hebrew rabbis designated the days upon which weddings should take place.

Herbert Spencer[34] says that the medicine-men of the Arawaks claimed the "jus primæ noctis." There is no such privilege claimed or conceded among the North American tribes, to my knowledge, and the Arawaks would seem to be alone among the natives of the whole continent in this respect.

In the town of Cumaná, in Amaracapanna, apparently close to Carthagena, in the present republic of Colombia, South America, the medicine-men, according to Girolamo Benzoni, exercised the "jus primæ noctis."[35]

To recover stolen or lost property, especially ponies, is one of the principal tasks imposed upon the medicine-men. They rely greatly upon the aid of pieces of crystal in effecting this. I made a friend of an Apache medicine-man by presenting him with a large crystal of denticulated spar, much larger than the one of whose mystical properties he had just been boasting to me. I can not say how this property of the crystal is manifested. Na-a-cha, the medicine-man alluded to, could give no explanation, except that by looking into it he could see everything he wanted to see.

The name of an American Indian is a sacred thing, not to be divulged by the owner himself without due consideration. One may ask a warrior of any tribe to give his name and the question will be met with either a point-blank refusal or the more diplomatic evasion that he can not understand what is wanted of him. The moment a friend approaches, the warrior first interrogated will whisper what is wanted, and the friend can tell the name, receiving a reciprocation of the courtesy from the other. The giving of names to children is a solemn matter, and one in which the medicine-men should always be consulted. Among the Plains tribes the children were formerly named at the moment of piercing their ears, which should occur at the first sun dance after their birth, or rather as near their first year as possible. The wailing of the children at the sun dance as their ears were slit will always be to me a most distressing memory.

The warriors of the Plains tribes used to assume agnomens or battle names, and I have known some of them who had enjoyed as many as four or five; but the Apache name once conferred seems to remain through life, except in the case of the medicine-men, who, I have always suspected, change their names upon assuming their profession, much as a professor of learning in China is said to do.

The names of mothers-in-law are never mentioned and it would be highly improper to ask for them by name; neither are the names of the dead, at least not for a long period of time. But it often happens that the child will bear the name of its grandfather or some other relative who was a distinguished warrior.

All charms, idols, talismans, medicine hats, and other sacred regalia should be made, or at least blessed, by the medicine-men. They assume charge of all ceremonial feasts and dances—such as the nubile dance, which occurs when any maiden attains marriageable age, and war dances preceding battle. Nearly all preparations for the warpath are under their control, and when on the trail of the enemy their power is almost supreme. Not a night passes but that the medicine-men get into the "ta-a-chi," or sweat bath, if such a thing be possible, and there remain for some minutes, singing and making "medicine" for the good of the party. After dark they sit around the fire and sing and talk with the spirits and predict the results of the campaign. I have alluded quite fully to these points in a previous work.

When a man is taken sick the medicine-men are in the zenith of their glory. One or two will assume charge of the case, and the clansmen and friends of the patient are called upon to supply the fire and help out in the chorus. On such occasions the Apache use no music except a drum or a rawhide. The drum is nearly always improvised from an iron camp kettle, partially filled with water and covered with a piece of cloth, well soaped and drawn as tight as possible. The drumstick does not terminate in a ball, as with us, but is curved into a circle, and the stroke is not perpendicular to the surface, but is often given from one side to the other. The American Indian's theory of disease is the theory of the

Chaldean, the Assyrian, the Hebrew, the Greek, the Roman —all bodily disorders and ailments are attributed to the maleficence of spirits who must be expelled or placated. Where there is only one person sick, the exercises consist of singing and drumming exclusively, but dancing is added in all cases when an epidemic is raging in the tribe. The medicine-men lead off in the singing, to which the assistants reply with a refrain which at times has appeared to me to be antiphonal. Then the chorus is swelled by the voices of the women and larger children and rises and falls with monotonous cadence. Prayers are recited, several of which have been repeated to me and transcribed; but very frequently the words are ejaculatory and confined to such expressions as "ugashe" (go away), and again there is to be noted the same mumbling of incoherent phrases which has been the stock in trade of medicine-men in all ages and places. This use of gibberish was admitted by the medicinemen, who claimed that the words employed and known only to themselves (each individual seemed to have his own vocabulary) were mysteriously effective in dispelling sickness of any kind. Gibberish was believed to be more potential in magic than was language which the practitioner or his dupes could comprehend. In Saxon Leechdoms, compiled by Cockayne, will be seen a text of gibberish to be recited by those wishing to stanch the flow of blood. (See p. 464.)

In the following citations it will be observed that Adair and Catlin were grievously in error in their respective statements. Adair denies that Indians on the warpath or elsewhere depend upon their "augurs" for instruction and guidance.[36] Gomara is authority for the statement that the natives of Hispaniola never made war without consulting their medicine-men—"no sin respuesta de los ídolos ó sin la de los sacerdotes, que adevinan."[37]

The medicine-men of Chicora (our present South Carolina) sprinkled the warriors with the juice of a certain herb as they were about to engage in battle.[38]

In Chicora "Mascaban los Sacerdotes una Ierva, i con el çumo de ella rociaban los Soldados, quando querian dar batalla, que era bendecirlos."[39]

"Among the Abipones [of Paraguay] the medicine-man teaches them the place, time, and manner proper for attacking wild beasts or the enemy."[40]

"The North American Indians are nowhere idolaters."[41]

Idols were always carried to war by the natives of Hispaniola: "Atanse á la frente ídolos chiquitos cuando quieren pelear."[42]

"Among the primitive Germans * * * the maintenance of discipline in the field as in the council was left in great measure to the priests; they took the auguries and gave the signal for onset."[43]

"In New Caledonia * * * the priests go to battle, but sit in the distance, *fasting* and praying for victory."[44]

Our hunting songs and war songs may be a survival of the incantations of Celtic or Teutonic medicine-men.

The adoption or retention of obsolete phraseology as a hieratic language which has been noted among many nations of the highest comparative development is a manifestation of the same mental process.

Gibberish was so invariable an accompaniment of the sacred antics of the medicine-men of Mexico that Fray Diego Duran warns his readers that if they see any Indian dancing and singing, "ó diciendo algunas palabras que no son

inteligibles, pues es de saber que aquellos representaban Dioses."[45]

Henry Youle Hind says:

The Dakotahs have a common and a sacred language. The conjurer, the war prophet, and the dreamer employ a language in which words are borrowed from other Indian tongues and dialects; they make much use of descriptive expressions, and use words apart from the ordinary signification. The Ojibways abbreviate their sentences and employ many elliptical forms of expression, so much so that half-breeds, quite familiar with the colloquial language, fail to comprehend a medicine-man when in the full flow of excited oratory.[46]

"Blood may be stanched by the words sicycuma, cucuma, ucuma, cuma, uma, ma, a."[47] There are numbers of these gibberish formulæ given, but one is sufficient.

"The third part of the magic[48] of the Chaldeans belonged entirely to that description of charlatanism which consists in the use of gestures, postures, and mysterious speeches, as byplay, and which formed an accompaniment to the proceedings of the thaumaturgist well calculated to mislead."[49]

Sahagun[50] calls attention to the fact that the Aztec hymns were in language known only to the initiated.

It must be conceded that the monotonous intonation of the medicine-men is not without good results, especially in such ailments as can be benefited by the sleep which such singing induces. On the same principle that petulant babies are lulled to slumber by the crooning of their nurses, the sick will frequently be composed to a sound and beneficial slumber, from which they awake refreshed and ameliorated.

I can recall, among many other cases, those of Chaundezi ("Long Ear," or "Mule") and Chemihuevi-Sal, both chiefs of the Apache, who recovered under the treatment of their own medicine-men after our surgeons had abandoned the case. This recovery could be attributed only to the sedative effects of the chanting.

Music of a gentle, monotonous kind has been prescribed in the medical treatment of Romans, Greeks, and even of comparatively modern Europeans. John Mason Goode, in his translation of Lucretius' De Natura Rerum, mentions among others Galen, Theophrastus, and Aulus Gellius. An anonymous writer in the Press of Philadelphia, Pa., under date of December 23, 1888, takes the ground that its use should be resumed.

The noise made by medicine-men around the couch of the sick is no better, no worse, than the clangor of bells in Europe. Bells, we are told, were rung on every possible occasion. Brand is full of quaint information on this head. According to him they were rung in Spain when women were in labor,[51] at weddings,[52] to dispel thunder, drive away bad spirits, and frustrate the deviltry of witches;[53] throughout Europe on the arrival of emperors, kings, the higher nobility, bishops, etc.,[54] to ease pain of the dead,[55] were solemnly baptized, receiving names,[56] and became the objects of superstition, various powers being ascribed to them.[57]

Adair, who was gifted with an excellent imagination, alludes to the possession of an "ark" by the medicine-men of the Creeks and other tribes of the Mississippi country, among whom he lived for so many years as a trader. The Apache have no such things; but I did see a sacred bundle or package, which I was allowed to feel, but not to open, and which I learned contained some of the lightning-riven twigs upon which they place such dependence. This was carried

by a young medicine-man, scarcely out of his teens, during Gen. Crook's expedition into the Sierra Madre, Mexico, in 1883, in pursuit of the hostile Chiricahua Apache. Maj. Frank North also told me that the Pawnee had a sacred package which contained, among other objects of veneration, the skin of an albino buffalo calf.

There are allusions by several authorities to the necessity of confession by the patient before the efforts of the medicinemen can prove efficacious.[58]

This confession, granting that it really existed, could well be compared to the warpath secret, which imposed upon all the warriors engaged the duty of making a clean breast of all delinquencies and secured them immunity from punishment for the same, even if they had been offenses against some of the other warriors present.

The Sioux and others had a custom of "striking the post" in their dances, especially the sun dance, and there was then an obligation upon the striker to tell the truth. I was told that the medicine-men were wont to strike with a club the stalagmites in the sacred caves of the Apache, but what else they did I was not able to ascertain.

Under the title of "hoddentin" will be found the statement made by one of the Apache as to the means employed to secure the presence of a medicine-man at the bedside of the sick. I give it for what it is worth, merely stating that Kohl, in his Kitchi-Gami, if I remember correctly, refers to something of the same kind where the medicine-man is represented as being obliged to respond to every summons made unless he can catch the messenger within a given distance and kick him.

There is very little discrepancy of statement as to what would happen to a medicine-man in case of failure to cure;

but many conflicting stories have been in circulation as to the number of patients he would be allowed to kill before incurring risk of punishment. My own conclusions are that there is no truth whatever in the numbers alleged, either three or seven, but that a medicine-man would be in danger, under certain circumstances, if he let only one patient die on his hands. These circumstances would be the verdict of the spirit doctors that he was culpably negligent or ignorant. He could evade death at the hands of the patient's kinsfolk only by flight or by demonstrating that a witch had been at the bottom of the mischief. [59]

Medicine-men, called "wizards" by Falkner, sometimes were killed by the Patagonians, when unsuccessful in their treatment, and were also obliged to wear women's clothing. They were selected in youth for supposed qualifications, especially if epileptic.[60]

In Hispaniola we are told that when a man died his friends resorted to necromancy to learn whether he had died through the neglect of the attending medicine-man to observe the prescribed fasts. If they found the medicineman guilty, they killed him and broke all his bones. In spite of this the medicine-man often returned to life and had to be killed again, and mutilated by castration and otherwise.[61]

Herrera repeats the story about a patient who died and whose relatives felt dissatisfied with the medicine-man:

Para saber si la muerte fue por su culpa, tomaban el çumo de cierta lerva, i cortaban las vñas del muerto, i los cabellos de encima de la frente, i los hacian polvos, i mezclados con el çumo, se lo daban à beber al muerto por la boca, i las narices, i luego le preguntaban muchas veces, si el Medico guardò dieta, hasta que hablando el demonio, respondia tan claro, como si fuera vivo, i decia, que el Medico no hiço dieta, i luego le bolvian à la sepultura.

Then the relatives attacked the medicine-man: "I le daban tantos palos, que le quebraban los braços, i las piernas, i à otros sacaban los ojos, i los cortaban sus miembros genitales."[62]

Alexander the Great expressed his sorrow at the death of his friend Hephæstion by crucifying the poor physicians who had attended the deceased.[63]

The medicine-men of the Natchez were put to death when they failed to cure.[64]

The Apache attach as much importance to the necessity of "laying the manes" of their dead as the Romans did. They have not localized the site of the future world as the Mohave have, but believe that the dead remain for a few days or nights in the neighborhood of the place where they departed from this life, and that they try to communicate with their living friends through the voice of the owl. If a relative hears this sound by night, or, as often happens, he imagines that he has seen the ghost itself, he hurries to the nearest medicine-man, relates his story, and carries out to the smallest detail the prescription of feast, singing, dancing, and other means of keeping the spirit in good humor on the journey which it will now undertake to the "house of spirits," the "chidin-bi-kungua." Nearly all medicine-men claim the power of going there at will, and not a few who are not medicine-men claim the same faculty.

The medicine-men of the Apache are paid by each patient or by his friends at the time they are consulted. There is no such thing as a maintenance fund, no system of tithes, nor any other burden for their support, although I can recall having seen while among the Zuñi one of the medicine-men who was making cane holders for the tobacco to be smoked at a coming festival, and whose fields were attended and his herds guarded by the other members of the tribe.

Among the Eskimo "the priest receives fees beforehand."[65]

"Tous ces sorciers ne réfusaient leurs secours à personne, pourvu qu'on les payait."[66]

"Among other customs was that of those who came to be cured, giving their bow and arrows, shoes, and beads to the Indians who accompanied Vaca and his companions."[67] (But we must remember that Vaca and his comrades traveled across the continent as medicine-men.)

"Las sementeras que hacen los Assenais son tambien de comunidad y comienzan la primera en la casa de su Chemisi que es su sacerdote principal y el que cuida de la Casa del Fuego."[68] The Asinai extended as far east as the present city of Natchitoches (Nacogdoches).

Spencer quotes Bernan and Hilhouse to the effect that the poor among the Arawaks of South America (Guiana) have no names because they can not pay the medicine-men.[69]

As a general rule, the medicine-men do not attend to their own families, neither do they assist in cases of childbirth unless specially needed. To both these rules there are exceptions innumerable. While I was at San Carlos Agency, Surgeon Davis was sent for to help in a case of uterine inertia, and I myself have been asked in the pueblo of Nambé, New Mexico, to give advice in a case of puerperal fever.

The medicine-men are accused of administering poisons to their enemies. Among the Navajo I was told that they would put finely pounded glass in food.

MEDICINE-WOMEN.



Fig. 429.—Medicine arrow used by Apache and Pueblo women.

There are medicine-women as well as medicine-men among the Apache, with two of whom I was personally acquainted. One named "Captain Jack" was well advanced in years and physically guite feeble, but bright in intellect and said to be well versed in the lore of her people. She was fond of instructing her grandchildren, whom she supported, in the prayers and invocations to the gods worshiped by her fathers, and I have several times listened carefully and unobserved to these recitations and determined that the prayers were the same as those which had already been given to myself as those of the tribe. The other was named Tze-go-juni, a Chiricahua, and a woman with a most romantic history. She had passed five years in captivity among the Mexicans in Sonora and had learned to speak Spanish with facility. A mountain lion had severely mangled her in the shoulder and knee, and once she had been struck by lightning; so that whether by reason of superior attainments or by an appeal to the superstitious reverence of her comrades, she wielded considerable influence. These medicine-women devote their attention principally to obstetrics, and have many peculiar stories to relate

concerning pre-natal influences and matters of that sort. Tze-go-juni wore at her neck the stone amulet, shaped like a spear, which is figured in the illustrations of this paper. The material was the silex from the top of a mountain, taken from a ledge at the foot of a tree which had been struck by lightning. The fact that siliceous rock will emit sparks when struck by another hard body appeals to the reasoning powers of the savage as a proof that the fire must have been originally deposited therein by the bolt of lightning. A tiny piece of this arrow or lance was broken off and ground into the finest powder, and then administered in water to women during time of gestation. I have found the same kind of arrows in use among the women of Laguna and other pueblos. This matter will receive more extended treatment in my coming monograph on "Stone Worship."

Mendieta is authority for the statement that the Mexicans had both medicine-men and medicine-women. The former attended to the sick men and the latter to the sick women. "Á las mujeres siempre las curaban otras mujeres, y á los hombres otros hombres."[70] Some of the medicine-women seem to have made an illicit use of the knowledge they had acquired, in which case both the medicine-woman and the woman concerned were put to death. "La mujer preñada que tomaba con que abortar y echar la criatura, ella y la física que le habia dado con que la lanzase, ambas morian." [71]

Gomara asserts that they were to be found among the Indians of Chicora (South Carolina).[72] He calls them "viejas" (old women).

"Los Medicos eran Mugeres viejas, i no havia otras."[73] In Nicaragua, "Las Viejas curaban los Enfermos."[74]

There were medicine-women in Goazacoalco: "Tienen Medicos para curar las enfermedades, i los mas eran

Mugeres, grandes Herbolarias, que hacian todas las curas con lervas."[75]

Bernal Diaz, in 1568, speaks of having, on a certain occasion, at the summit of a high mountain, found "an Indian woman, very fat, and having with her a dog of that species, which they breed in order to eat, and which do not bark. This Indian was a witch; she was in the act of sacrificing the dog, which is a signal of hostility."[76]

"The office of medicine-man though generally usurped by males does not appertain to them exclusively, and at the time of our visit the one most extensively known was a black (or meztizo) woman, who had acquired the most unbounded influence by shrewdness, joined to a hideous personal appearance, and a certain mystery with which she was invested."[77] Creeks have medicine-women as well as medicine-men. The Eskimo have medicine-men and medicine-women.[78] The medicine-men and women of the Dakota "can cause ghosts to appear on occasion."[79]

Speaking of the Chippewa, Spencer says: "Women may practice soothsaying, but the higher religious functions are performed only by men."[80]

The medicine-men of the Apache do not assume to live upon food different from that used by the laity. There are such things as sacred feasts among the tribes of North America—as, for example, the feast of stewed puppy at the sun dance of the Sioux—but in these all people share.

In the mortuary ceremonies of the medicine-men there is a difference of degree, but not of kind. The Mohave, however, believe that the medicine-men go to a heaven of their own. They also believe vaguely in four different lives after this one.

Cabeza de Vaca says that the Floridians buried their ordinary dead, but burned their medicine-men, whose incinerated bones they preserved and drank in water.[81] "After they [the medicine-men and women of the Dakota] have four times run their career in human shape they are annihilated."[82] Schultze says that the medicine-men of the Sioux and the medicine-women also, after death "may be transformed into wild beasts."[82]

Surgeon Smart shows that among other offices entrusted to the medicine-men of the Apache was the reception of distinguished strangers.[83] Long asserts that the medicinemen of the Otoe, Omaha, and others along the Missouri pretended to be able to converse with the fetus in utero and predict the sex.[84] Nothing of that kind has ever come under my notice. Adair says that the medicine-men of the Cherokee would not allow snakes to be killed.[85] The Apache will not let snakes be killed within the limits of the camp by one of their own people, but they will not only allow a stranger to kill them, but request him to do so. They made this request of me on three occasions.

Several of the most influential medicine-men whom I have known were blind, among others old Na-ta-do-tash, whose medicine hat figures in these pages. Whether this blindness was the result of old age or due to the frenzy of dancing until exhausted in all seasons I am unable to conjecture. Schultze says of the shamans of Siberia: "This artificial frenzy has such a serious effect upon the body, and more particularly the eyes, that many of the shamans become blind; a circumstance which enhances the esteem in which they are held."[86] Some of the medicine-men of Peru went blind from overexertion in their dances, although Gomara assigns as a reason that it was from fear of the demon with whom they talked. "Y aun algunos se quiebran los ojos para semejante hablar [i.e., talk with the devil]; y creo que lo

hacian de miedo, porque todos ellos se atapan los ojos cuando hablan con el."[87]

Dunbar tells us that the medicine-men of the Pawnee swallowed arrows and knives, and had also the trick of apparently killing a man and bringing him back to life. The same power was claimed by the medicine-men of the Zuñi, and the story told me by old Pedro Pino of the young men whom they used to kill and restore to life, will be found in "The Snake Dance of the Moquis."

REMEDIES AND MODES OF TREATMENT.

The materia medica of the Apache is at best limited and comprehends scarcely anything more than roots, leaves, and other vegetable matter. In gathering these remedies they resort to no superstitious ceremonies that I have been able to detect, although I have not often seen them collecting. They prefer incantation to pharmacy at all times, although the squaws of the Walapai living near old Camp Beale Springs in 1873, were extremely fond of castor oil, for which they would beg each day.

The main reliance for nearly all disorders is the sweat bath, which is generally conducive of sound repose. All Indians know the benefit to be derived from relieving an overloaded stomach, and resort to the titillation of the fauces with a feather to induce nausea. I have seen the Zuñi take great drafts of lukewarm water and then practice the above as a remedy in dyspepsia.

When a pain has become localized and deep seated, the medicine-men resort to suction of the part affected, and raise blisters in that way. I was once asked by the Walapai chief, Sequanya, to look at his back and sides. He was covered with cicatrices due to such treatment, the

medicine-men thinking thus to alleviate the progressive paralysis from which he had been long a sufferer, and from which he shortly afterwards died. After a long march, I have seen Indians of different bands expose the small of the back uncovered to the fierce heat of a pile of embers to produce a rubefacient effect and stimulate what is known as a weak back. They drink freely of hot teas or infusions of herbs and grasses for the cure of chills. They are all dextrous in the manufacture of splints out of willow twigs, and seem to meet with much success in their treatment of gunshot wounds, which they do not dress as often as white practitioners, alleging that the latter, by so frequently removing the bandages, unduly irritate the wounds. I have known them to apply moxa, and I remember to have seen two deep scars upon the left hand of the great Apache chief Cochise, due to this cause.

It should not be forgotten that the world owes a large debt to the medicine-men of America, who first discovered the virtues of coca, sarsaparilla, jalap, cinchona, and guiacum. They understand the administration of enemata, and have an apparatus made of the paunch of a sheep and the hollow leg bone.

Scarification is quite common, and is used for a singular purpose. The Apache scouts when tired were in the habit of sitting down and lashing their legs with bunches of nettles until the blood flowed. This, according to their belief, relieved the exhaustion.

The medicine-men of the Floridians, according to Vaca, sucked and blew on the patient, and put hot stones on his abdomen to take away pain; they also scarified, and they seemed to have used moxas. "Ils cautérisent aussi avec le feu."[88]

The medicine-men of Hispaniola cured by suction, and when they had extracted a stone or other alleged cause of sickness it was preserved as a sacred relic, especially by the women, who looked upon it as of great aid in parturition.[89] Venegas speaks of a tube called the "chacuaco," formed out of a very hard black stone, used by the medicine-men of California in sucking such parts of the patient's body as were grievously afflicted with pains. In these tubes they sometimes placed lighted tobacco and blew down upon the part affected after the manner of a moxa, I suppose.[90]

The men of Panuco were so addicted to drunkenness that we are told: "Lorsqu'ils sont fatigués de boire leur vin par la bouche, ils se couchent, élèvent les jambes en l'air, et s'en font introduire dans le fondement au moyen d'une canule, taut que le corps peut en contenir."[91] The administration of wine in this manner may have been as a medicine, and the Aztecs of Panuco may have known that nutriment could be assimilated in this way. It shows at least that the Aztecs were acquainted with enemata.

"Quando la enfermedad les parecia que tenia necesidad de evacuacion, usaban del aiuda ò clister [clyster], con cocimientos de Iervas, i polvos, en Agua, i tomandola en la boca, con yn canuto de hueso de pierna de Garça, la hechaban, i obraba copiosamente: i en esto pudo esta Gente ser industriada de la Cigueña, que con su largo pico se cura, como escriven los Naturales."[92] Smith says that the medicine-men of the Araucanians "are well acquainted with the proper use of emetics, cathartics, and sudorifics. For the purpose of injection they make use of a bladder, as is still commonly practiced among the Chilenos."[93] Oviedo says of the medicine-men: "Conoçian muchas hiervas de que usaban y eran apropiadas á diversas enfermedades."[94] One of the most curious remedies presented in Bancroft's first volume is the use of a poultice of mashed poison-ivy

leaves as a remedy for ringworm by the Indians of Lower California.

The Indians of Topia (in the Sierra Madre, near Sinaloa), were in the habit of scarifying their tired legs and aching temples.[95] The Arawaks, of Guiana, also scarified, according to Spencer.[96] The inhabitants of Kamchatka use enemata much in the same way as the Navajo and Apache do.[97] They also use moxa made of a fungus.[98]

It has never been my good fortune to notice an example of trephining among our savage tribes, although I have seen a good many wounded, some of them in the head. Trephining has been practiced by the aborigines of America, and the whole subject as noted among the primitive peoples of all parts of the globe has been treated in a monograph by Dr. Robert Fletcher, U. S. Army.[99]

Dr. Fordyce Grinnell, who was for some years attached to the Wichita Agency as resident physician, has published the results of his observations in a monograph, entitled "The healing art as practiced by the Indians of the Plains," in which he says: "Wet cupping is resorted to quite frequently. The surface is scarified by a sharp stone or knife, and a buffalo horn is used as the cupping glass. Cauterizing with red-hot irons is not infrequently employed." A cautery of "burning pith" was used by the Araucanians.[100]

"It may be safely affirmed that a majority of the nation [Choctaw] prefer to receive the attentions of a white physician when one can be obtained. * * * When the doctor is called to his patient he commences operations by excluding all white men and all who disbelieve in the efficacy of his incantations."[101] "The [Apache] scouts seem to prefer their own medicine-men when seriously ill, and believe the weird singing and praying around the couch is more effective than the medicine dealt out by our camp

'sawbones.'"[102] The promptness with which the American Indian recovers from severe wounds has been commented upon by many authorities. From my personal observation I could, were it necessary, adduce many examples. The natives of Australia seem to be endowed with the same recuperative powers.[103]

After all other means have failed the medicine-men of the Southwest devote themselves to making altars in the sand and clay near the couch of the dying, because, as Antonio Besias explained, this act was all the same as extreme unction. They portray the figures of various animals, and then take a pinch of the dust or ashes from each one and rub upon the person of the sick man as well as upon themselves. Similar altars or tracings were made by the medicine-men of Guatemala when they were casting the horoscope of a child and seeking to determine what was to be its medicine in life. This matter of sand altars has been fully treated by Matthews in the report of the Bureau of 1883-'84. for and there are representations to be found in my Snake Dance of the Moguis. "Writing on sand" is a mode of divination among the Chinese.[104] Padre Boscana represents the "puplem" or medicine-men of the Indians of California as making or sketching "a most uncouth and ridiculous figure of an animal on the ground," and presumably of sands, clays, and other such materials.[105]

HAIR AND WIGS.

The medicine-men of the Apache were, at least while young, extremely careful of their hair, and I have often seen those who were very properly proud of their long and glossy chevelure. Particularly do I recall to mind the "doctor" at San Carlos in 1885, who would never allow his flowing black tresses to be touched. But they do not roach their hair, as I

have seen the Pawnee do; they do not add false hair to their own, as I have seen among the Crow of Montana and the Mohave of the Rio Colorado; they do not apply plasters of mud as do their neighbors the Yuma, Cocopa, Mohave and Pima, and in such a manner as to convince spectators that the intent was ceremonial; and they do not use wigs in their dances. Wigs made of black wool may still be found occasionally among the Pueblos, but the Apache do not use them, and there is no reference to such a thing in their myths.

It is to be understood that these paragraphs are not treating upon the superstitions concerning the human hair, as such, but simply of the employment of wigs, which would seem in former days among some of the tribes of the Southwest to have been made of human hair presented by patients who had recovered from sickness or by mourners whose relatives had died.[106] Wigs with masks attached were worn by the Costa Ricans, according to Gabb.[107]

Some of the Apache-Yuma men wear long rolls of matted hair behind, which are the thickness of a finger, and two feet or more in length, and composed of old hair mixed with that growing on the head, or are in the form of a wig, made of hair that has been cut off when mourning the dead, to be worn on occasions of ceremony.[108]

Observations of the same kind have been made by Speke upon the customs of the people of Africa in his Nile,[109] concerning the Kidi people at the head of the Nile; by Cook, in Hawkesworth's Voyages,[110] speaking of Tahiti, and by Barcia,[111] speaking of Greenland. Sir Samuel Baker describes the peculiar wigs worn by the tribes on Lake Albert Nyanza, formed of the owner's hair and contributions from all sources plastered with clay into a stiff mass.[112]

Melchior Diaz reported that the people of Cibola "élèvent dans leurs maisons des animaux velus, grands comme des chiens d'Espagne. Ils les tondent, ils en font des perruques de couleurs." This report was sent by the Viceroy Mendoza to the Emperor Charles V. Exactly what these domesticated animals were, it would be hard to say; they may possibly have been Rocky Mountain sheep,[113] though Mr. Cushing, who has studied the question somewhat extensively, is of the opinion that they may have been a variety of the llama.

The Assinaboine used to wear false hair, and also had the custom of dividing their hair into "joints" of an inch or more, marked by a sort of paste of red earth and glue;[114] The Mandan did the same.[115] In this they both resemble the Mohave of the Rio Colorado. "The Algonquins believed also in a malignant Maniton. * * * She wore a robe made of the hair of her victims, for she was the cause of death."[116]

The Apache, until within the last twenty years, plucked out the eyelashes and often the eyebrows, but only a few of them still persist in the practice. Kane says that the Winnebagoes "have the custom of pulling out their eyebrows."[117] Herrera says that among the signs by which the Tlascaltecs recognized their gods when they saw them in visions, were "vianle sin cejas, i sin pestañas."[118]

MUDHEADS.

Reference has been made to a ceremonial plastering of mud upon the heads of Indians. When General Crook was returning from his expedition into the Sierra Madre, Mexico, in 1883, in which expedition a few of the enemy had been killed, the scouts upon reaching the San Bernardino River made a free use of the sweat bath, with much singing and other formulas, the whole being part of the lustration which all warriors must undergo as soon as possible after being

engaged in battle. The Apache proper did not apply mud to their heads, but the Apache-Yuma did.

Capt. Grossman, U. S. Army,[119] says of the Pima method of purification after killing an Apache, that the isolation of the warrior lasts for sixteen days, during which period no one speaks to him, not even the old woman who brings him his food. The first day he touches neither food nor drink, and he eats sparingly for the whole time, touching neither meat nor salt; he bathes frequently in the Gila River and nearly the whole time keeps his head covered with a plaster of mud and mesquite.

"The boyes [of the Massagueyes] of seven or eight yeeres weare clay fastned on the hayre of the head, and still renewed with new clay, weighing sometimes five or six pounds. Nor may they be free hereof till in warre or lawfull fight hee hath killed a man."[120]

According to Padre Geronimo Boscana, the traditions of the Indians of California show that they "fed upon a kind of clay."[121] But this clay was often plastered upon their heads "as a kind of ornament." These were the Indians of San Juan Capistrano, who strongly resembled the Mohave. After all, the "mudheads" of the Mohave are no worse than those people in India who still bedaub their heads with "the holy mud of the Ganges." Up to this time the mud has been the "blue mud" of the Colorado and other rivers, but when we find Herbert Spencer mentioning that the heads of the Comanche are "besmeared with a dull red clay" we may suspect that we have stumbled upon an analogue of the custom of the Aztec priests, who bedaubed their heads with the coagulating lifeblood of their human victims. We know that there has been such a substitution practiced among the Indians of the Pueblo of Jemez, who apply red ocher to the mouth of the stone mountain lion, in whose honor human blood was once freely shed. The practice of so many of the Plains tribes of painting the median line of the head with vermilion seems to be traceable back to a similar custom.

SCALP SHIRTS.

The shirt depicted on Pl. III, made of buckskin and trimmed with human scalps, would seem to belong to the same category with the mantles made of votive hair, mentioned as being in use among the California tribe a little more than a century ago. It was presented to me by Little Big Man, who led me to believe that it had once belonged to the great chief of the Sioux, Crazy Horse, or had at least been worn by him. Of its symbolism I am unable to find the explanation. The colors yellow and blue would seem to represent the earth and water or sky, the feathers attached would refer to the birds, and the round circle on the breast is undoubtedly the sun. There is a cocoon affixed to one shoulder, the significance of which I do not know.



Plate III.
SCALP SHIRT OF "LITTLE BIG MAN" (SIOUX).

THE RHOMBUS, OR BULL ROARER.

The rhombus was first seen by me at the snake dance of the Tusayan, in the village of Walpi, Ariz., in the month of August, 1881. Previous to that date I had heard of it vaguely, but had never been able to see it in actual use. The

medicine-men twirled it rapidly, and with a uniform motion, about the head and from front to rear, and succeeded in faithfully imitating the sound of a gust of rain-laden wind. As explained to me by one of the medicine-men, by making this sound they compelled the wind and rain to come to the aid of the crops. At a later date I found it in use among the Apache, and for the same purpose. The season near the San Carlos Agency during the year 1884 had been unusually dry, and the crops were parched. The medicine-men arranged a procession, two of the features of which were the rhombus and a long handled cross, upon which various figures were depicted. Of the latter, I will speak at another time.



Fig. 430.—Rhombus of the Apache.

Again, while examining certain ruins in the Verde Valley, in central Arizona, I found that the "Cliff Dwellers," as it has become customary to call the prehistoric inhabitants, had employed the same weapon of persuasion in their

intercourse with their gods. I found the rhombus also among the Rio Grande Pueblo tribes and the Zuñi. Dr. Washington Matthews has described it as existing among the Navajo and Maj. J. W. Powell has observed it in use among the Utes of Nevada and Utah. As will be shown, its use in all parts of the world seems to have been as general as that of any sacred implement known to primitive man, not even excepting the sacred cords or rosaries discussed in this paper. Three forms of the rhombus have come under my own observation, each and all apparently connected in symbolism with the lightning. The first terminates in a triangular point, and the general shape is either that of a long, narrow, parallelogram, capped with an equilateral triangle, or else the whole figure is that of a slender isosceles triangle. Where the former shape was used, as at the Tusayan snake dance, the tracing of a snake or lightning in blue or yellow followed down the length of the rhombus and terminated in the small triangle, which did duty as the snake's head. The second pattern was found by Dr. Matthews among the Navajo, and by myself in the old cliff dwellings. The one which I found was somewhat decayed, and the extremity of the triangle was broken off. There was no vestige of painting left. The second form was serrated on both edges to simulate the form of the snake or lightning. The third form, in use among the Apache, is an oblong of 7 or 8 inches in length, one and a quarter inches in width by a quarter in thickness. One extremity, that through which the cord passes, is rounded to rudely represent a human head, and the whole bears a close resemblance to the drawings of schoolboys which are intended for the human figure. The Apache explained that the lines on the front side of the rhombus were the entrails and those on the rear side the hair of their wind god. The hair is of several colors, and represents the lightning. I did not ascertain positively that such was the case, but was led to believe that the rhombus of the Apache was made by the medicine-men from wood, generally pine or fir, which had been struck by lightning on the mountain tops. Such wood is held in the highest estimation among them, and is used for the manufacture of amulets of especial efficacy. The Apache name for the rhombus is tzi-ditindi, the "sounding wood." The identification of the rhombus or "bull roarer" of the ancient Greeks with that used by the Tusayan in their snake dance was first made by E. B. Tylor in the Saturday Review in a criticism upon "The Snake Dance of the Moquis of Arizona."

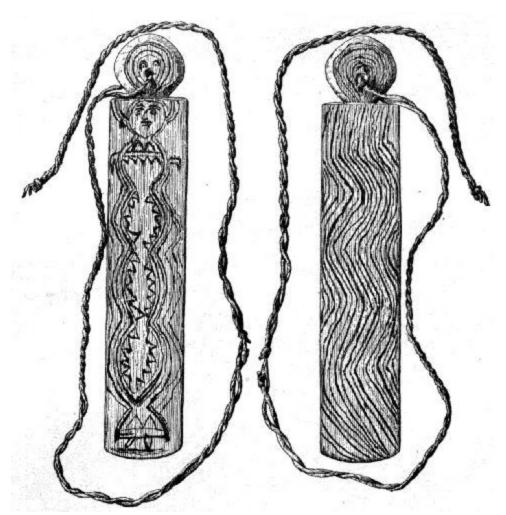


Fig. 431.—Rhombus of the Apache.

The Kaffirs have the rhombus among their playthings:

The nodiwu is a piece of wood about 6 or 8 inches long, and an inch and a half or 2 inches wide, and an eighth or a quarter of an inch thick in the middle. Towards the edges it is beveled off, so that the surface is convex, or consists of two inclined planes. At one end it has a thong attached to it by which it is whirled rapidly round. * * * There is a kind of superstition connected with the nodiwu, that playing with it invites a gale of wind. Men will, on this account, often prevent boys from using it when they desire calm weather for any purpose. This superstition is identical with that which prevents many sailors from whistling at sea.[122]

Of the Peruvians we are informed that "their belief was that there was a man in the sky with a sling and a stick, and that in his power were the rain, the hail, the thunder, and all else that appertains to the regions of the air, where clouds are formed."[123]

The sacred twirler of the snake dance is found in Greece, America, Africa and New Zealand. It survives as a toy in England and the United States.[124] The same peculiar instrument has been noticed in the religious ceremonials of the Australians, especially in the initiatory rites of the "bora." It is called the "tirricoty."[125] The twirling of the tziditindi in medicine or prayer corresponds to the revolution of the prayer wheel of the Lamas.

THE CROSS.

The sign of the cross appears in many places in Apache symbolism. The general subject of the connection of the cross with the religion of the aborigines of the American continent has been so fully traversed by previous authors that I do not care to add much more to the subject beyond saying that my own observation has assured me that it is

related to the cardinal points and the four winds, and is painted by warriors upon their moccasins upon going into a strange district in the hope of keeping them from getting on a wrong trail.

In October, 1884, I saw a procession of Apache men and women, led by the medicine-men bearing two crosses, made as follows: The vertical arm was 4 feet 10 inches long, and the transverse between 10 and 12 inches, and each was made of slats about $1\frac{1}{2}$ inches wide, which looked as if they had been long in use. They were decorated with blue polka dots upon the unpainted surface. A blue snake meandered down the longer arm. There was a circle of small willow twigs at top; next below that, a small zinc-cased mirror, a bell, and eagle feathers. Nosey, the Apache whom I induced to bring it to me after the ceremony, said that they carried it in honor of Guzanutli to induce her to send rain, at that time much needed for their crops. It is guite likely that this particular case represents a composite idea; that the original beliefs of the Apache have been modified to some extent by the crude ideas of the Mexican captives among them, who still remember much that was taught them in the churches of the hamlets in northern Mexico, from which they were kidnapped years ago; but, on the other hand, it is to be remembered that the cross has always formed a part of the Apache symbolism; that the snake does not belong to the Christian faith, and that it has never been allowed to appear upon the cross since the time of the Gnostics in the second and third centuries. Therefore, we must regard that as a Pagan symbol, and so must we regard the circle of willow twigs, which is exactly the same as the circle we have seen attached to the sacred cords for the cure of headache.[126]

The cross was found in full vogue as a religious emblem among the aborigines all over America. Father Le Clercq[127]

speaks of its very general employment by the Gaspesians: "Ils ont parmi eux, tout infideles qu'ils soient, la Croix en singuliere veneration, qu'ils la portent figurée sur leurs habits & sur leur chair; qu'ils la tiennent à la main dans tous leurs voïages, soit par mer, soit par terre; & qu'enfin ils la posent au dehors & au dedans de leurs Cabannes, comme la marque d'honneur qui les distingue des autres Nations du Canada." He narrates[128] that the Gaspé tradition or myth was, that the whole tribe being ravaged by a plague, the medicine-men had recourse to the Sun, who ordered them to make use of the cross in every extremity.

Herrera relates that the followers of Hernandez de Cordoba found at Cape Catoche "unos Adoratorios ... i Cruces pintadas que les causò gran admiracion."[129] He also says that Juan de Grijalva on the island of Cozumel found a number of oratories and temples, but one in particular was made in the form of a square tower, with four openings. Inside this tower was a cross made of lime, which the natives reverenced as the god of the rain; "una Cruz de Cal, de tres varas en alto, à la qual tenian por el Dios de la Iluvia."[130]

NECKLACES OF HUMAN FINGERS.

The necklace of human fingers, an illustration of which accompanies this text (Pl. IV), belonged to the foremost of the medicine-men of a brave tribe—the Cheyenne of Montana and Wyoming. They were the backbone of the hostility to the whites, and during the long and arduous campaign conducted against them by the late Maj. Gen. George Crook, which terminated so successfully in the surrender of 4,500 of the allied Sioux and Cheyenne, at Red Cloud and Spotted Tail agencies, in the early spring of 1877, it was a noted fact that wherever a band of the Cheyenne was to be found there the fighting was most desperate. It is

a matter now well established that the Cheyenne are an offshoot of the Algonquian family, speaking a dialect closely resembling that of the Cree, of British America.



Plate IV. NECKLACE OF HUMAN FINGERS.

It may interest some readers to listen to a few words descriptive of the manner in which such a ghastly relic of savagery came into my possession. On the morning of the 25th of November, 1876, the cavalry and Indian scouts

(Sioux, Shoshoni, Arapaho, Pawnee, and a few of the Chevenne themselves), of Gen. Crook's command, under the leadership of the late Brig. Gen. Ranald S. Mackenzie, then colonel of the Fourth Cavalry, surprised and destroyed the main village of the Cheyenne, on the headwaters of the Powder River, in the Big Horn Mountains, Wyoming. The onslaught was irresistible, the destruction complete, and the discomfited savages were forced to flee from their beds, half naked and with nothing save their arms and ammunition. More than half of the great herd of ponies belonging to the savages were killed, captured, or so badly wounded as to be of no use to the owners. The cold became so intense that on the night after the fight eleven papooses froze to death in their mothers' arms, and the succeeding night, three others. This blow, the most grievous ever inflicted upon the plains tribes, resulted in the surrender, first of the Cheyenne, and later on of the principal chief of the Sioux, the renowned Crazy Horse: after which the Sioux troubles were minimized into the hunt for scattered bands. Undoubtedly, among the bitterest losses of valuable property suffered by the Cheyenne on this occasion were the two necklaces of human fingers which came into my possession, together with the small buckskin bag filled with the right hands of papooses belonging to the tribe of their deadly enemies, the Shoshoni. These were found in the village by one of our scouts—Baptiste Pourrier, who, with Mr. Frank Gruard, was holding an important and responsible position in connection with the care of the great body of Indian scouts already spoken of. From these two gentlemen I afterwards obtained all the information that is here to be found regarding the Chevenne necklace.

The second necklace, consisting of four fingers, was buried, as Gen. Crook did not wish to have kept more than one specimen, and that only for scientific purposes. Accordingly, the necklace here depicted was sent first to the U. S.

Military Academy at West Point, New York, and later to the National Museum in Washington, where it was believed it could better fulfill its mission of educating students in a knowledge of the manners and customs of our aborigines.

The buckskin bag, with the papooses' hands, was claimed by the Shoshoni scouts, who danced and wailed all night, and then burned the fearful evidence of the loss sustained by their people.

The necklace is made of a round collar of buckskin. incrusted with the small blue and white beads purchased from the traders, these being arranged in alternate spaces of an inch or more in length. There are also attached numbers of the perforated wampum shell beads of native manufacture. Pendant from this collar are five medicine arrows, the exact nature of which, it was, of course, impossible to determine from the owner himself. Both Frank Baptiste agreed that an arrow might become "medicine" either from having been shot into the person of the owner himself or into the body of an enemy, or even from having been picked up under peculiar circumstances. The owner, High Wolf or Tall Wolf, admitted as much after he had surrendered at the Red Cloud Agency and had made every effort to obtain the return of his medicine, which was this necklace.

The four medicine bags to be seen in the picture are worthy of attention. They were carefully examined under a powerful glass by Dr. H. C. Yarrow, U. S. Army, in the city of Washington, and pronounced to be human scrota. The first of these contained a vegetable powder, somewhat decomposed, having a resemblance to hoddentin; the second was filled with killikinnick; the third with small garnet-colored seeds like the chia in use among the Apache, and the fourth with a yellow, clayey-white vegetable matter not identified. The fifth, also, remained unidentified.

Besides the above, there are artificial teeth, resembling those of the fossil animals abundant in the Bad Lands of South Dakota, but cut out of soft stone.

The fingers—eight altogether—are the left-hand middle fingers of Indians of hostile tribes, killed by High Wolf. I obtained the list and could insert it here were it worthwhile to do so. The fingers have not been left in the natural state, but have been subjected to very careful and elaborate antiseptic treatment in order thoroughly to desiccate them. They were split longitudinally on the inner side and after the bone had been extracted the surface of the skin, both inside and out, received a treatment with a wash or paint of ocherous earth, the same as is used for the face. I was told that the bones were not replaced but that sticks were inserted to maintain the fingers in proper shape.

Of the reason for making use of such a trophy or relic, there is not much to be said; even the savages know little and say less. From the best information that I have been able to gather, it would seem to be based partly upon a vainglorious desire to display the proofs of personal prowess, and partly upon the vague and ill defined, but deeply rooted, belief in the talismanic or "medicinal" potency possessed by all parts of the human body, especially after death. It was such a belief which impelled the Mandan, Aztecs, and others of the American tribes to preserve the skulls of their dead as well as (among the Aztecs) those of the victims sacrificed in honor of their gods. As has been shown in another place, the Zuñi and others take care to offer food at stated periods to the scalps of their enemies.

The use of necklaces of human fingers or of human teeth is to be found in many parts of the world, and besides the fingers themselves, we find the whole arm, or in other cases only the nails. The Cheyenne did not always restrict themselves to fingers; they generally made use of the whole hand, or the arm of the slaughtered enemy. In a colored picture drawn and painted by one of themselves I have a representation of a scalp dance, in which the squaws may be seen dressed in their best, carrying the arms of enemies elevated on high poles and lances. There is no doubt in my mind that this custom of the Cheyenne of cutting off the arm or hand gave rise to their name in the sign language of the "Slashers," or "Wrist Cutters," much as the corresponding tribal peculiarity of the Dakota occasioned their name of the "Coupe Gorge" or "Throat Cutters."

The necklace of human fingers is found among other tribes. A necklace of four human fingers was seen by the members of the Lewis and Clarke expedition among the Shoshoni at the headwaters of the Columbia, in the early years of the present century. Early in the spring of 1858 Henry Youle Hind refers to the allies of the Ojibwa on Red River as having "two fingers severed from the hands of the unfortunate Sioux."[131] In Eastman's "Legends of the Sioux," we read of "Harpsthinah, one of the Sioux women, who wore as long as she could endure it, a necklace made of the hands and feet of Chippewah children."[132] We read that in New Zealand, "Several rows of human teeth, drawn on a thread, hung on their breasts."[133] Capt. Cook speaks of seeing fifteen human jaw bones attached to a semicircular board at the end of a long house on the island of Tahiti. "They appeared to be fresh, and there was not one of them that wanted a single tooth;"[134] and also, "the model of a canoe, about three feet long, to which were tied eight human jaw bones; we had already learnt that these were trophies of war."[135] Capt. Byron, R. N., saw in the Society Islands, in 1765, a chief who "had a string of human teeth about his waist, which was probably a trophy of his military prowess."[136]

"The wild Andamanese, who live only on the fruits of their forests and on fish, so far revere their progenitors that they adorn their women and children with necklaces and such like, formed out of the finger and toe-nails of their ancestors."[137]

Bancroft says[138] that the Californians did not generally scalp, but they did cut off and keep the arms and legs of a slain enemy or, rather, the hands and feet and head. They also had the habit of plucking out and preserving the eyes.

Kohl assures us that he has been informed that the Ojibwa will frequently cut fingers, arms, and limbs from their enemies and preserve these ghastly relics for use in their dances. Sometimes the warriors will become so excited that they will break off and swallow a finger.[139]

Tanner says of the Ojibwa: "Sometimes they use sacks of human skin to contain their medicines, and they fancy that something is thus added to their efficacy."[140]

Of the savages of Virginia we read: "Mais d'autres portent pour plus glorieuse parure une main seiche de quelqu'un de leurs ennemis."[141]

Of the Algonkin we read: "Il y en a qui ont une partie du bras et la main de quelque Hiroquois qu'ils ont tué; cela est si bien vuidée que les ongles restent toutes entieres."[142]

The Mohawk "place their foe against a tree or stake and first tear all the nails from his fingers and run them on a string, which they wear the same as we do gold chains. It is considered to the honor of any chief who has vanquished or overcome his enemies if he bite off or cut off some of their members, as whole fingers."[143]

The Cenis (Asinai) of Texas, were seen by La Salle's expedition in 1687-1690, torturing a captive squaw. "They

then tore out her hair, and cut off her fingers."[144]

In volume 2 of Kingsborough's Mexican Antiquities, in the plates of the Vatican manuscript, is to be seen a representation of an Aztec priest or other dignitary holding out in his hands two human arms. In plate 76 of the same is a priest offering up a human sacrifice, the virile member of the victim cut off.

Teoyamaqui, the wife of Huitzlipochtli, the Aztec god of war, was depicted with a necklace of human hands.[145] Squier also says that Darga or Kali, the Hindu goddess, who corresponds very closely to her, was represented with "a necklace of skulls" and "a girdle of dissevered human hands."

The Hindu goddess Kali was decorated with a necklace of human skulls.[146] In the Propaganda collection, given in Kingsborough,[147] are to be seen human arms and legs.

"On the death of any of the great officers of state, the finger bones and hair are also preserved; or if they have died shaven, as sometimes occurs, a bit of their mbugu dress will be preserved in place of the hair."[148] "Their families guard their tombs."[149]

The principal war fetiches of Uganda "consist of dead lizards, bits of wood, hide, nails of dead people, claws of animals, and beaks of birds." Stanley saw them displayed before King Mtesa.[150]

"Some of the women in Gippsland wear round the neck human hands, which, Mr. Hull says, were beautifully prepared. He moreover informs me that they sometimes wear the parts of which the 'Lingam' and 'Priapus' were the emblems."[151] "The Gippsland people keep the relics of the departed. They will cut off the hands to keep as a remembrance, and these they will attach to the string that is tied round the neck."[152]

Smyth also relates that the women of some of the Australian tribes preserve "the hands of some defunct member of the tribe—that of some friend of the woman's, or perhaps one belonging to a former husband. This she keeps as the only remembrance of one she once loved; and, though years may have passed, even now, when she has nothing else to do, she will sit and moan over this relic of humanity. Sometimes a mother will carry about with her the remains of a beloved child, whose death she mourns."[153] The Australians also use the skulls of their "nearest and dearest relatives" for drinking vessels; thus, a daughter would use her mother's skull, etc.[154]

"One of the most extraordinary of their laws is that a widow, for every husband she marries after the first, is obliged to cut off a joint of a finger, which she presents to her husband on the wedding day, beginning at one of the little fingers."
[155]

In the Army and Navy Journal, New York, June 23, 1888, is mentioned a battle between the Crow of Montana and the Piegan, in which the former obtained some of the hands and feet of dead warriors of the first-named tribe and used them in their dances.

Catlin shows that the young Sioux warriors, after going through the ordeal of the sun dance, placed the little finger of the left hand on the skull of a sacred buffalo and had it chopped off.[156]

"The sacrifices [of American Indians] at the fasts at puberty sometimes consist of finger joints."[157]

In Dodge's Wild Indians is represented (Pl. vi, 13) a Cheyenne necklace of the bones of the first joint of the human fingers, stripped of skin and flesh. I have never seen or heard of anything of the kind, although I have served with the Cheyenne a great deal and have spoken about their customs. My necklace is of human fingers mummified, not of bones.

Fanny Kelly says of a Sioux chief: "He showed me a puzzle or game he had made from the finger bones of some of the victims that had fallen beneath his own tomahawk. The bones had been freed from the flesh by boiling, and, being placed upon a string, were used for playing some kind of Indian game."[158]

Strabo recounts in his third book that the Lusitanians sacrificed prisoners and cut off their right hands to consecrate them to their gods.

Dulaure says that the Germans attached the heads and the right hands of their human victims to sacred trees.[159]

Adoni-bezek cut off the thumbs and great toes of seventy kings of Syria.[160]

The necklace of human fingers is not a particle more horrible than the ornaments of human bones to be seen in the cemetery of the Capuchins in Rome at the present day. I have personally known of two or three cases where American Indians cut their enemies limb from limb. The idea upon which the practice is based seems to be the analogue of the old English custom of sentencing a criminal to be "hanged, drawn, and quartered."

Brand gives a detailed description of the "hand of glory," the possession of which was believed by the peasantry of Great Britain and France to enable a man to enter a house invisible to the occupants. It was made of the hand of an executed (hanged) murderer, carefully desiccated and prepared with a great amount of superstitious mummery.

With this holding a candle of "the fat of a hanged man" burglars felt perfectly secure while engaged in their predatory work.[161] The belief was that a candle placed in a dead man's hand will not be seen by any but those by whom it is used. Such a candle introduced into a house kept those who were asleep from awakening.

The superstition in regard to the "hand of glory" was widely diffused throughout France, Germany, Spain, and Great Britain. As late as the year 1831 it was used by Irish burglars in the county Meath.

Dr. Frank Baker delivered before the Anthropological Society of Washington, D. C., a lecture upon these superstitions as related to the "hand of glory," to which the student is respectfully referred.[162]

An Aztec warrior always tried to procure the middle finger of the left hand of a woman who had died in childbirth. This he fastened to his shield as a talisman.[163] The great weapon of the Aztec witches was the left arm of a woman who had died in her first childbirth.[164] Pliny mentions "still-born infants cut up limb by limb for the most abominable practices, not only by midwives, but by harlots even as well!"[165]

The opinions entertained in Pliny's time descended to that of the Reformation—

Finger of birth-strangled babe, Ditch-deliver'd by a drab.[166]

"Scrofula, imposthumes of the parotid glands, and throat diseases, they say, may be cured by the contact of the hand of a person who has been carried off by an early death;" but, he goes on to say, any dead hand will do, "provided it is of the same sex as the patient and that the part affected is touched with the back of the left hand."[167] A footnote adds that this superstition still prevails in England in regard to the hand of a man who has been hanged.

The use of dead men's toes, fingers, spinal vertebræ, etc., in magical ceremonies, especially the fabrication of magical lamps and candles, is referred to by Frommann.[168]

Grimm is authority for the statement that in both France and Germany the belief was prevalent that the fingers of an unborn babe were "available for magic."[169]

In England witches were believed to "open graves for the purpose of taking out the joints of the fingers and toes of dead bodies ... in order to prepare a powder for their magical purposes."[170]

"Saint Athanase dit même, que ces parties du corps humain [i.e., hands, feet, toes, fingers, etc.] étoient adorées comme des dieux particuliers."[171]

According to the sacred lore of the Brahmans "the Tirtha sacred to the Gods lies at the root of the little finger, that sacred to the Rishis in the middle of the fingers, that sacred to Men at the tips of the fingers, that sacred to Agni (fire) in the middle of the hand."[172]

In the Island of Ceylon "debauchees and desperate people often play away the ends of their fingers."[173]

Hone shows that "every joint of each finger was appropriated to some saint."[174]

NECKLACES OF HUMAN TEETH.

A number of examples are to be found of the employment of necklaces of human teeth. In my own experience I have never come across any specimens, and my belief is that among the Indians south of the Isthmus such things are to be found almost exclusively. I have found no reference to such ornamentation or "medicine" among the tribes of North America, but there are many to show the very general dissemination of the custom in Africa and in the islands of the South Sea. Gomara says that the Indians of Santa Marta wore at their necks, like dentists, the teeth of the enemies they had killed in battle.[175] Many of the Carib, we are told by a Spanish writer, ostentatiously wear necklaces made of strings of the teeth of the enemies whom they have slain. [176] Padre Fray Alonzo Fernandez says of the Carib: "Traen los dientes con los cabellos de los que mataron por collares, como hazian antiguamente los Scitas."[177] The people of New Granada "traen al cuello dientes de los que matavan." [178] Picart says that the natives of New Granada and Cumana "portent au col les dents des ennemis qu'ils ont massacrez."[179] The Spaniards found in the temple of the Itzaes, on the island of Peten, an idol made of "yesso," which is plaster, and in the head, which was shaped like the sun, were imbedded the teeth of the Castilians whom they had captured and killed.[180]

"They strung together the teeth of such of their enemies as they had slain in battle and wore them on their legs and arms as trophies of successful cruelty."[181]

Stanley says, referring to the natives of the Lower Congo country: "Their necklaces consisted of human, gorilla, and

crocodile teeth, in such quantity, in many cases, that little or nothing could be seen of the neck."[182]

"The necklaces of human teeth which they [Urangi and Rubunga, of the Lower Congo] wore."[183] Again, "human teeth were popular ornaments for the neck."[184] When a king dies they [the Wahuma, of the head of the Nile] cut out his lower jaw and preserve it covered with beads.[185]

Schweinfurth[186] speaks of having seen piles of "lower jawbones from which the teeth had been extracted to serve as ornaments for the neck" by the Monbuttoo of Africa. "A slaughtered foe was devoured from actual bloodthirstiness and hatred by the Niam-Niams of Central Africa.... They make no secret of their savage craving, but ostentatiously string the teeth of their victims round their necks, adorning the stakes erected beside their dwellings for the habitation of the trophies with the skulls of the men they have devoured. Human fat is universally sold."[187]

The four front teeth were extracted by the men and women of the Latooka and other tribes of the White Nile, but no explanation is given of the custom.[188]

In Dahomey, strings of human teeth are worn.[189]

Freycinet saw in Timor, Straits of Malacca, "a score of human jawbones, which we wished to purchase; but all our offers were met by the word 'pamali,' meaning sacred."[190]

In one of the "morais" or temples entered by Kotzebue in 1818, on the Sandwich Islands, there were two great and ugly idols, one representing a man, the other a woman. "The priests made me notice that both statues, which had their mouths wide open, were furnished with a row of human teeth."[191]

The Sandwich Islanders kept the jaw bones of their enemies as trophies.[192] King Tamaahmaah had a "spitbox which was set round with human teeth, and had belonged to several of his predecessors."[193]

Among some of the Australian tribes the women wear about their necks the teeth which have been knocked out of the mouths of the boys at a certain age.[194] This custom of the Australians does not obtain among the North American tribes, by whom the teeth, as they fall out, are carefully hidden or buried under some tree or rock. At least, I have been so informed by several persons, among others by Chato, one of the principal men of the Chiricahua Apache.

Molina speaks of the customs of the Araucanians, who, after torturing their captives to death, made war flutes out of their bones and used the skulls for drinking vessels.[195] The Abipones of Paraguay make the bones of their enemies into musical instruments.[196]

The preceding practice is strictly in line with the "medicinal" and "magical" values attached in Europe to human teeth, human skin, etc. The curious reader may find much on this subject in the works of Frommann, Beckherius, Etmüller, Samuel Augustus Flemming, and others of the seventeenth century, where it will be shown that the ideas of the people of Europe of that period were only in name superior to those of the savages of America, the islands of the South Seas, and of Central Africa. In my work upon "The Scatalogic Rites of all Nations" I have treated this matter more in extenso, but what is here adduced will be sufficient for the present article.

The skin of Ziska, the Bohemian reformer, was made into a "medicine drum" by his followers.

THE SCRATCH STICK.

When Gen. Crook's expedition against the Chiricahua Apache reached the heart of the Sierra Madre, Mexico, in 1883, it was my good fortune to find on the ground in Geronimo's rancheria two insignificant looking articles of personal equipment, to which I learned the Apache attached the greatest importance. One of these was a very small piece of hard wood, cedar, or pine, about two and a half to three inches long and half a finger in thickness, and the other a small section of the cane indigenous to the Southwest and of about the same dimensions. The first was the scratch stick and the second the drinking reed.

The rule enjoined among the Apache is that for the first four times one of their young men goes out on the warpath he must refrain from scratching his head with his fingers or letting water touch his lips. How to keep this vow and at the same time avoid unnecessary personal discomfort and suffering is the story told by these petty fragments from the Apache's ritual. He does not scratch his head with his fingers; he makes use of this scratch stick. He will not let water touch his lips, but sucks it into his throat through this tiny tube. A long leather cord attached both stick and reed to the warrior's belt and to each other. This was all the information I was able to obtain of a definite character. Whether these things had to be prepared by the medicinemen or by the young warrior himself; with what ceremonial, if any, they had to be manufactured, and under what circumstances of time and place, I was unable to ascertain to my own satisfaction, and therefore will not extend my remarks or burden the student's patience with incoherent statements from sources not absolutely reliable. That the use of the scratch stick and the drinking reed was once very general in America and elsewhere, and that it was not altogether dissociated from ritualistic or ceremonial ideas, may be gathered from the citations appended.

In her chapter entitled "Preparatory ceremony of the young warrior" Mrs. Emerson says: "He does not touch his ears or head with his hand," explaining in a footnote, "the head was sometimes made a sacrificial offering to the sun."[197] Tanner relates that the young Ojibwa warrior for the "three first times" that he accompanies a war party "must never scratch his head or any other part of his body with his fingers, but if he is compelled to scratch he must use a small stick."[198] Kohl states that the Ojibwa, while on the warpath, "will never sit down in the shade of a tree or scratch their heads; at least, not with their fingers. The warriors, however, are permitted to scratch themselves with a piece of wood or a comb."[199] Mackenzie states regarding the Indians whom he met on the Columbia, in 52° 38′, N. lat., "instead of a comb they [the men] have a small stick hanging by a string from one of the locks [of hair], which they employ to alleviate any itching or irritation in the head."[200]

The Tlinkit of British North America use these scratchers made of basalt or other stone.

"The pipe-stem carrier (i.e., the carrier of the sacred or 'medicine' pipe) of the Crees, of British North America, dares not scratch his own head, without compromising his own dignity, without the intervention of a stick, which he always carries for that purpose."[201]

Bancroft[202] quotes Walker as saying that "a Pima never touches his skin with his nails, but always with a small stick for that purpose, which he renews every fourth day and wears in his hair."

As part of the ceremony of "initiating youth into manhood" among the Creeks, the young neophyte "during the twelve moons ... is also forbidden to pick his ears or scratch his head with his fingers, but must use a small splinter to

perform these operations."[203] The Apache-Yuma men carry in their hair "a slender stick or bone about 8 inches long, which serves them as a comb."[204]

The idea that these scratch sticks replace combs is an erroneous one; Indians make combs in a peculiar way of separate pieces of wood, and they are also very fond of brushing their long locks with the coarse brushes, which they make of sacaton or other grass.

"One other regulation, mentioned by Schomburgk, is certainly quaint; the interesting father may not scratch himself with his finger nails, but may use for this purpose a splinter, especially provided, from the mid-rib of a cokerite palm."[205]

When a Greenlander is about to enter into conversation with the spirits "no one must stir, not so much as to scratch his head."[206]

In the New Hebrides most of the natives "wear a thin stick or reed, about 9 inches long, in their hair, with which they occasionally disturb the vermin that abound in their heads."
[207]

Alarcon, describing the tribes met on the Rio Colorado, in 1541, says: "They weare certaine pieces of Deeres bones fastened to their armes, wherewith they strike off the sweate."[208]

In German folk-lore there are many references to the practice in which the giants indulged frequently in scratching themselves, sometimes as a signal to each other. Just what significance to attach to these stories I can not presume to say, as Grimm merely relates the fact without comment.[209]

Of the Abyssinians, Bruce says: "Their hair is short and curled like that of a negro's in the west part of Africa, but this is done by art not by nature, each man having a wooden stick with which he lays hold of the lock and twists it round like a screw till it curls in the form he desires."[210] In a footnote, he adds: "I apprehend this is the same instrument used by the ancients, and censured by the prophets, which in our translation is rendered crisping-pins."

Possibly the constant use of the scratch stick in countries without wood suggested that it should be carried in the hair, and hence it would originate the fashion of wearing the hair crimped round it, and after a while it would itself be used as a crimping-pin.

Thus far, the suggestion of a religious or ceremonial idea attaching to the custom of scratching has not been apparent, unless we bear in mind that the warrior setting out on the warpath never neglects to surround himself with all the safeguards which the most potent incantations and "medicine" of every kind can supply. But Herbert Spencer tells us in two places that the Creeks attach the idea of a ceremonial observance to the custom. He says that "the warriors have a ceremony of scratching each other as a sign of friendship;"[211] and again, "scratching is practiced among young warriors as a ceremony or token of friendship. When they have exchanged promises of inviolable attachment, they proceed to scratch each other before they part."[212]

Dr. J. Hampden Porter remarks that this ceremonial scratching may be a "survival" of the blood covenant, and that in earlier times the young warriors, instead of merely scratching each other's arms, may have cut the flesh and exchanged the blood. The idea seems to be a very sensible one.

Father Alegre describes a ceremonial scratching which may have been superseded by the scratch stick, to which the medicine-men of certain tribes subjected the young men before they set out on the warpath. Among the Pima and Opata the medicine-men drew from their quivers the claws of eagles, and with these gashed the young man along the arms from the shoulders to the wrists.[213]

This last paragraph suggests so strongly certain of the practices at the sun dance of the tribes farther to the north that it may be well to compare it with the other allusions in this paper to that dance.

It will be noticed that the use of the scratch-stick, at least among the tribes of America, seems to be confined to the male sex; but the information is supplied by Mr. Henshaw, of the Bureau of Ethnology, that the Indians of Santa Barbara, Cal., made their maidens at the time of attaining womanhood wear pendant from the neck a scratcher of abalone shell, which they had to use for an indefinite period when the scalp became irritable.

Prof. Otis T. Mason, of the National Museum, informs me that there is a superstition in Virginia to the effect that a young woman enciente for the first time must, under no circumstances, scratch her head with her fingers, at least while uncovered; she must either put on gloves or use a small stick.

The Parsi have a festival at which they serve a peculiar cake or bread called "draona," which is marked by scratches from the finger nails of the woman who has baked it.[214]

No stress has been laid upon the appearance in all parts of the world of "back scratchers" or "scratch my backs," made of ivory, bone, or wood, and which were used for toilet purposes to remove irritation from between the shoulder blades or along the spine where the hand itself could not reach. They are to the present day in use among the Chinese and Japanese, were once to be found among the Romans and other nations of Europe, and instances of their occasional employment until a very recent date might be supplied.

THE DRINKING REED.

Exactly what origin to ascribe to the drinking reed is now an impossibility, neither is it probable that the explanations which the medicine-men might choose to make would have the slightest value in dispelling the gloom which surrounds the subject. That the earliest conditions of the Apache tribe found them without many of the comforts which have for generations been necessaries, and obliged to resort to all sorts of expedients in cooking, carrying, or serving their food is the most plausible presumption, but it is submitted merely as a presumption and in no sense as a fact. It can readily be shown that in a not very remote past the Apache and other tribes were compelled to use bladders and reeds for carrying water, or for conveying water, broth, and other liquid food to the lips. The conservative nature of man in all that involves his religion would supply whatever might be needed to make the use of such reeds obligatory in ceremonial observances wherein there might be the slightest suggestion of religious impulse. We can readily imagine that among a people not well provided with forks and spoons, which are known to have been of a much later introduction than knives, there would be a very decided danger of burning the lips with broth, or of taking into the mouth much earthy and vegetable matter or ice from springs and streams at which men or women might wish to drink, so the use of the drinking reed would obviate no small amount of danger and discomfort.

Water was carried in reeds by the Dyaks of Borneo, according to Bock.[215] The manner in which the natives of the New Hebrides and other islands of the South Pacific Ocean carry water in bamboo joints recalls the Zuñi method of preserving the sacred water of the ocean in hollow reeds. [216]

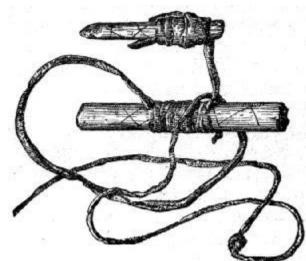


Fig. 432.—The scratch stick and drinking reed.

Mr. F. H. Cushing shows that "so far as language indicates the character of the earliest water vessels which to any extent met the requirements of the Zuñi ancestry, they were tubes of wood or sections of canes."[217] Long after these reeds had disappeared from common use, the priests still persisted in their use for carrying the water for the sacred ceremonies. The mother of the king of Uganda gave to Speke "a beautifully-worked pombé sucking-pipe."[218] For ordinary purposes these people have "drinking gourds." In Ujiji, Cameron saw an old chief sucking pombé, the native beer, through a reed;[219] and, later on in his narrative, we learn that the reed is generally used for the purposes of drinking. "The Malabars reckoned it insolent to touch the vessel with their lips when drinking."[220] They made use of vessels with a spout, which were no more and no less than

the small hollow-handled soup ladles of the Zuñi and Tusayan, through which they sipped their hot broth.

In an ancient grave excavated not far from Salem, Massachusetts, in 1873, were found five skeletons, one of which was supposed to be that of the chief Nanephasemet, who was killed in 1605 or 1606. He was the king of Namkeak. On the breast of this skeleton were discovered "several small copper tubes ... from 4 to 8 inches in length, and from one-eighth to one-fourth of an inch in diameter, made of copper rolled up, with the edges lapped."[221]

Alarcon relates that the tribes seen on the Rio Colorado by him in 1541, wore on one arm "certain small pipes of cane." But the object or purpose of wearing these is not indicated.
[222]

The natives of the Friendly Islands carried in their ears little cylinders of reed, although we learn that these were "filled with a red solid substance."[223] Among the Narrinyeri of Australia, when young men are to be initiated into the rank of warriors, during the ceremonies "they are allowed to drink water, but only by sucking it up through a reed."[224] Admiral von Wrangel says of the Tchuktchi of Siberia: "They suck their broth through a small tube of reindeer bone," which "each individual carries about with him."[225] Padre Sahagun says that the human victim whom the Aztecs offered up in sacrifice was not allowed to touch water with his lips, but had to "suck it through a reed."[226]

"The Mexicans had a forty-days' fast in memory of one of their sacred persons who was tempted *forty* days on a mountain. He drinks through a reed. He is called the Morning Star."[227] The Mexicans, according to Fray Diego Duran, placed before the statues of their dead bowls of "vino," with "rosas," tobacco (this seems to be the proper translation of the word "humazos," smokes), and a reed

called the "drinker of the sun," through which the spirit could imbibe.[228]

"The suction pipes of steatite," mentioned by Schoolcraft, as found in the mounds, may have been the equivalents of our drinking reeds, and made of steatite to be the more readily preserved in the ritual of which they formed part.

Copper cylinders 1¼ inches long and ¾ of an inch in diameter were found in the mounds of the Mississippi Valley by Squier and Davis. The conjecture that they had been used "for ornaments" does not seem warranted.[229]

We should not forget that there was a semideification of the reed itself by the Aztec in their assignment of it to a place in their calendar under the name of "acatl."[230]

Mrs. Ellen Russell Emerson speaks of the custom the warriors of the northern tribes had which suggests that she had heard of the drinking reed without exactly understanding what it meant. She says that warriors carry bowls of birch bark "from one side of which the warrior drinks in going to battle—from the other, on his return. These bowls are not carried home, but left on the prairie, or suspended from trees within a day's journey of his village." [231]

Among the Brahmans practices based upon somewhat similar ideas are to be found: every morning, upon rising, "ils prennent trois fois de l'eau dans la main, & en jettent trois fois dans leur bouche, évitant d'y toucher avec la main."[232]

The fundamental reason upon which the use of the drinking reed is based is that the warrior or devotee shall not let water touch his lips. It is strange to find among the regulations with regard to taking water by the warrior caste: "He shall not sip water while walking, standing, lying down, or bending forward."[233]

The Dharma-sûtra, traditionally connected with the Rishi-Vasishtha, of the Seventh Mandala of the Rig-Veda, is a relic of a Vedic school of the highest antiquity. Its seat was in the present northwestern provinces of India, and, like the Dharmasâstra of Gautama, it is the sole surviving record from this source.[234]

There was another service performed by reeds or tubes in the domestic economy of nations around the north pole. As the Apache are derived from an Arctic ancestry it does not seem amiss to allude to it. Lord Lonsdale, in describing the capture of a whale which he witnessed, says that the Eskimo women "first of all gathered up the harpoons and then pulled out all the spears. As each spear was withdrawn a blow-pipe was pushed into the wound and the men blew into it, after which the opening was tied up. When every wound had been treated in this manner the whale resembled a great windbag and floated high in the water."

In the National Museum at Washington, D. C., there are many pipes made of the bones of birds, which were used by the Inuit as drinking tubes when water had to be taken into the mouth from holes cut in the ice. These drinking tubes seem to be directly related to our subject, although they may also have been used as Lonsdale describes the pipes for blowing the dead whale full of air. Another point to be mentioned is that the eagle pipe kept in the mouth of the young warrior undergoing the torture of the sun dance among the Sioux and other tribes on the plains is apparently connected with the "bebedero del Sol" of the peoples to the south.[235]

The use of this drinking reed, shown to have been once so intimately associated with human sacrifice, may have

disappeared upon the introduction of labrets, which seem, in certain cases at least, to be associated with the memory of enemies killed in battle, which would be only another form of human sacrifice. This suggestion is advanced with some misgivings, and only as a hypothesis to assist in determining for what purpose labrets and drinking tubes have been employed. The Apache have discontinued the use of the labret, which still is to be found among their congeners along the Lower Yukon, but not among those living along the lower river.[236] According to Dall the custom was probably adopted from the Inuit; he also shows that whenever labrets are worn in a tribe they are worn by both sexes, and that the women assume them at the first appearance of the catamenia.

"This is to be noted, that how many men these Savages [Brazilians] doe kill, so many holes they will have in their visage, beginning first in their nether lippe, then in their cheekes, thirdly, in both their eye-browes, and lastly in their eares."[237]

Cabeza de Vaca speaks of the Indians near Malhado Island, "They likewise have the nether lippe bored, and within the same they carrie a piece of thin Cane about halfe a finger thicke."[238] Herrera relates very nearly the same of the men of "Florida": "Traìan una tetilla oradada, metido por el agujero un pedaço de Caña, i el labio baxero tambien agujereado, con otra caña en èl."[239] But Herrera probably obtained his data from the narrative of Vaca.

In looking into this matter of labrets as connected or suspected as being in some way connected with the drinking reed, we should not expect to find the labret adhering very closely to the primitive form, because the labret, coming to be regarded more and more as an ornament, would allow greater and greater play to the fancy of the wearer or manufacturer, much the same as the

crosses now worn by ladies, purely as matter of decoration, have become so thoroughly examples of dexterity in filagree work as to have lost the original form and significance as a declaration of faith. But it is a subject of surprise to find that the earlier writers persistently allude to the labrets in the lips of the Mexican deities, which probably were most tenacious of primitive forms, as being shaped like little reeds—"cañutillos."

Herrera says of Tescatlipoca: "Que era el Dios de la Penitencia, i de los Jubileos ... Tenia Çarcillo de Oro, i Plata en el labio baxo, con un cañutillo cristalino, de un geme de largo."[240] The high priest, he says, was called topilçin, and in sacrificing human victims he wore "debaxo del labio, junto al medio de la barba, una pieça como cañutillo, de una piedra açul."[241]

Father Acosta also speaks of the tube (canon) of crystal worn by Tezcatlipoca in the lower lip: "En la leure d'embas un petit canon de crystal, de la longueur d'un xeme ou demy pied."[242]

Speaking of Quetzalcoatl Clavigero says: "From the under lip hung a crystal tube."[243] From Diego Duran's account of this "bezote" or labret it must have been hollow, as he says it contained a feather: "En el labio bajo tenia un bezote de un veril cristalino y en el estaba metida una pluma verde y otras veces azul."[244]

In the Popul Vuh is to be found a myth which gives an account of the origin of labrets. It relates that two night watchers over the flowers in the garden of Xibalba had in some manner proved derelict in duty, and had their lips split as a punishment.[245]

In Paraguay a tribe called the Chiriguanes, "se percent la levre inférieure & ils y attachent un petit Cilindre d'étain ou

d'argent, ou de Resine transparente. Ce prétendu ornement s'appelle *Tembeta*."[246]

CHAPTER II.

HODDENTIN, THE POLLEN OF THE TULE, THE SACRIFICIAL POWDER OF THE APACHE; WITH REMARKS UPON SACRED POWDERS AND BREAD OFFERINGS IN GENERAL.

"Trifles not infrequently lead to important results. In every walk of science a trifle disregarded by incurious thousands has repaid the inquisitiveness of a single observer with unhoped-for knowledge."[247]

The taciturnity of the Apache in regard to all that concerns their religious ideas is a very marked feature of their character; probably no tribe with which our people have come in contact has succeeded more thoroughly preserving from profane inquiry a complete knowledge of matters relating to their beliefs and ceremonials. How much of this ignorance is to be attributed to interpreters upon whom reliance has necessarily been placed, and how much to the indisposition of the Apache to reveal anything concerning himself, it would be fruitless to inquire, but, in my own experience, when I first went among them in New Mexico and Arizona twenty-three years ago, I was foolish enough to depend greatly upon the Mexican captives who had lived among the Apache since boyhood, and who might be supposed to know exactly what explanation to give of every ceremony in which the Apache might engage. Nearly every one of these captives, or escaped captives, had married among the Apache, and had raised families of halfbreed children, and several of them had become more Apache than the Apache themselves. Yet I was time and again assured by several of these interpreters that the Apache had no religion, and even after I had made some progress in my investigations, at every turn I was met by the most contradictory statements, due to the interpreter's desire to inject his own views and not to give a frank exposition of those submitted by the Apache. Thus, an Apache god would be transmuted into either a "santo" or a "diablo," according to the personal bias of the Mexican who happened to be assisting me. "Assanutlije" assumed the disguise of "Maria Santissima," while ceremonies especially sacred and beneficent in the eyes of the savages were stigmatized as "brujeria" and "hechiceria" (witchcraft) in open defiance of the fact that the Apache have as much horror and dread of witches as the more enlightened of their brethren who in past ages suffered from their machinations in Europe and America. The interpreters had no intention to deceive; they were simply unable to disengage themselves from their own prejudices and their own ignorance; they could not, and they would not, credit the existence of any such thing as religion, save and excepting that taught them at their mothers' knees in the petty hamlets of Sonora and they still preserved hazy which and distorted recollections. One of the first things to be noticed among the Apache, in this connection, was the very general of buckskin. of little bags sometimes appearance sometimes plain, which were ordinarily ornamented. attached to the belts of the warriors, and of which they seemed to be especially careful.[248]

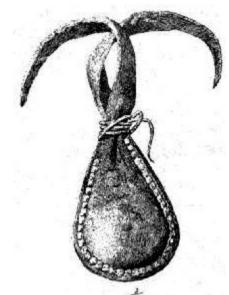


Fig. 433.—Bag containing hoddentin.

What follows in this chapter was not learned in an hour or a day, but after a long course of examination and a comparison of statements extracted from different authorities.

The bags spoken of revealed when opened a quantity of yellow colored flour or powder, resembling cornmeal, to which the Apache gave the name of "hoddentin," or "hadntin," the meaning of which word is "the powder or pollen of the tule," a variety of the cat-tail rush, growing in all the little ponds and cienegas of the Southwest.

I made it the touchstone of friendship that every scout or other Apache who wished for a favor at my hands should relate something concerning his religious belief. I did not care much what topic he selected; it might be myths, clan laws, war customs, medicine—anything he pleased, but it had to be something and it had to be accurate. Hoddentin having first attracted my attention, I very naturally made many of my first inquiries about it, and, while neglecting no opportunity for independent observation, drew about me the most responsible men and women, heard what each had

to say, carefully compared and contrasted it with the statements of the others, and now give the result.

I noticed that in the dances for the benefit of the sick the medicine-men in the intervals between chants applied this yellow powder to the forehead of the patient, then in form of a cross upon his breast, then in a circle around his couch, then upon the heads of the chanters and of sympathizing friends, and lastly upon their own heads and into their own mouths. There is a considerable difference in method, as medicine-men allow themselves great latitude, or a large "personal equation," in all their dealings with the supernatural. No Apache would, if it could be avoided, go on the warpath without a bag of this precious powder somewhere upon his person, generally, as I have said, attached to his ammunition belt. Whenever one was wounded, hurt, or taken sick while on a scout, the medicineman of the party would walk in front of the horse or mule ridden by the patient and scatter at intervals little pinches of hoddentin, that his path might be made easier. As was said to me: "When we Apache go on the warpath, hunt, or plant, we always throw a pinch of hoddentin to the sun, saying 'with the favor of the sun, or permission of the sun, I am going out to fight, hunt, or plant,' as the case may be, 'and I want the sun to help me.'"

I have noticed that the Apache, when worn out with marching, put a pinch of hoddentin on their tongues as a restorative.

"Hoddentin is eaten by sick people as a remedy."[249]

"Before starting out on the warpath, they take a pinch of hoddentin, throw it to the sun, and also put a pinch on their tongues and one on the crown of the head.... When they return, they hold a dance, and on the morning of that day throw pinches of hoddentin to the rising sun, and then to the east, south, west, and north, to the four winds."[250]

I am unable to assert that hoddentin is used in any way at the birth of a child; but I know that as late as 1886 there was not a babe upon the San Carlos reservation, no matter how tender its age, that did not have a small bag of hoddentin attached to its neck or dangling from its cradle. Neither can I assert anything about its use at time of marriage, because, among the Apache, marriage is by purchase, and attended with little, if any, ceremony. But when an Apache girl attains the age of puberty, among other ceremonies performed upon her, they throw hoddentin to the sun and strew it about her and drop on her head flour of the piñon, which flour is called by the Chiricahua Apache "nostchi," and by the Sierra Blanca Apache "opé."[251]

"Upon attaining the age of puberty, girls fast one whole day, pray, and throw hoddentin to the sun."[252] When an Apache dies, if a medicine-man be near, hoddentin is sprinkled upon the corpse. The Apache buried in the clefts of rocks, but the Apache-Mohave cremated. "Before lighting the fire the medicine-men of the Apache-Mohave put hoddentin on the dead person's breast in the form of a cross, on the forehead, shoulders, and scattered a little about."[253]

The very first thing an Apache does in the morning is to blow a little pinch of hoddentin to the dawn. The Apache worship both dawn and darkness, as well as the sun, moon, and several of the planets.

"When the sun rises we cast a pinch of hoddentin toward him, and we do the same thing to the moon, but not to the stars, saying 'Gun-ju-le, chigo-na-ay, si-chi-zi, gun-ju-le, inzayu, ijanale,' meaning 'Be good, O Sun, be good.' 'Dawn, long time let me live'; or, 'Don't let me die for a long time,' and at night, 'Gun-ju-le, chil-jilt, si-chi-zi, gun-ju-le, inzayu, ijanale,' meaning 'Be good, O Night; Twilight, be good; do not let me die.'" "In going on a hunt an Apache throws hoddentin and says 'Gun-ju-le, chigo-na-ay, cha-ut-si, ping, kladitza,' meaning 'Be good, O Sun, make me succeed deer to kill.'"[254]

The name of the full moon in the Apache language is "klegona-ay," but the crescent moon is called "tzontzose" and hoddentin is always offered to it.[255]

"Hoddentin is thrown to the sun, moon (at times), the morning star, and occasionally to the wagon."[256] "The Apache offer much hoddentin to 'Na-u-kuzze,' the Great Bear."[257] "Our custom is to throw a very small pinch of hoddentin at dawn to the rising sun."[258] "The women of the Chiricahua throw no hoddentin to the moon, but pray to it, saying: 'Gun-ju-le, klego-na-ay,' (be good, O Moon)."[259]

When the Apache plant corn the medicine-men bury eagleplume sticks in the fields, scatter hoddentin, and sing. When the corn is partially grown they scatter pinches of hoddentin over it.[260]

The "eagle-plume sticks" mentioned in the preceding paragraph suggests the "ke-thawn" mentioned by Matthews in "The Mountain Chant."[261]

"When a person is very sick the Apache make a great fire, place the patient near it, and dance in a circle around him and the fire, at the same time singing and sprinkling him with hoddentin in the form of a cross on head, breast, arms, and legs."[262]

In November, 1885, while at the San Carlos agency, I had an interview with Nantadotash, an old blind medicine-man of the Akañe or Willow gens, who had with him a very valuable medicine-hat which he refused to sell, and only with great

reluctance permitted me to touch. Taking advantage of his infirmity, I soon had a picture drawn in my notebook, and added giving the symbolism of all ornamentation attached. Upon discovering this, the old man became much excited, and insisted upon putting a pinch of hoddentin upon the drawing, and then recited a prayer, which I afterwards succeeded in getting verbatim. After the prayer was finished, the old man arose and marked with hoddentin the breast of his wife, of Moses, of Antonio, of other Apache present, and then of myself, putting a large pinch over my heart and upon each shoulder, and then placed the rest upon his own tongue. He explained that I had taken the "life" out of his medicine hat, and, notwithstanding the powers of his medicine, returned in less than a month with a demand for \$30 as damages. His hat never was the same after I drew it. My suggestion that the application of a little soap might wash away the clots of grease, soot, and earth adhering to the hat, and restore its pristine efficacy were received with the scorn due to the sneers of the scoffer.

"In time of much lightning, the Apache throw hoddentin and say: 'Gun-ju-le, ittindi,' be good, Lightning."[263]

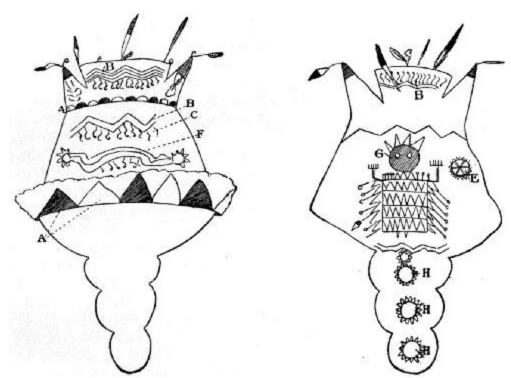


Fig. 434.—Nan-ta-do-tash's medicine hat.

Tzit-jizinde, "the Man who likes Everybody," who said he belonged to the Inoschujochin—Manzanita or Bearberry clan—showed me how to pray with hoddentin in time of lightning or storm or danger of any kind. Taking a small pinch in his fingers, he held it out at arm's length, standing up, and repeated his prayer, and then blew his breath hard. I was once with a party of Apache while a comet was visible. I called their attention to it, but they did not seem to care. On the other hand, Antonio told me that the "biggest dance" the Apache ever had was during the time that "the stars all fell out of the sky" (1833).

"The only act of a religious character which I observed ... was shortly after crossing the river they [i.e., the American officers] were met by a small party of the Indians, one of whom chalked a cross on the breast of each, with a yellow earth, which he carried in a satchel at his belt. Previous to doing so he muttered some words very solemnly with his

hands uplifted and eyes thrown upwards. Again, on arriving at the camp of the people, the chief and others in greeting them took a similar vow, touching thereafter the yellow chalked cross. Sonora may have furnished them with some of their notions of a Deity."[264]

"The yellow earth," seen by Dr. Smart was, undoubtedly, hoddentin, carried in a medicine bag at the belt of a medicine-man. Some years ago I went out with Al. Seiber and a small party of Apache to examine three of their "sacred caves" in the Sierra Pinal and Sierra Ancha. No better opportunity could have been presented for noting what they did. The very last thing at night they intoned a "medicine" song, and at early dawn they were up to throw a pinch of hoddentin to the east.

Moses and John, two of the Apache mentioned above, requested permission to go off in the mountains after deer and bear, supposed to be plentiful in the higher altitudes. Before leaving camp, Moses blew a pinch of hoddentin toward the sun, repeating his prayer for success, and ending it with a sharp, snappy "ek," as if to call attention. In one of the sacred caves visited on this trip, the Apache medicinemen assembled for the purpose of holding their snake dance. This I have never seen among the Apache, but that they celebrate it and that it is fully the equal of the repulsive rite which I have witnessed and noted among the Tusayan[265] I am fully assured. I may make reference to some of its features in the chapter upon animal worship and ophic rites.

From a multiplicity of statements, the following are taken: Concepcion had seen the snake dance over on the Carrizo, near Camp Apache; the medicine-men threw hoddentin upon the snakes. He said: "After getting through with the snake, the medicine-man suffered it to glide off, covered with the hoddentin, thrown by admiring devotees."

Mike Burns had no remembrance of seeing hoddentin thrown to the sun. He had seen it thrown to the snake, "in a kind of worship."

Nott and Antonio stated that "when they find that a snake has wriggled across the trail, especially the trail to be followed by a war party, they throw hoddentin upon the trail." Nott took a pinch of hoddentin, showed how to throw it upon the snake, and repeated the prayer, which I recorded.

Corbusier instances a remedy in use among the Tonto Apache. This consisted in applying a rattlesnake to the head or other part suffering from pain. He continues: "After a time the medicine-man rested the snake on the ground again, and, still retaining his hold of it with his right hand, put a pinch of yellow pollen into its mouth with his left, and rubbed some along its belly."[266]

"He then held his hand out to a man, who took a pinch of the powder and rubbed it on the crown of a boy's head. Yellow pollen treated in this manner is a common remedy for headache, and may frequently be seen on the crowns of the heads of men and boys."[267]

Hoddentin is used in the same manner as a remedy for headache among the San Carlos Apache, but the medicinemen apply a snake to the person of a patient only when their "diagnosis" has satisfied them that he has been guilty of some unkindness to a snake, such as stepping upon it, in which case they pretend that they can cure the man by applying to the part affected the portion of the reptile's body upon which he trampled.

The Apache state that when their medicine-men go out to catch snakes for their snake dance, they recite a prayer and lay their left hand, in which is some hoddentin, at the opening of the snake's den, through which the reptile must crawl, and, after a short time the snake will come out and allow himself to be handled.

Hoddentin is also offered to other animals, especially the bear, of which the Apache, like their congeners the Navajo, stand in great awe and reverence. When a bear is killed, the dance which is held becomes frenzied; the skin is donned by all the men, and much hoddentin is thrown, if it can be obtained. One of these dances which I saw in the Sierra Madre, Mexico, in 1883, lasted all night, without a moment's cessation in the singing and prancing of the participants.

A great deal of hoddentin is offered to the "ka-chu" (great or jack rabbit).[268]

The Apache medicine-man, Nakay-do-klunni, called by the whites "Bobbydoklinny," exercised great influence over his people at Camp Apache, in 1881. He boasted of his power to raise the dead, and predicted that the whites should soon be driven from the land. He also drilled the savages in a peculiar dance, the like of which had never been seen among them. The participants, men and women, arranged themselves in files, facing a common center, like the spokes of a wheel, and while thus dancing hoddentin was thrown upon them in profusion. This prophet or "doctor" was killed in the engagement in the Cibicu canyon, August 30, 1881.

In a description of the "altars" made by the medicine-men of the Apache-Yuma at or near Camp Verde, Arizona, it is shown that this sacred powder is freely used. Figures were drawn upon the ground to represent the deities of the tribe, and the medicine-men dropped on all, except three of them, a pinch of yellow powder (hoddentin) which was taken from a small buckskin bag. This powder was put upon the head, chest, or other part of the body of the patient.

Surgeon Corbusier, U. S. Army,[269] says that the ceremony just described was "a most sacred one and entered into for the purpose of averting the diseases with which the Apache at Camp Verde had been afflicted the summer previous."

I am not sure that the Apache-Yuma have not borrowed the use of hoddentin from the Apache. My reason for expressing this opinion is that I have never seen an Apache without a little bag of hoddentin when it was possible for him to get it, whereas I have never seen an Apache-Yuma with it except when he was about to start out on the warpath. The "altars" referred to by Corbusier are made also by the Apache, Navajo, Zuñi, and Tusayan. Those of the Apache, as might be inferred from their nomadic state, were the crudest; those of the Navajo, Zuñi, and Tusayan display a wonderful degree of artistic excellence. The altars of the Navajo have been described and illustrated by Dr. Washington Matthews, [270] and those of the Tusayan by myself.[271]

Moses Henderson, wishing me to have a profitable interview with his father, who was a great snake doctor among the Apache, told me that when he brought him to see me I should draw two lines across each other on his right foot, and at their junction place a bead of the chalchihuitl, the cross to be drawn with hoddentin. The old man would then tell me all he knew.

The Apache, I learned, at times offer hoddentin to fire, an example of pyrodulia for which I had been on the lookout, knowing that the Navajo have fire dances, the Zuñi the Feast of the Little God of Fire, and the Apache themselves are not ignorant of the fire dance.

Hoddentin seems to be used to strengthen all solemn compacts and to bind faith. I had great trouble with a very bright medicine-man named Na-a-cha, who obstinately refused to let me look at the contents of a phylactery which

he constantly wore until I let him know that I, too, was a medicine-man of eminence. The room in which we had our conversation was the quarters of the post surgeon, at that time absent on scout. The chimney piece was loaded with bottles containing all kinds of drugs and medicines. I remarked carelessly to Na-a-cha that if he doubted my powers I would gladly burn a hole through his tongue with a drop of fluid from the vial marked "Acid, nitric," but he concluded that my word was sufficient, and after the door was locked to secure us from intrusion he consented to let me open and examine the phylactery and make a sketch of its contents. To guard against all possible trouble, he put a pinch of hoddentin on each of my shoulders, on the crown of my head, and on my chest and back. The same performance was gone through with in his own case. He explained that hoddentin was good for men to eat, that it was good medicine for the bear, and that the bear liked to eat it. I thought that herein might be one clew to the reason why the Apache used it as a medicine. The bear loves the tule swamp, from which, in days primeval, he sallied out to attack the squaws and children gathering the tule powder or tule bulb. Poorly armed, as they then were, the Apache must have had great trouble in resisting him; hence they hope to appease him by offering a sacrifice acceptable to his palate. If acceptable to the chief animal god, as the bear seems to have been, as he certainly was the most dangerous, then it would have been also acceptable to the minor deities like the puma, snake, eagle, etc., and, by an easy transition, to the sun, moon, and other celestial powers. This opinion did not last long, as will be shown. From its constant association with all sacrifices and all acts of worship, hoddentin would naturally become itself sanctified and an object of worship, just as rattles, drums, standards, holy grails, etc., in different parts of the world have become fetichistic. I was not in the least surprised when I heard Moses Henderson reciting a prayer, part of which ran thus: "Hoddentin eshkin,

bi hoddentin ashi" ("Hoddentin child, you hoddentin I offer"), and to learn that it was a personification of hoddentin.

The fact that the myths of the Apache relate that Assanut-lije spilled hoddentin over the surface of the sky to make the Milky Way may be looked upon as an inchoate form of a calendar, just as the Aztecs transferred to their calendar the reed, rabbit, etc.

So constant is the appearance of hoddentin in ceremonies of a religious nature among the Apache that the expression "hoddentin schlawn" (plenty of hoddentin) has come to mean that a particular performance or place is sacred. Yet, strange to say, this sacred pollen of the tule is gathered without any special ceremony; at least, I noticed none when I saw it gathered, although I should not fail to record that at the time of which I speak the Apache and the Apache-Yuma were returning from an arduous campaign, in which blood had been shed, and everything they did—the bathing in the sweat lodges and the singing of the Apache and the plastering of mud upon their heads by the Apache-Yuma had a reference to the lustration or purgation necessary under such circumstances. Not only men but women may gather the pollen. When the tule is not within reach our cattail rush is used. Thus, the Chiricahua, confined at Fort Pickens, Florida, gathered the pollen of the cat-tail rush, some of which was given me by one of the women who gathered it.

Before making an examination into the meaning to be attached to the use of hoddentin, it is well to determine whether or not such a powder or anything analogous to it is to be found among the tribes adjacent.

THE "KUNQUE" OF THE ZUÑI AND OTHERS.

The term "kunque" as it appears in this chapter is one of convenience only. Each pueblo, or rather each set of pueblos, has its own name in its own language, as, for example, the people of Laguna and Acoma, who employ it in all their ceremonies as freely as do the Zuñi, call it in their tongue "hinawa." In every pueblo which I visited—and I visited them all, from Oraibi of Tusayan, on the extreme west, to Picuris, on the extreme east; from Taos, in the far north, to Isleta del Sur, in Texas—I came upon this kunque, and generally in such quantities and so openly exposed and so freely used that I was both astonished and gratified; astonished that after centuries of contact with the Caucasian the natives should still adhere with such tenacity to the ideas of a religion supposed to have been extirpated, and gratified to discover a lever which I could employ in prying into the meaning of other usages and ceremonials.

Behind the main door in the houses at Santa Clara, San Ildefonso, Picuris, Laguna, Acoma, San Felipe, Jemez, and other towns, there is a niche containing a bowl or saucer filled with this sacred meal, of which the good housewife is careful to throw a pinch to the sun at early dawn and to the twilight at eventide. In every ceremony among the Pueblos naturally enough, more particularly among those who have been living farthest from the Mexicans, the lavish scattering of sacred meal is the marked feature of the occasion. At the snake dance of the Tusayan, in 1881, the altars were surrounded with baskets of pottery and with flat plagues of reeds, which were heaped high with kunque. When the procession moved out from under the arcade and began to make the round of the sacred stone the air was white with meal, and in my imagination I could see that it was a procession of Druids circling about a "sacred stone" in Ireland previous to the coming of St. Patrick. When the priests threw the snakes down upon the ground it was within a circle traced with kungue, and soon the snakes were covered with the same meal flung upon them by the squaws. There was only one scalp left among the Tusayan in 1881, but there were several among the Zuñi, and one or two each at Acoma and Laguna. In every one of these towns kungue was offered to the scalps.

At the feast of the Little God of Fire among the Zuñi, in 1881, my personal notes relate that "the moment the head of the procession touched the knoll upon which the pueblo is built the mass of people began throwing kungue upon the Little God and those with him as well as on the ground in front of, beside, and behind them. This kungue was contained in sacred basket-shaped bowls of earthenware. The spectators kept the air fairly misty with clouds of the sacred kungue. This procession passed around the boundaries of the pueblo of Zuñi, stopping at eight holes in the ground for the purpose of enacting a ceremonial of consecration suggestive of the 'terminalia' of the Romans. They visited each of the holes, which were 18 inches deep and 12 inches square, with a sandstone slab to serve as a cover. Each hole was filled with kunque and sacrificial plumes. * * * 'Every morning of the year, when the sky is clear, at the rising of Lucero [the morning star], at the crowing of the cock, we throw corn flour [kunque] to the sun. I am never without my bag of kunque; here it is [drawing it from his belt]. Every Zuñi has one. We offer it to the sun for good rain and good crops."[272]

Subsequently Pedro went on to describe in detail a phallic dance and ceremony, in which there was a sort of divination. The young maiden who made the lucky guess was richly rewarded, while her less fortunate companions were presented with a handful of kunque, which they kept during the ensuing year. This dance is called "ky'áklu," and is independent of the great phallic dance occurring in the month of December. Pedro also stated that until very

recently the Zuñi were in the habit of celebrating a fire dance at Noche Buena (Christmas). There were four piles of wood gathered for the occasion, and upon each the medicine-men threw kunque in profusion. This dance, as Pedro described it, closely resembled one mentioned by Landa in his Cosas de Yucatan. High up on the vertical face of the precipice of Tâaiyalana there is a phallic shrine of the Zuñi to which I climbed with Mr. Frank Cushing. We found that the place had been visited by young brides who were desirous of becoming mothers. The offerings in every case included kunque.

In the account given in the National Tribune, Washington, District of Columbia, May 20, 1886, of the mode of life of the Zuñi woman Wehwa while in the national capital, and while engaged in the kirmes, we read:

She also strewed sacred corn meal along on her way to the theater to bring good luck to her and the other dancers. * * * She has gone from her comfortable room to pray in the street at daylight every morning, whatever the weather has been. * * * At such times she strews corn meal all around her until the front-door steps and the sidewalk are much daubed with dough. But this is not the corn meal in common use in the United States, but is sacred meal ground in Zuñi with sacred stones.[273]

So long a time has elapsed since any of the Pueblos have been on the warpath that no man can describe their actual war customs except from the dramatic ceremonial of their dances or from the stories told him by the "old men." The following from an eyewitness will therefore be of interest: "Before the Pueblos reached the heights they were ordered to scale they halted on the way to receive from their chiefs some medicine from the medicine bags which each of them carried about his person. This they rubbed upon their heart, as they said, to make it big and brave, and they also rubbed it upon other parts of their bodies and upon their rifles for the same purpose."[274]

The constant use of kunque by the different Pueblo tribes has been noticed from the first days of European contact. In the relation of Don Antonio de Espejo (1583) we are told that upon the approach of the Spaniards to the town of Zaguato, lying 28 leagues west of Zuñi, "a great multitude of Indians came forth to meete them, and among the rest their Caçiques, with so great demonstration of joy and gladnes, that they cast much meale of Maiz upon the ground for the horses to tread upon."[275]

I am under the impression that the ruins of this village are those near the ranch of Mr. Thomas V. Keam, at Keam's Canyon, Arizona, called by the Navajo "Talla-hogandi," meaning "singing house," in reference to the Spanish mission which formerly existed there. This village is, as I have hitherto shown, the ruin of the early pueblo of Awátubi.

In his poem descriptive of the conquest of New Mexico, entitled "Nueva Mejico," Alcala de Henares, 1610, Villagrá uses the following language:[276]

Passando à Mohoçe, Zibola, y Zuni,
Por cuias nobles tierras descubrimos,
Una gran tropa de Indios que venia,
Con cantidad harina que esparcian,
Sobre la gente toda muy apriessa,
Y entrando assi en los pueblos las mugeres
Dieron en arrojarnos tantá della,
Que dimos en tomarles los costales,
De donde resultò tener con ellas,
Unas carnestolendas bien reñidas.

It is gratifying to observe that the Spanish writer in the remote wilds of America struck upon an important fact in ethnology: that the throwing of "harina" or flour by the people of Tusayan (Mohoçe or Moqui), Cibola, and Zuñi (observe the odd separation of "Zibola" from either Moqui or Zuñi) was identical with the "carnestolendas" of Spain, in which, on Shrove Tuesday, the women and girls cover all the men they meet with flour. The men are not at all backward in returning the compliment, and the streets are at times filled with the farinaceous dust.

"Harina de maiz azul" is used by Mexicans in their religious ceremonies, especially those connected with the water deities.[277] The Peruvians, when they bathed and sacrificed to cure themselves of sickness, "untandose primero con Harina de Maiz, i con otras cosas, con muchas, i diversas ceremonias, i lo mismo hacen en los Baños."[278] The kungue of the Peruvians very closely resembled that of the Zuñi. We read that it was a compound of different-colored maize ground up with sea shells.[279] The Peruvians had a Priapic idol called Hua-can-qui, of which we read: "On offre à cette idole une corbeille ornée de plumes de diverses couleurs et remplie d'herbes odoriférantes; on y met aussi de la farine de mais que l'on renouvelle tous les mois, et les femmes se lavent la figure avec celle que l'on ôte, en accompagnant cette ablution de plusieurs cérémonies superstitieuses."[280]

The tribes seen on the Rio Colorado in 1540 by Alarcon "carry also certaine little long bagges about an hand broade tyed to their left arme, which serve them also instead of brasers for their bowes, full of the powder of a certaine herbe, whereof they make a certaine beverage."[281] We are at a loss to know what this powder was, unless hoddentin. The Indians came down to receive the son of the sun, as

Alarcon led them to believe him to be, in full gala attire, and no doubt neglected nothing that would add to their safety.

"Ils mirent dans leur bouche du maïs et d'autres semences, et les lancèrent vers moi en disant que c'était la manière dont ils faisaient les sacrifices au soleil."[282]

Kohl speaks of seeing inside the medicine wigwam, during the great medicine ceremonies of the Ojibwa, "a snow-white powder."[283] In an address delivered by Dr. W. J. Hoffman before the Anthropological Society of Washington, D. C., May 2, 1888, upon the symbolism of the Midē', Jes'sakkid, and Wâbeno of the Ojibwa of Minnesota, he stated in reply to a question from me that he had not been able to find any of the "snow-white powder" alluded to by Kohl in Kitchigami.[284]

In Yucatan, when children were baptized, one of the ceremonies was that the chac, or priest in charge, should give the youngster a pinch of corn meal, which the boy threw in the fire. These chacs were priests of the god who presided over baptism and over hunting.[285]

At the coronation of their kings the Aztecs had a sacred unction, and a holy water, drawn from a sacred spring, and "about his neck is tied a small gourd, containing a certain powder, which is esteemed a strong preservative against disease, sorcery, and treason."[286]

"At the entrance to one of the narrow defiles of the Cordilleras ... a large mass of rock with small cavities upon its surface, into which the Indians, when about to enter the pass, generally deposit a few glass beads, a handful of meal, or some other propitiatory offering to the 'genius' supposed to preside over the spot and rule the storm."

Again, "on receiving a plate of broth, an Indian, before eating, spills a little upon the ground; he scatters broadcast

a few pinches of the meal that is given him, and pours out a libation before raising the wine cup to his lips, as acts of thanksgiving for the blessings he receives."[287]

When Capt. John Smith was captured by the Pamunkey tribe of Virginia in 1607 he was taken to "a long house," where, on the morning following "a great grim fellow" came skipping in, "all painted over with coale, mingled with oyle. With most strange gestures and passions he began his invocation, and environed the fire with a circle of meale." This priest was followed by six others, who "with their rattles began a song, which ended, the chiefe priest layd downe five wheat cornes." This ceremony was apparently continued during the day and repeated on the following two days.[288] Capt. Smith's reception by the medicine-men of the Virginians is described by Picart.[289] These medicinemen are called "prêtres," and we are informed that they sang "des chants magiques." The grains of wheat ("grains de blé") were "rangez cinq à cinq."

Gomara tells us that in the religious festivals of Nicaragua there were used certain "taleguillas con polvos," but he does not tell what these "polvos" were; he only says that when the priests sacrifice themselves they cured the wounds, "curan las heridas con polvo de herbas ó carbon." [290]

While the Baron de Graffenreid was a prisoner in the hands of the Tuscarora, on the Neuse River, in 1711, the conjurer or high priest ("the priests are generally magicians and even conjure up the devil") "made two white rounds, whether of flour or white sand, I do not know, just in front of us."[291]

Lafitau says of one of the medicine-women of America: "Elle commença d'abord par préparer un espace de terrain qu'elle nétoya bien & qu'elle couvrit de farine, ou de cendre

très-bien bluttée (je ne me souviens pas exactement laquelle des deux)."[292]

In a description of the ceremonial connected with the first appearance of the catamenia in a Navajo squaw, there is no reference to a use of anything like hoddentin, unless it may be the corn which was ground into meal for a grand feast, presided over by a medicine-man.[293]

When a woman is grinding corn or cooking, and frequently when any of the Navajo, male or female, are eating, a handful of corn meal is put in the fire as an offering (to the sun).[294]

The Pueblos of New Mexico are described as offering sacrifices of food to their idols. "Los Indios del Norte tienan multitud de Idolos, en pequeños Adoratorios, donde los ponen de comer."[295]

Maj. Backus, U. S. Army, describes certain ceremonies which he saw performed by the Navajo at a sacred spring near Fort Defiance, Arizona, which seems to have once been a geyser:

I once visited it with three other persons and an Indian doctor, who carried with him five small bags, each containing some vegetable or mineral substance, all differing in color. At the spring each bag was opened and a small quantity of its contents was put into the right hand of each person present. Each visitor, in succession, was then required to kneel down by the spring side, to place his closed hand in the water up to his elbow, and after a brief interval to open his hand and let fall its contents into the spring. The hand was then slowly withdrawn and each one was then permitted to drink and retire.[296]

Columbus in his fourth voyage touched the mainland, going down near Brazil. He says:

In Cariay and the neighboring country there are great enchanters of a very fearful character. They would have given the world to prevent my remaining there an hour. When I arrived they sent me immediately two girls very showily dressed; the eldest could not be more than eleven years of age and the other seven, and both exhibited so much immodesty that more could not be expected from public women. They carried concealed about them a magic powder.[297]

The expedition of La Salle noticed, among the Indians on the Mississippi, the Natchez, and others, "todos los dias, que se detuvieren en aquel Pueblo, ponia la Cacica, encima de la Sepultura de Marle [i.e., a Frenchman who had been drowned], una Cestilla llena de Espigas de Maíz, tostado." [298]

"He showed me, as a special favor, that which give him his power—a bag with some reddish powder in it. He allowed me to handle it and smell this mysterious stuff, and pointed out two little dolls or images, which, he said, gave him authority over the souls of others; it was for their support that flour and water were placed in small birch-rind saucers in front."[299]

On page 286, narrative of the Jeannette Arctic expedition, Dr. Newcomb says: "One day, soon after New Year's, I was out walking with one of the Indians. Noticing the new moon, he stopped, faced it, and, blowing out his breath, he spoke to it, invoking success in hunting. The moon, he said, was 'Tyunne,' or ruler of deers, bears, seals, and walrus." The ceremony herein described I have no doubt was analogous in every respect to hoddentin-throwing. As the Indians

mentioned were undoubtedly Tinneh, my surmise seems all the more reasonable.[300]

Tanner relates that among the Ojibwa the two best hunters of the band had "each a little leather sack of medicine, consisting of certain roots pounded fine and mixed with red paint, to be applied to the little images or figures of the animals we wish to kill."[301]

"In the parish of Walsingham, in Surrey, there is or was a custom which seems to refer to the rites performed in honor of Pomona. Early in the spring the boys go round to the several orchards in the parish and whip the apple trees.... The good woman gives them some meal."[302]

Among the rustics of Great Britain down to a very recent period there were in use certain "love powders," the composition of which is not known, a small quantity of which had to be sprinkled upon the food of the one beloved.[303]

Attached to the necklace of human fingers before described, captured from one of the chief medicine-men of the Cheyenne Indians, is a bag containing a powder very closely resembling hoddentin, if not hoddentin itself.

It is said that the Asinai made sacrifice to the scalps of their enemies, as did the Zuñi as late as 1881. "Ofrecen á las calaveras pinole molido y de otras cosas comestibles."[304]

Perrot says the Indians of Canada had large medicine bags, which he calls "pindikossan," which, among other things, contained "des racines ou des poudres pour leur servir de médecines."[305]

In an article on the myth of Manibozho, by Squier, in American Historical Magazine Review, 1848, may be found an account of the adventures of two young heroes, one of whom is transferred to the list of gods. He commissioned his comrade to bring him offerings of a white wolf, a polecat, some pounded maize, and eagles' tails.

Laplanders sprinkle cow and calf with flour.[306]

Cameron met an old chief on the shores of Lake Tanganyika, of whom he says: "His forehead and hair were daubed with vermilion, yellow, and white powder, the pollen of flowers."
[307]

In the incantations made by the medicine-men of Africa, near the head of the Congo, to preserve his expedition from fire, Cameron saw the sacrifice of a goat and a hen, and among other features a use of powdered bark closely resembling hoddentin: "Scraping the bark off the roots and sticks, they placed it in the wooden bowl and reduced it to powder." The head medicine-man soon after "took up a handful of the powdered bark and blew some toward the sun and the remainder in the opposite direction."[308]

The magic powder, called "uganga," used as the great weapon of divination of the mganga, or medicine-men of some of the African tribes, as mentioned by Speke,[309] must be identical with the powder spoken of by Cameron.

Near the village of Kapéka, Cameron was traveling with a caravan in which the principal man was a half-breed Portuguese named Alvez. "On Alvez making his entry he was mobbed by women, who shrieked and yelled in honor of the event and pelted him with flour." This was Alvez's own home and all this was a sign of welcome.[310]

Speke describes a young chief wearing on his forehead "antelope horns, stuffed with magic powder to keep off the evil eye."[311]

After describing an idol, in the form of a man, in a small temple on the Lower Congo, Stanley says: "The people

appear to have considerable faith in a whitewash of cassava meal, with which they had sprinkled the fences, posts, and lintels of doors."[312]

"According to Consul Hutchinson (in his interesting work 'Impressions of Western Africa'), the Botikaimon [a medicine-man], previous to the ceremony of coronation, retires into a deep cavern, and there, through the intermediary of a 'rukaruka' (snake demon), consults the demon Maon. He brings back to the king the message he receives, sprinkles him with a yellow powder called 'tsheoka,' and puts upon his head the hat his father wore." [313] In a note, it is stated that: "Tsheoka is a vegetable product, obtained, according to Hutchinson, by collecting a creamy coat that is found on the waters at the mouth of some small rivers, evaporating the water, and forming a chalky mass of the residue." [314] Schultze says[315] that the Congo negroes "appease the hurricane" by "casting meal into the air."

The voudoo ceremonies of the negroes of New Orleans, which would seem to have been transplanted from Africa, include a sprinkling of the congregation with a meal which has been blessed by the head medicine-man or conjurer.

At the feast of Huli, at the vernal equinox (our April fool's day), the Hindu throw a purple powder (abir) upon each other with much sportive pleasantry. A writer in "Asiatick Researches"[316] says they have the idea of representing the return of spring, which the Romans called "purple."

During the month of Phalgoonu, there is a festival in honor of Krishna, when the "Hindus spend the night in singing and dancing and wandering about the streets besmeared with the dolu (a red) powder, in the daytime carrying a quantity of the same powder about with them, which, with much noise and rejoicing, they throw over the different

passengers they may meet in their rambles. Music, dancing, fireworks, singing, and many obscenities take place on this occasion."[317]

On pages 434-435 of my work, "Scatalogic Rites of all Nations," are to be found extracts from various authorities in regard to the Hindu feast of Holi or Hulica, in which this statement occurs: "Troops of men and women, wreathed with flowers and drunk with bang, crowd the streets, carrying sacks full of bright-red vegetable powder. With this they assail the passers-by, covering them with clouds of dust, which soon dyes their clothes a startling color."

"Red powder (gulál) is a sign of a bad design of an adulterous character. During the Holi holidays, the Maháráj throws gulál on the breasts of female and male devotees."
[318]

"In India, the devotees throw red powder on one another at the festival of the Huli, or vernal equinox. This red powder, the Hindoos say, is the imitation of the pollen of plants, the principle of fructification, the flower of the plant."[319]

The women of the East Indies (Brahmins), on the 18th of January, celebrate a feast in honor of the goddess Parvati: "Leur but est d'obtenir une longue vie pour leurs maris, & qu'elles ne deviennent jamais veuves. Elles font une Image de Parvati avec de la farine de riz & du grain rouge qu'elles y mêlent; elles l'ornent d'habits & de fleurs & après l'avoir ainsi servie pendant neuf jours, elles la portent le dixiéme dans un Palenquin hors de la Ville. Une foule de femmes mariées la suivent, on la jette ensuite dans un des étangs sacrez, où on la laisse, & chacune s'en retourne chez elle."

Speaking of the methods in use among the Lamas for curing disease, Rev. James Gilmour says: "Throwing about small pinches of millet seed is a usual part of such a service."[321]

Dr. W. W. Rockhill described to me a Tibetan festival, which includes a procession of the God of Mercy, in which procession there are masked priests, holding blacksnake whips in their hands, and carrying bags of flour which they throw upon the people.

The use of these sacred powders during so many different religious festivals and ceremonies would seem to resemble closely that made by the Apache of hoddentin and the employment of kunque by the Zuñi and others; and from Asia it would seem that practices very similar in character found their way into Europe. Of the Spanish witches it is related:

When they entered people's houses they threw a powder on the faces of the inmates, who were thrown thereby into so deep a slumber that nothing could wake them, until the witches were gone.... Sometimes they threw these powders on the fruits of the field and produced hail which destroyed them. On these occasions the demon accompanied them in the form of a husbandman, and when they threw the powders they said:

"Polvos, polvos, Pierda se tado, Queden los nuestros, Y abrasense otros."[322]

Higgins says: "The flour of wheat was the sacrifice offered to the $X\rho\eta\varsigma$ or Ceres in the $E\dot{v}\chi\check{\alpha}\rho\iota\sigma\tau(\alpha$."[323]

What relation these powders have had to the "carnestolendas" of the Spanish and Portuguese, already alluded to, and the throwing of "confetti" by the Italians, which is a modification, it would be hard to say. Some relation would appear to be suggested.

USE OF POLLEN BY THE ISRAELITES AND EGYPTIANS.

There are some suggestions of a former use of pollen among the Israelites and Egyptians.

Manna, which we are assured was at one time a source of food to the Hebrews, was afterward retained as an offering in the temples. Forlong, however, denies that it ever could have entered into general consumption. He says:

Manna, as food, is an absurdity, but we have the well-known produce of the desert oak or ash—Fraxinus.... An omer of this was precious, and in this quantity, at the spring season, not difficult to get; it was a specially fit tribute to be "laid up" before any Phallic Jah, as it was the pollen of the tree of Jove and of Life, and in this sense the tribe lived spiritually on such "spiritual manna" as this god supplied or was supplied with.[324]

The detestation in which the bean was held by the highcaste people of Egypt does not demonstrate that the bean was not an article of food to a large part of the population, any more than the equal detestation of the occupation of swineherd would prove that none of the poor made use of swine's flesh. The priesthood of Egypt were evidently exerting themselves to stamp out the use of a food once very common among their people, and to supersede it with wheat or some other cereal. They held a man accursed who in passing through a field planted with beans had his clothing soiled with their pollen. Speke must have encountered a survival of this idea when he observed in equatorial Africa, near the sources of the Nile, and among people whose features proclaimed their Abyssinian origin, the very same aversion. He was unable to buy food, simply because he and some of his followers had eaten "the bean called maharagué." Such a man, the natives believed, "if he tasted the products of their cows, would destroy their cattle."[325]

One other point should be dwelt upon in describing the kunque of the Zuñi, Tusayan, and other Pueblos. It is placed upon one of the sacred flat baskets and packed down in such a manner that it takes the form of one of the old-fashioned elongated cylindro-conical cheeses. It should be noted also that by something more than a coincidence this form was adhered to by the peoples farther to the south when they arranged their sacred meal upon baskets.

At the festival of the god Teutleco the Aztecs made "de harina de maiz un montecillo muy tupido de la forma de un queso."[326] This closely resembles the corn meal heaps seen at the snake dance of the Tusayan.

The Zuñi, in preparing kunque or sacred meal for their religious festivals, invariably made it in the form of a pyramid resting upon one of their flat baskets. It then bore a striking resemblance to the pyramids or phalli which the Egyptians offered to their deities, and which Forlong thinks must have been "just such Lingham-like sweet-bread as we still see in Indian Sivaic temples."[327] Again, "the orthodox Hislop, in his Two Babylons, tells us that 'bouns,' buns, or bread offered to the gods from the most ancient times were similar to our 'hotcross' buns of Good Friday, that ... the buns known by that identical name were used in the worship of the Queen of Heaven, the goddess Easter (Ishtar or Astarti) as early as the days of Kekrops, the founder of Athens, 1500 years B. C."[328]

Forlong[329] quotes Capt. Wilford in Asiatick Researches, vol. 8, p. 365, as follows:

When the people of Syracuse were sacrificing to goddesses, they offered cakes called *mulloi*, shaped like the female organ; and Dulare tells us that the male organ was similarly symbolised in pyramidal cakes at Easter by the pious Christians of Saintogne, near Rochelle, and handed about from house to house; that even in his day the festival of Palm Sunday was called *La Fête des Pinnes*, showing that this fête was held to be on account of both organs, although, of course, principally because the day was sacred to the palm, the ancient tree Phallus.... We may believe that the Jewish cakes and show bread were also emblematic.

Mr. Frank H. Cushing informs me that there is an annual feast among the Zuñi in which are to be seen cakes answering essentially to the preceding description.

HODDENTIN A PREHISTORIC FOOD.

The peculiar manner in which the medicine-men of the Apache use the hoddentin (that is, by putting a pinch upon their own tongues); the fact that men and women make use of it in the same way, as a restorative when exhausted; its appearance in myth in connection with Assanutlije, the goddess who supplied the Apache and Navajo with so many material benefits, all combine to awaken the suspicion that in hoddentin we have stumbled upon a prehistoric food now reserved for sacrificial purposes only. That the underlying idea of sacrifice is a food offered to some god is a proposition in which Herbert Spencer and W. Robertson Smith concur. In my opinion, this definition is incomplete; a perfect sacrifice is that in which a prehistoric food is offered to a god, and, although in the family oblations of everyday life we meet with the food of the present generation, it would not be difficult to show that where the whole

community unites in a function of exceptional importance the propitiation of the deities will be effected by foods whose use has long since faded away from the memory of the laity.

The sacred feast of stewed puppy and wild turnips forms a prominent part of the sun dance of the Sioux, and had its parallel in a collation of boiled puppy (catullus), of which the highest civic and ecclesiastical dignitaries of pagan Rome partook at stated intervals.

The reversion of the Apache to the food of his ancestors the hoddentin—as a religious offering has its analogue in the unleavened bread and other obsolete farinaceous products which the ceremonial of more enlightened races has preserved from oblivion. Careful consideration of the narrative of Cabeza de Vaca sustains this conclusion. In the western portion of his wanderings we learn that for from thirty to forty days he and his comrades passed through tribes which for one-third of the year had to live on "the powder of straw" (on the powder of bledos), and that afterwards the Spaniards came among people who raised corn. At that time, Vaca, whether we believe that he ascended the Rio Concho or kept on up the Rio Grande, was in a region where he would certainly have encountered the ancestors of our Apache tribe and their brothers the Navajo. The following is Herrera's account of that part of Vaca's wanderings: "Padeciendo mucha hambre en treinta i quatro Jornadas, pasando por una Gente que la tercera parte del Año comen polvos de paja, i los huvieron de comer, por haver llegado en tal ocasion."[330]

This powder (polvo) of paja or grass might at first sight seem to be grass seeds; but why not say "flour," as on other occasions? The phrase is an obscure one, but not more obscure than the description of the whole journey. In the earlier writings of the Spaniards there is ambiguity because the new arrivals endeavored to apply the names of their own plants and animals to all that they saw in the western continent. Neither Castañeda nor Cabeza de Vaca makes mention of hoddentin, but Vaca does say that when he had almost ended his journey: "La côte ne possède pas de maïs; on n'y mange que de la poudre de paille de blette." "Blette" is the same as the Spanish "bledos."[331] "Nous parvînmes chez une peuplade qui, pendant le tiers de l'année, ne vit que de poudre de paille." "We met with a people, who the third part of the yeere eate no other thing save the powder of straw."[332]

Davis, who seems to have followed Herrera, says: "These Indians lived one-third of the year on the powder of a certain straw.... After leaving this people they again arrived in a country of permanent habitations, where they found an abundance of maize.... The inhabitants gave them maize both in grain and flour."[333]

The Tusayan Indians were formerly in the habit of adding a trifle of chopped straw to their bread, but more as our own bakers would use bran than as a regular article of diet.

Barcia[334] makes no allusion to anything resembling hoddentin or "polvos de bledos" in his brief account of Vaca's journey. But Buckingham Smith, in his excellent translation of Vaca's narrative, renders "polvos de paja" thus: "It was probably the seed of grass which they ate. I am told by a distinguished explorer that the Indians to the west collect it of different kinds and from the powder make bread, some of which is quite palatable." And for "polvos de bledos": "The only explanation I can offer for these words is little satisfactory. It was the practice of the Indians of both New Spain and New Mexico to beat the ear of young maize, while in the milk, to a thin paste, hang it in festoons in the sun, and, being thus dried, was preserved for winter use."

This explanation is very unsatisfactory. Would not Vaca have known it was corn and have said so? On the contrary, he remarks in that very line in Smith's own translation: "There is no maize on the coast."

The appearance of all kinds of grass seeds in the food of nearly all the aborigines of our southwestern territory is a fact well known, but what is to be demonstrated is the extensive use of the "powder" of the tule or cat-tail rush. Down to our day, the Apache have used not only the seeds of various grasses, but the bulb of the wild hyacinth and the bulb of the tule. The former can be eaten either raw or cooked, but the tule bulb is always roasted between hot stones. The taste of the hyacinth bulb is somewhat like that of raw chestnuts. That of the roasted tule bulb is sweet and not at all disagreeable.[335]

Father Jacob Baegert[336] enumerates among the foods of the Indians of southern California "the roots of the common reed" (i.e., of the tule).

Father Alegre, speaking of the tribes living near the Laguna San Pedro,[337] in latitude 28° north—two hundred leagues north of the City of Mexico—says that they make their bread of the root, which is very frequent in their lakes, and which is like the plant called the "anea" or rush in Spain. "Forman el pan de una raiz muy frecuente en sus lagunas, semejante á las que llaman aneas en España."[338]

The Indians of the Atlantic Slope made bread of the bulb of a plant which Capt. John Smith[339] says "grew like a flag in marshes." It was roasted and made into loaves called "tuckahoe."[340]

Kalm, in his Travels in North America,[341] says of the tuckahoe:

It grows in several swamps and marshes and is commonly plentiful. The hogs greedily dig up its roots with their noses in such places, and the Indians of Carolina likewise gather it in their rambles in the woods, dry it in the sun, grind, and make bread of it. Whilst the root is fresh it is harsh and acrid, but, being dried, it loses the greater part of its acrimony. To judge by these qualities, the tuckahoe may very likely be the Arum virginianum.

The Shoshoni and Bannock of Idaho and Montana eat the tule bulb.[342]

Something analogous to hoddentin is mentioned by the chronicler of Drake's voyage along the California coast about A. D. 1540. Speaking of the decorations of the chiefs of the Indians seen near where San Francisco now stands, he says another mark of distinction was "a certain downe, which groweth up in the countrey upon an herbe much like our lectuce, which exceeds any other downe in the world for finenesse and beeing layed upon their cawles, by no winds can be removed. Of such estimation is this herbe amongst them that the downe thereof is not lawfull to be worne, but of such persons as are about the king, ... and the seeds are not used but onely in sacrifice to their gods."[343]

Mr. Cushing informs me that hoddentin is mentioned as a food in the myths of the Zuñi under the name of oneya, from oellu, "food."

In Kamtchatka the people dig and cook the bulbs of the Kamtchatka lily, which seems to be some sort of a tuber very similar to that of the tule.

"Bread is now made of rye, which the Kamtchadals raise and grind for themselves; but previous to the settlement of the country by the Russians the only native substitute for bread was a sort of baked paste, consisting chiefly of the grated tubers of the purple Kamtchatkan lily."[344]

HODDENTIN THE YIAUHTLI OF THE AZTECS.

There would seem to be the best of reason for an identification of hoddentin with the "yiauhtli" which Sahagun and Torquemada tell us was thrown by the Aztecs in the faces of victims preparatory to sacrificing them to the God of Fire, but the explanation given by those authors is not at all satisfactory. The Aztecs did not care much whether the victim suffered or not; he was sprinkled with this sacred powder because he had assumed a sacred character.

Padre Sahagun[345] says that the Aztecs, when about to offer human sacrifice, threw "a powder named 'yiauhtli' on the faces of those whom they were about to sacrifice, that they might become deprived of sensation and not suffer much pain in dying."

In sacrificing slaves to the God of Fire, the Aztec priests "tomaban ciertos polvos de una semilla, llamada Yauhtli, y polvoreaban las caras con ellas, para que perdiesen el sentido, y no sintiesen tanto la muerte cruel, que las daban."[346]

Guautli, generally spelled "yuautli," one of the foods paid to Montezuma as tribute, may have been tule pollen. Gallatin says: "I can not discover what is meant by the guautli. It is interpreted as being *semilla de Bledo*; but I am not aware of any other native grain than maize having been, before the introduction of European cereales, an article of food of such general use, as the quantity mentioned seems to indicate." [347]

Among the articles which the king of Atzapotzalco compelled the Aztecs to raise for tribute is mentioned

"BLEDOS" OF ANCIENT WRITERS—ITS MEANING.

Lafitau[349] gives a description of the Iroquois mode of preparing for the warpath. He says that the Iroquois and Huron called war "n'ondoutagette" and "gaskenragette." "Le terme *Ondouta* signifie le duvet qu'on tire de l'épy des Roseaux de Marais & signifie aussi la plante toute entiere, dont ils se servent pour faire les nattes sur quoi ils couchent, de sorte qu'il y a apparence qu'ils avoient affecté ce terme pour la Guerre, parce que chaque Guerrier portoit avec soy sa natte dans ces sortes d'expeditions."

This does not seem to be the correct explanation. Rather, it was because they undoubtedly made some sacrificial meal of this "duvet," or pollen, and used it as much as the Apache do hoddentin, their sacred meal made of the pollen of the tule, which is surely a species of "roseaux de marais."

The great scarcity of corn among the people passed while en route to Cibola is commented upon in an account of Coronado's expedition to Cibola, in Coleccion de Documentos Inéditos, relativos al descubrimiento, conquista y colonizacion de las posesiones Españolas de América y Oceanía.[350]

We are also informed[351] that the people of Cibola offered to their idols "polbos amarillos de flores."

Castañeda speaks of the people beyond Chichilticale making a bread of the mesquite which kept good for a whole year. He seems to have been well informed regarding the vegetable foods of the tribes passed through by Coronado's expedition.[352]

That the "blettes" or "bledos" did not mean the same as grass is a certainty after we have examined the old writers, who each and all show that the bledos meant a definite kind of plant, although exactly what this plant was they fail to inform us. It can not be intended for the sunflower, which is mentioned distinctly by a number of writers as an article of diet among the Indians of the Southwest.[353]

TZOALLI.

An examination of the Spanish writers who most carefully their observations transmitted the religious nogu ceremonies of the Aztecs and other nations in Mexico and South America brings out two most interesting features in this connection. The first is that there were commemorative feasts of prehistoric foods, and the second that one or more of these foods has played an important part in the religion of tribes farther north. The first of these foods is the "tzoalli," which was the same as "bledos," which latter would seem beyond question to have been hoddentin or yiauhtli. Brasseur de Bourbourg's definition simply states that the tzoalli was a compound of leguminous grains peculiar to Mexico and eaten in different ways: "Le Tzohualli était un composé de graines légumineuses particulières au Mexique, qu'on mangeait de diverses manières."[354]

In the month called Tepeilhuitl the Aztecs made snakes of twigs and covered them with dough of bledos (a kind of grain or hay seed). Upon these they placed figures, representing mountains, but shaped like young children.[355] This month was the thirteenth on the Mexican calendar, which began on our February 1. This would put it October 1, or thereabout.

Squier cites Torquemada's description of the sacrifices called Ecatotontin, offered to the mountains by the

Mexicans. In these they made figures of serpents and children and covered them with "dough," named by them tzoalli, composed of the seeds of bledos.[356]

A dramatic representation strongly resembling those described in the two preceding paragraphs was noted among the Tusayan of Arizona by Mr. Taylor, a missionary, in 1881, and has been mentioned at length in The Snake Dance of the Moquis. Clavigero relates that the Mexican priests "all eat a certain kind of gruel which they call *Etzalli*." [357]

Torquemada relates that the Mexicans once each year made an idol or statue of Huitzlipotchli of many grains and the seeds of bledos and other vegetables which they kneaded with the blood of boys who were sacrificed for the purpose. "Juntaban muchos granos y semilla de Bledos, y otras legumbres, y molianlas con mucha devocion, y recato, y de ellas amasaban, y formaban la dicha Estatua, del tamaño y estatura de un Hombre. El licor, con que se resolbian y desleian aquellas harinas era sangre de Niños, que para este fin se sacrificaban."[358]

It is remarkable the word "maiz" does not occur in this paragraph. Huitzlipotchli being the God of War, it was natural that the ritual devoted to his service should conserve some, if not all, of the foods, grains, and seeds used by the Mexicans when on the warpath in the earliest days of their history; and that this food should be made into a dough with the blood of children sacrificed as a preliminary to success is also perfectly in accordance with all that we know of the mode of reasoning of this and other primitive peoples. Torquemada goes on to say that this statue was carried in solemn procession to the temple and idol of Huitzlipotchli and there adorned with precious jewels (chalchihuitl), embedded in the soft mass. Afterward it was carried to the temple of the god Paynalton, preceded by a

priest carrying a snake in the manner that the priests in Spain carried the cross in the processions of the church. "Con una Culebra mui grande, y gruesa en las manos, tortuosa, y con muchas bueltas, que iba delante, levantada en alto, á manera de Cruz, en nuestras Procesiones."[359] This dough idol, he says, was afterwards broken into "migajas" (crumbs) and distributed among the males only, boys as well as men, and by them eaten after the manner of communion; "este era su manera de comunion."[360] Herrera, speaking of this same idol of Vitzliputzli, as he calls him, says it was made by the young women of the temple, of the flour of bledos and of toasted maize, with honey, and that the eyes were of green, white, or blue beads, and the teeth of grains of corn. After the feast was over, the idol was broken up and distributed to the faithful, "á manera de comunion." "Las Doncellas recogidas en el templo, dos Dias antes de la Fiesta, amasaban harina de Bledos, i de Maiz tostado, con miel, y de la masa hacian un Idolo grande, con los ojos de cuentas grandes, verdes, açules, ò blancas; i por dientes granos de maiz."[361]

H. Bancroft speaks of the festival in honor of Huitzilopochtli, "the festival of the wafer or cake." He says: "They made a cake of the meal of bledos, which is called which was afterward divided in a communion.[362] Diego Duran remarks that at this feast the chief priest carried an idol of dough called "tzoally," which is made of the seeds of bledos and corn made into a mass with honey.[363] "Un ydolo de masa, de una masa que llaman tzoally, la cual se hace de semilla de bledos y maiz amasado con miel." This shows that "bledos" and "maiz" were different things.[364] A few lines farther on Duran tells us that this cake, or bread, was made by the nuns of the temple, "las mozas del recogimiento de este templo," and that they ground up a great quantity of the seed of bledos, which they call huauhtly, together with toasted maize.

"Molian mucha cantidad de semilla de bledos que ellos llaman huauhtly juntamente con maiz tostado."[365] He then shows that the "honey" (miel) spoken of by the other writers was the thick juice of the maguey. "Despues de molido, amasabanlo con miel negra de los magueis."

Acosta describes a Mexican feast, held in our month of May, in which appeared an idol called Huitzlipotchli, made of "mays rosty," "semence de blettes," and "amassoient avec du miel."[366]

In the above citations it will be seen that huauhtly or yuauhtli and tzoally were one and the same. We also find some of the earliest if not the very earliest references to the American popped corn.

That the Mexicans should have had such festivals or feasts in honor of their god of battles is no more extraordinary than that in our own country all military reunions make it a point to revert to the "hard tack" issued during the campaigns in Virginia and Tennessee. Many other references to the constant use as a food, or at least as a sacrificial food, of the bledos might be supplied if needed. Thus Diego Duran devotes the twelfth chapter of his third book to an obscure account of a festival among the Tepanecs, in which appeared animal gods made of "masa de semilla de bledos," which were afterwards broken and eaten.

Torquemada speaks of such idols employed in the worship of snakes and mountains.[367] In still another place this authority tells us that similar figures were made and eaten by bride and groom at the Aztec marriage ceremony.[368]

The ceremonial manner in which these seeds were ground recalls the fact that the Zuñi regard the stones used for grinding kunque as sacred and will not employ them for any other purpose.

Idols made of dough much after the fashion of the Aztecs are to be found among the Mongols. Meignan speaks of seeing "an idol, quite open to the sky and to the desert, representing the deity of travelers. It was made of compressed bread, covered over with some bituminous

substance, and perched on a horse of the same material, and held in its hand a lance in Don Quixote attitude. Its horrible features were surmounted with a shaggy tuft of natural hair. A great number of offerings of all kinds were scattered on the ground all around. Five or six images, formed also of bread, were bending in an attitude of prayer before the deity."[369]

Dr. Edwin James, the editor of Tanner's Narrative,[370] cites the "Calica Puran" to show that medicinal images are employed by the people of the East Indies when revenge is sought upon an enemy; "water must be sprinkled on the meal or earthen victim which represents the sacrificer's enemy."

In those parts of India where human sacrifice had been abolished, a substitutive ceremony was practiced "by forming a human figure of flour-paste, or clay, which they carry into the temples, and there cut off its head or mutilate it, in various ways, in presence of the idols."[371]

Gomara describes the festival in honor of the Mexican God of Fire, called "Xocothuecl," when an idol was used made of every kind of seed and was then enwrapped in sacred blankets to keep it from breaking. "Hacian aquella noche un ídolo de toda suerte de semillas, envolvíanlo en mantas benditas, y liábanlo, porque no se deshiciese."[372]

These blessed blankets are also to be seen at the Zuñi feast of the Little God of Fire, which occurs in the month of December. It is a curious thing that the blessed blankets of the Zuñi are decorated with the butterfly, which appeared upon the royal robes of Montezuma.

What other seeds were used in the fabrication of these idols is not very essential to our purpose, but it may be pointed out that one of them was the seed of the "agenjo," which

was the "chenopodium" or "artemisia," known to us as the "sagebrush."

Of the Mexicans we learn from a trustworthy author: "Tambien usaban alguna manera de comunion ó recepcion del sacramento, y es que hacian unos idolitos chiquitos de semilla de bledos ó cenizos, ó de otras yerbas, y ellos mismos se los recibian, como cuerpo ó memoria de sus dioses."[373]

Mendieta wrote his Historia Eclesiástica Indiana in 1596, "al tiempo que esto escribo (que es por Abril del año de noventa y seis)"[374] and again,[375] "al tiempo que yo esto escribo."

The Mexicans, in the month of November, had a festival in honor of Tezcatlipuca. "Hacian unos bollos de masa de maíz y semejante de agenjos, aunque son de otra suerte que los de acá, y echábanlos á cocer en ollas con agua sola. Entre tanto que hervian y se cocian los bollos, tañian los muchachos un atabal ... y después comíanselos con gran devocion."[376]

Gomara's statement, that while these cakes of maize and wormwood seed were cooking the young men were beating on drums, would find its parallel in any account that might be written of the behavior of the Zuñi, while preparing for their sacred feasts. The squaws grind the meal to be used on these occasions to the accompaniment of singing by the medicine-men and much drumming by a band of assistants selected from among the young men and boys.

Mr. Francis La Flèche, a nearly full-blood Omaha Indian, read before the Anthropological Society of Washington, D. C., in 1888, a paper descriptive of the funeral customs of his people, in which he related that when an Indian was supposed to be threatened with death the medicine-men

would go in a lodge sweat-bath with him and sing, and at the same time "pronouncing certain incantations and sprinkling the body of the client with the powder of the artemisia, supposed to be the food of the ghosts."[377]

To say that a certain powder is the food of the ghosts of a tribe is to say indirectly that the same powder was once the food of the tribe's ancestors.

The Peruvians seem to have made use of the same kind of sacrificial cakes kneaded with the blood of the human victim. We are told that in the month of January no strangers were allowed to enter the city of Cuzco, and that there was then a distribution of corn cakes made with the blood of the victim, which were to be eaten as a mark of alliance with the Inca. "Les daban unos Bollos de Maíz, con sangre de el sacrificio, que comian, en señal de confederacion con el Inga."[378]

Balboa says that the Peruvians had a festival intended to signalize the arrival of their young men at manhood, in which occurred a sort of communion consisting of bread kneaded by the young virgins of the sun with the blood of victims. This same kind of communion was also noted at another festival occurring in our month of September of each year. ("Un festin composé de pain pétri par les jeunes vierges du Soleil avec le sang des victimes."[379]) There were other ceremonial usages among the Aztecs, in which the tule rush itself, "espadaña," was employed, as at childbirth, marriage, the festivals in honor of Tlaloc, and in the rough games played by boys. It is possible that from being a prehistoric food the pollen of the tule, or the plant which furnished it, became associated with the idea of sustenance, fertility, reproduction, and therefore very properly formed part of the ritual necessary in weddings or connected with the earliest hours of a child's life, much as rice has been used so freely in other parts of the world.[380]

Among the Aztecs the newly born babe was laid upon fresh green tule rushes, with great ceremony, while its name was given to it.[380]

Gomara says that the mats used in the marriage ceremonies of the Aztecs were made of tules. "Esteras verdes de espadañas."[381]

"They both sat down upon a new and curiously wrought mat, which was spread in the middle of the chamber close to the fire." The marriage bed was made "of mats of rushes, covered with small sheets, with certain feathers, and a gem of chalchihuitl in the middle of them."[382]

The third festival of Tlaloc was celebrated in the sixth month, which would about correspond to our 6th of June. [383] But there was another festival in honor of the Tlaloc, which seems very hard to understand. A full description is given by Bancroft.[384] To celebrate this it was incumbent upon the priests to cut and carry to the temples bundles of the tule, which were woven into a sacred mat, after which there was a ceremonial procession to a tule swamp in which all bathed.

The Aztecs, like the Apache, had myths showing that they sprang originally from a reed swamp. There was an Aztec god, Napatecutli, who was the god of the tule and of the mat-makers.[385] This rush was also strewn as part of several of their religious ceremonies.

Fosbrooke[386] has this to say about certain ceremonies in connection with the churches in Europe: "At certain seasons the Choir was strewed with hay, at others with sand. On Easter sabbath with ivy-leaves; at other times with rushes." He shows that hay was used at Christmas and the vigil of All Saints, at Pentecost, Athelwold's Day, Assumption of the Blessed Virgin, and Ascension, etc.

The Mexican populace played a game closely resembling our "blind man's buff" in their seventeenth month, which was called Tititl and corresponded to the winter solstice. In this game, called "nechichiquavilo," men and boys ran through the streets hitting every one whom they met with small bags or nets ("taleguillas ó redecillas") filled with tule powder or fine paper ("llenas de flor de las espadañas ó de algunos papeles rotos").[387]

The same thing is narrated by other early Spanish writers upon Mexico.

In the myths of Guatemala it is related that there were several distinct generations of men. The first were made of wood, without heart or brains, with worm-eaten feet and hands. The second generation was an improvement upon this, and the women are represented as made of tule. "Las mugeres fueron hechas de corazon de espadaña."[388]

Picart, enumerating the tree gods of the Romans, says that they had deified "les Roseaux pour les Rivieres."[389]

GENERAL USE OF THE POWDER AMONG INDIANS.

This very general dissemination among the Indians of the American continent of the sacred use of the powder of the tule, of images, idols, or sacrificial cakes made of such prehistoric foods, certainly suggests that the Apache and the Aztecs, among whom they seem to have been most freely used on ceremonial occasions, were invaders in the country they respectively occupied, comparatively recent in their arrival among the contiguous tribes like the Zuñi and Tusayan who on corresponding occasions offered to their gods a cultivated food like corn. The Tlascaltec were known in Mexico as the "bread people," possibly because they had

been acquainted with the cultivation of the cereals long before the Aztecs. Similarly, there was a differentiation of the Apache from the sedentary Pueblos. The Apache were known to all the villages of the Pueblos as a "corn-buying tribe," as will presently be shown. It is true that in isolated cases and in widely separated sections the Apache have for nearly two centuries been a corn-planting people, because we find accounts in the Spanish chronicles of the discovery and destruction by their military expeditions of "trojes" or magazines of Apache corn near the San Francisco (or Verde) River, in the present Territory of Arizona, as early as the middle of the last century. But the general practice of the tribe was to purchase its bread or meal from the Pueblos at such times as hostilities were not an obstacle to free trade. There was this difference to be noted between the Apache and the Aztecs: The latter had been long enough in the valley of Anahuac to learn and adopt many new foods, as we learn from Duran, who relates that at their festivals in honor of Tezcatlipoca, or those made in pursuance of some vow, the women cooked an astonishing variety of bread, just as, at the festivals of the Zuñi, Tusayan, and other our own time, thirty different preparations of corn may be found.[390] I was personally informed by old Indians in the pueblos along the Rio Grande that they had been in the habit of trading with the Apache and Comanche of the Staked Plains of Texas until within very recent years; in fact, I remember seeing such a party of Pueblos on its return from Texas in 1869, as it reached Fort Craig, New Mexico, where I was then stationed. I bought a buffalo robe from them. The principal article of sale on the side of the Pueblos was cornmeal. The Zuñi also carried on this mixed trade and hunting, as I was informed by the old chief Pedro Pino and others. The Tusayan denied that they had ever traded with the Apache so far to the east as the buffalo country, but asserted that the Comanche had once sent a large body of their people over to Walpi to trade with the Tusayan, among whom they remained for two years. There was one buffalo robe among the Tusayan at their snake dance in 1881, possibly obtained from the Ute to the north of them.

The trade carried on by the "buffalo" Indians with the Pueblos was noticed by Don Juan de Oñate as early as 1599. He describes them as "dressed in skins, which they also carried into the settled provinces to sell, and brought back in return cornmeal."[391]

Gregg[392] speaks of the "Comancheros" or Mexicans and Pueblos who ventured out on the plains to trade with the Comanche, the principal article of traffic being bread. Whipple[393] refers to this trade as carried on with all the nomadic tribes of the Llano Estacado, one of which we know to have been the eastern division of the Apache. The principal article bartered with the wild tribes was flour, i.e., cornmeal.

In another place he tells us of "Pueblo Indians from Santo Domingo, with flour and bread to barter with the Kái-ò-wàs and Comanches for buffalo robes and horses."[394] Again, Mexicans were seen with flour, bread, and tobacco, "bound for Comanche land to trade. We had no previous idea of the extent of this Indian trade."[395] Only one other reference to this intertribal commerce will be introduced.

Vetancurt[396] mentions that the Franciscan friars, between 1630 and 1680, had erected a magnificent "temple" to "Our Lady of the Angels of Porciúncula," and that the walls were so thick that offices were established in their concavities. On each side of this temple, which was erected in the pueblo of Pecos (situated at or near the head of the Pecos River, about 30 miles southeast of Santa Fé, New Mexico, on the eastern rim of the Llano Estacado), were three towers. At the foot of the hill was a plain about one league in circumference, to

which the Apache resorted for trade. These were the Apache living on the plains of Texas. They brought with them buffalo robes, deer skins and other things to exchange for corn. They came with their dog-trains loaded, and there were more than five hundred traders arriving each year.

Observe that here we have the first and only reference to the use of dog trains by the Apache who in every other case make their women carry all plunder in baskets on their backs. In this same extract from Vetancurt there is a valuable remark about Quivira: "Este es el paso para los reinos de la Quivira."

ANALOGUES OF HODDENTIN.

In the citation from the Spanish poet Villagrá, already given, the suggestion occurs that some relationship existed between the powder scattered so freely during the Spanish "carnestolendas" and the "kunque" thrown by the people of Tusayan upon the Spaniards and their horses when the Spaniards first entered that country. This analogy is a very striking one, even though the Spaniards have long since lost all idea of the meaning of the practice which they still follow. It is to be noted, however, that one of the occasions when this flour is most freely used is the Eve of All Saints (Hallowe'en), when the ghosts or ancestors of the community were to be the recipients of every attention.[397]

In the East, the use of the reddish or purple powder called the "gulál" is widely prevalent, but it is used at the feast of Huli, which occurs at the time of the vernal equinox.

There seems to have been used in Japan in very ancient days a powder identical with the hoddentin, and, like it, credited with the power to cure and rejuvenate. In the mythical period, from the most ancient times to about B. C. 200, being the period of the so-called pure Japanese "medicine," it is related that Ona-muchi-no-mikoko gave these directions to a hare which had been flayed by a crocodile: "Go quickly now to the river mouth, wash thy body with fresh water, then take the pollen of the sedges and spread it about, and roll about upon it; whereupon thy body will certainly be restored to its original state."[398]

There is no indication that in the above case the "pollen of the sedges" had ever occupied a place in the list of foods. It would appear that its magical effects were strictly dependent upon the fact that it was recognized as the reproductive agent in the life of the plant.

No allusion has yet been made to the hoddentin of the Navajo, who are the brothers of the Apache. Surgeon Matthews[399] has referred to it under the name of tqa-ditin', or ta-di-tin', "the pollen, especially the pollen of corn."

This appears to me to be a very interesting case of a compromise between the religious ideas of two entirely different systems or sects. The Navajo, as now known to us, are the offspring of the original Apache or Tinneh invaders and the refugees from the Rio Grande and Zuñi Pueblos, who fled to the fierce and cruel Apache to seek safety from the fiercer and more cruel Spanish.

The Apache, we have shown, offer up in sacrifice their traditional food, the pollen of the tule. The Zuñi, as we have also shown, offer up their traditional food, the meal of corn, to which there have since been added sea shells and other components with a symbolical significance. The Navajo, the progeny of both, naturally seek to effect a combination or compromise of the two systems and make use of the pollen of the corn. Kohl narrates an Ojibwa legend to the effect that their god Menaboju, returning from the warpath, painted his

face with "pleasant yellow stripes ... of the yellow foam that covers the water in spring," and he adds that this is "probably the yellow pollen that falls from the pine." He quotes[400] another legend of the magic red powder for curing diseases once given by the snake spirit of the waters to an Ojibwa.

Godfrey Higgins[401] has this to say of the use of pollen by the ancients which he recognizes as connected with the principle of fertility:

Aρωμα, the sweet smell, means also a flower, that is Pushpa or Pushto. This was the language of the followers of the Phasah or the Lamb—it was the language of the Flower, of the Natzir, of the Flos-floris of Flora, of the Arouma, and of the flour of Ceres, or the Eucharistia. It was the language of the pollen, the pollen of plants, the principle of generation, of the Pole or Phallus.

Again he says:

Buddha was a flower, because as flour or pollen he was the principle of fructification or generation. He was flour because flour was the fine or valuable part of the plant of Ceres, or wheat, the pollen which, I am told, in this plant, and in this plant alone, renews itself when destroyed. When the flour, pollen, is killed, it grows again several times. This is a very beautiful type or symbol of the resurrection. On this account the flour of wheat was the sacrifice offered to the $X\rho\eta\varsigma$ or Ceres in the $E\dot{v}\chi\alpha\rho\iota\sigma\tau(\alpha)$. In this pollen we have the name of pall or pallium and of Pallas, in the first language meaning wisdom.... When the devotee ate the bread he ate the pollen, and thus ate the body of the God of generation; hence might come transubstantiation.

Lupton,[402] in 1660, describes a "powder of the flowers [pollen?] of elder, gathered on a midsummer day," which was taken to restore lost youth. Brand, it may be as well to say, traces back the custom of throwing flour into the faces of women and others on the streets at Shrovetide, in Minorca and elsewhere, to the time of the Romans.[403]

In writing the description of the Snake Dance of the Moquis of Arizona, I ventured to advance the surmise that the corn flour with which the sacred snakes were covered, and with which the air was whitened, would be found upon investigation to be closely related to the crithomancy or divination by grains of the cereals, as practiced among the ancient Greeks. Crithomancy, strictly speaking, meant a divination by grains of corn. The expression which I should have employed was alphitomancy, a divination "by meal, flower, or branne."[404] But both methods of divination have been noticed among the aborigines of America.

In Peru the medicine-men were divided into classes, as were those of ancient Egypt. These medicine-men "made the various means of divination specialities." Some of them predicted by "the shapes of grains of maize taken at random."[405] In Guatemala grains of corn or of chile were used indiscriminately, and in Guazacualco the medicine-women used grains of frijoles or black beans. In Guatemala they had what they called "ahquij." "Este modo de adivinar se llama ahquij, malol-tzitè, malol-ixim, esto es: el que adivina por el sol, ó por granos de maiz ó chile."[406]

In Guazacualco the medicine-women "hechaban suertes con granos de Frisoles, a manera de Dados, i hacian sus invocaciones, porque eran Hechiceros: i si el Dado decia bien, proseguian en la cura, diciendo que sanaria: i si mal, no bolvian al enfermo."[407]

Herrera in the preceding paragraph recognizes the close similarity between this sacred ceremony of casting lots or divining, and the more orthodox method of gambling, pure and simple, which has in every case been derived from a sacred origin.

"Les Hachus [one class of Peruvian priests] consultaient l'avenir au moyen de grains de maïs ou des excréments des animaux."[408]

The Mexicans "para saber si los enfermos habian de morir, ó sanar de la enfermedad que tenian, echaban un puñado de maiz lo mas grueso que podian haber, y lanzábanlo siete ó ocho veces, como lanzan los dados los que los juegan, y si algun grano quedaba enhiesto, decian que era señal de muerte."[409]

Father Brebœuf relates that at the Huron feast of the dead, which occurred every 8 or 10 years and which he saw at Ossossane, "a few grains of Indian corn were thrown by the women upon the sacred relics."[410]

THE DOWN OF BIRDS IN CEREMONIAL OBSERVANCES.

No exhaustive and accurate examination of the subject of hoddentin could be made without bringing the investigator face to face with the curious analogue of "down" throwing and sprinkling which seemingly obtains with tribes which at some period of their history have been compelled to rely upon birds as a main component of their diet. Examples of this are to be met with on both sides of the Pacific as well as in remote Australia, and were the matter more fully examined there is no doubt that some other identifications might be made in very unexpected quarters. The down used by the Tchuktchi on occasions of ceremony had a suggestion

of religion about it.[411] "On leaving the shore, they sung and danced. One who stood at the head of the boat was employed in plucking out the feathers of a bird's skin and blowing them in the air."

In Langsdorff's Travels[412] we learn that some of the dancers of the Koluschan of Sitka have their heads powdered with the small down feathers of the white-headed eagle and ornamented with ermine; also, that the hair and bodies of the Indians at the mission of Saint Joseph, New California, were powdered with down feathers.[413]

The Indians from the North Pacific coast seen visiting the mission of San Francisco, by Kotzebue in 1816, "had their long disordered hair covered with down."[414]

Bancroft says of the Nootka of the northwest coast of British America: "the hair is powdered plentifully with white feathers, which are regarded as the crowning ornament for manly dignity in all these regions."[415]

The bird's down used by the Haida of British North America in their dances seems very closely related to hoddentin. They not only put it upon their own persons, but "delight to communicate it to their partners in bowing," and also "blow it into the air at regular intervals through a painted tube." They also scattered down as a sign of welcome to the first European navigators.[416]

In all these dances, ceremonial visits, and receptions of strangers the religious element can be discerned more or less plainly. The Indians west of the Mississippi with whom Father Hennepin was a prisoner in 1680, and who appear to have been a branch of the Sioux (Issati or Santee and Nadouessan), had a grand dance to signalize the killing of a bear. On this occasion, which was participated in by the "principaux chefs et guerriers," we learn that there was this

to be noted in their dress: "ayant même leurs cheveux frottez d'huile d'ours & parsemez de plumes, rouges & blanches & les têtes chargées de duvet d'oiseaux."[417]

"Swan's and bustard's down" was used by the Accancess [i.e., the Arkansas of the Siouan stock] in their religious ceremonies.[418]

Of the war dress of the members of the Five Nations we learn from an early writer: "Their heads [previously denuded of all hair except that of the crown] are painted red down to the eye-brows and sprinkled over with white down."[419]

The Indians of Virginia at their war dances painted themselves to make them more terrible: "Pour se rendre plus terriblee, ils sément des plumes, du duvet, ou du poil de quelque bête sur la peinture toute fraiche."[420] Down was also used by the medicine-men of the Carib.[421] The down of birds was used in much the same way by the tribes of Cumaná, a district of South America not far from the mouth of the Orinoco, in the present territory of Venezuela; [422] by the Tupinambis, of Brazil, who covered the bodies of their victims with it;[423] by the Chiribchi, of South America, [424] and by the tribes of the Isthmus of Darien.[425] This down has also been used by some of the Australians in their sacred dances.[426] "The hair, or rather the wool upon their heads, was very abundantly powdered with white powder.... They powder not only their heads, but their beards too."[427]

In China "there is a widespread superstition that the feathers of birds, after undergoing certain incantations, are thrown up into the air, and being carried away by the wind work blight and destruction wherever they alight."

The down of birds seems not to have been unknown in Europe. To this day it is poured upon the heads of the bride and groom in weddings among the Russian peasantry.[428]

This leads up to the inquiry whether or not the application of tar and feathers to the person may not at an early period have been an act of religious significance, perverted into a ridiculous and infamous punishment by a conquering and unrelenting hostile sect. The subject certainly seems to have awakened the curiosity of the learned Buckle, whose remarks may as well be given.

Richard, during his stay in Normandy (1189), made some singular laws for regulating the conduct of the pilgrims in their passage by sea. "A robber, convicted of theft, shall be shaved in the manner of a champion; and boiling pitch poured upon his head, and the feathers of a pillow shaken over his head to distinguish him; and be landed at the first port where the ships shall stop."[429]

The circumstances mentioned in the text respecting tarring and feathering is a fine subject for comment by the searchers into popular antiquities.[430]

HAIR POWDER.

Speaking of the "duvet" or down, with which many American savage tribes deck themselves, Picart observes very justly: "Cet ornement est bizare, mais dans le fond l'est il beaucoup plus que cette poudre d'or dont les Anciens, se poudroient la tête, ou que cette poudre composée d'amidon avec laquelle nos petits maitres modernes affectent de blanchir leurs cheveux ou leurs perruques?"[431]

Picart does not say, and perhaps it would not be wise for us to surmise, that these modes of powdering had a religious origin.

The custom of powdering the hair seems to be a savage "survival;" at least, it is still to be found among the Friendly Islanders, among whom it was observed by Forster.[432]

These islanders used a white lime powder, also one of blue and another of orange made of turmeric.

The Sandwich Islanders plastered their hair over "with a kind of lime made from burnt shells,"[433] and Dillon speaks of the Friendly Islanders using lime, as Forster has already informed us.[434] The Hottentots made a lavish use of the medicinal powder of the buchu, which they plastered on their heads, threw to their sacred animals, and used liberally at their funerals.[435] Kolben dispels all doubt by saying: "These powderings are religious formalities." He also alludes to the use, in much the same manner, of ashes by the same people.[436]

The use of ashes also occurs among the Zuñi, the Apache (at times), and the Abipone of Paraguay. Ashes are also "thrown in the way of a whirlwind to appease it."[437]

In the Witches' Sabbath, in Germany, "it was said that the witches burned a he goat, and divided its ashes among themselves."[438]

In all the above cases, as well as in that of the use of ashes in the Christian churches, it is possible that the origin of the custom might be traced back either to a desire to share in the burnt offering or else in that of preserving some of the incinerated dust of the dead friend or relative for whom the tribe or clan was in mourning. Ashes in the Christian church were not confined to Lent alone; they "were worn four times a year, as in the beginning of Lent."[439]

Tuphramancy or divination by ashes was one of the methods of forecast in use among the priests of pagan Rome.[440]

In Northumberland the custom prevailed of making bonfires on the hills on St. Peter's day. "They made encroachments, on these occasions, upon the bonfires of the neighbouring towns, of which they took away some of the ashes by force: This they called 'carrying off the flower (probably the flour) of the wake.'[441] Moresin thinks this a vestige of the ancient Cerealia."

The mourning at Iddah, in Guinea, consists in smearing the forehead "with wood ashes and clay water, which is allowed to dry on. They likewise powder their hair with wood ashes." [442]

DUST FROM CHURCHES—ITS USE.

The last ceremonial powder to be described is dust from the ground, as among some of the Australians who smear their heads with pipe-clay as a sign of mourning.[443]

The French writers mention among the ceremonies of the Natchez one in which the Great Sun "gathered dust, which he threw back over his head, and turned successively to the four quarters of the world in repeating the same act of throwing dust."[444]

Mention is made of "an old woman who acted as beadle" of a church, who "once brought to the bedside of a dying person some of the sweepings from the floor of the altar, to ease and shorten a very lingering death."[445]

Altar dust was a very ancient remedy for disease. Frommann says that, of the four tablets found in a temple of Esculapius, one bore this inscription: "Lucio affecto lateris dolore; veniret et ex ara tollerit cinerem et una cum vino comisceret et poneret supra latus; et convaluit," etc.[446]

It seems then that the mediæval use of altar dust traces back to the Roman use of altar ashes.

So hard is it to eradicate from the minds of savages ideas which have become ingrafted upon their nature that we need not be surprised to read in the Jesuit relations of affairs in Canada (1696-1702) that, at the Mission of Saint Francis, where the Indians venerated the memory of a saintly woman of their own race, Catheraine Tagikoo-ita, "pour guérir les malades que les rémèdes ordinaires ne soulagent point, on avale dans l'eau ou dans un bouillon un peu de la poussière de son tombeau."

A few persons are to be found who endeavor to collect the dust from the feet of one hundred thousand Brahmins. One way of collecting this dust is by spreading a cloth before the door of a house where a great multitude of Brahmins are assembled at a feast, and, as each Brahmin comes out, he shakes the dust from his feet as he treads upon this cloth. Many miraculous cures are declared to have been performed upon persons using this dust.[447]

A widow among the Armenian devil-worshipers is required "to strew dust on her head and to smear her face with clay." [448]

CLAY-EATING.

The eating of clay would appear to have once prevailed all over the world. In places the custom has degenerated into ceremonial or is to be found only in myths. The Aztec devotee picked up a pinch of clay in the temple of Tezcatlipoca and ate it with the greatest reverence.[449]

Sahagun is quoted by Squier[450] as saying that the Mexicans swore by the sun and "by our sovereign mother, the Earth," and ate a piece of earth.

But the use of clay by the Mexicans was not merely a matter of ceremony; clay seems to have been an edible in quite common use. Edible earth was sold openly in the markets of Mexico; "yaun tierra," says Gomara in the list of foods given by him.
[451]

The eating of clay was forbidden to Mexican women during pregnancy.

Diego Duran describes the ceremonial eating of clay in the temples of Mexico; "Llegó el dedo al suelo, y cogiendo tierra en él lo metió en la boca; á la cual ceremonia llamaban comer tierra santa."[452] And again he says that in their sacrifices the Mexican nobles ate earth from the feet of the idols. "Comian tierra de la que estaba á los pies del Ydolo." [453] But the Mexicans did not limit themselves to a ceremonial clay-eating alone. Thomas Gage relates that "they ate a kind of earth, for at one season in the yeer they had nets of mayle, with the which they raked up a certaine dust that is bred upon the water of the Lake of Mexico, and that is kneaded together like unto oas of the sea."[454]

Diego Duran[455] mentions the ceremonial clay-eating at the feast of Tezcatlipoca agreeing with the note already taken from Kingsborough.

There is reference to clay-eating in one of the myths given in the Popol-Vuh. The Quiche deities Hunahpu and Xbalanqué, desiring to overcome the god Cabrakan, fed him upon roasted birds, but they took care to rub one of the birds with "tizate" and to put white powder around it. The circle of white powder was, no doubt, a circle of hoddentin or something analogous thereto, intended to prevent any baleful influence being exercised by Cabrakan. "Mais ils frottèrent l'un des oiseaux avec du *tizate* et lui mirent de la poussière blanche à l'entour."[456]

In a footnote the word "tizate" is explained to be a very friable whitish earth, used in polishing metals, making

cement, etc.: "Terre blanchâtre fort friable, et dont ils se servent pour polir les métaux, faire du ciment, etc."

Cabeza de Vaca says that the Indians of Florida ate clay —"de la terre."[457] He says also[458] that the natives offered him many mesquite beans, which they ate mixed with earth —"mele avec de la terre."[459]

The Jaguaces of Florida ate earth (tierra).[460]

At the trial of Vasco Pocallo de Figueroa, in Santiago de Cuba, in 1522, "for cruelty to the natives," he sought to make it appear that the Indians ate clay as a means of suicide: "el abuso de los Indios en comer tierra ... seguian matandose de intento comiendo tierra."[461]

The Muiscas had in their language the word "jipetera," a "disease from eating dirt."[462] Whether the word "dirt" as here employed means filth, or earth and clay, is not plain; it probably means clay and earth.

Venegas asserts that the Indians of California ate earth. The traditions of the Indians of San Juan Capistrano, California, and vicinity show that "they had fed upon a kind of clay," which they "often used upon their heads by way of ornament."[463]

The Tátu Indians of California mix "red earth into their acorn bread ... to make the bread sweet and make it go further."
[464]

Long[465] relates that when the young warrior of the Oto or Omaha tribes goes out on his first fast he "rubs his person over with a whitish clay," but he does not state that he ate it.

Sir John Franklin[466] relates that the banks of the Mackenzie River in British North America contain layers of a kind of unctuous mud, probably similar to that found near the

Orinoco, which the Tinneh Indians "use occasionally as food during seasons of famine, and even at other times chew as an amusement.... It has a milky taste and the flavour is not disagreeable."

Father de Smet[467] says of the Athapascan: "Many wandering families of the Carrier tribe ... have their teeth worn to the gums by the earth and sand they swallow with their nourishment." This does not seem to have been intentionally eaten.

"Some of the Siberian tribes, when they travel, carry a small bag of their native earth, the taste of which they suppose will preserve them from, all the evils of a foreign sky."[468]

We are informed that the Tunguses of Siberia eat a clay called "rock marrow," which they mix with marrow. "Near the Ural Mountains, powdered gypsum, commonly called 'rock meal,' is sometimes mixed with bread, but its effects are pernicious."[469]

"The Jukabiri of northeastern Siberia have an earth of sweetish and rather astringent taste," to which they "ascribe a variety of sanatory properties."[470]

There is nothing in the records relating to Victoria respecting the use of any earth for the purpose of appeasing hunger, but Grey mentions that one kind of earth, pounded and mixed with the root of the *Mene* (a species of Hæmadorum), is eaten by the natives of West Australia.[471]

The Apache and Navajo branches of the Athapascan family are not unacquainted with the use of clay as a comestible, although among the former it is now scarcely ever used and among the latter used only as a condiment to relieve the bitterness of the taste of the wild potato; in the same manner it is known to both the Zuñi and Tusayan.

Wallace says that eating dirt was "a very common and destructive habit among Indians and half-breeds in the houses of the whites."[472]

"Los apassionados à comer tierra son los Indios Otomacos." [473]

"The earth which is eaten by the Ottomacs [of the Rio Orinoco] is fat and unctuous."[474]

Waitz[475] cites Heusinger as saying that the Ottomacs of the Rio Orinoco eat large quantities of a fatty clay.

Clay was eaten by the Brazilians generally.[476]

The Romans had a dish called "alica" or "frumenta," made of the grain zea mixed with chalk from the hills at Puteoli, near Naples.[477]

According to the myths of the Cingalese, their Brahmins once "fed on it [earth] for the space of 60,000 years."[478]

PREHISTORIC FOODS USED IN COVENANTS.

It has been shown that the Apache, on several occasions, as when going out to meet strangers, entering into solemn agreements, etc., made use of the hoddentin. A similar use of food, generally prehistoric, can be noted in other regions of the world.

It was a kind of superstitious trial used among the Saxons to purge themselves of any accusation by taking a piece of barley bread and eating it with solemn oaths and execrations that it might prove poisonous or their last morsel if what they asserted or denied was not true.[479] Those pieces of bread were first execrated by the priest, from which he infers that at a still earlier day sacramental bread may have been used for the same purpose.

At Rome, in the time of Cicero and Horace, a master who suspected that his slaves had robbed him conducted them before a priest. They were each obliged to eat a cake over which the priest had "pronounced some magical words (carmine infectum)."[480]

The people living on the coast of Coramandel have an ordeal consisting in the chewing of unboiled rice. No harm will attach to him who tells the truth, but the perjurer is threatened with condign punishment in this world and in that to come.[481] Bread is bitten when the Ostaaks of Siberia take a solemn oath, such as one of fealty to the Czar. [482]

SACRED BREADS AND CAKES.

Since the employment of hoddentin, or tule pollen, as a sacred commemorative food would seem to have been fairly demonstrated, before closing this section I wish to add a few paragraphs upon the very general existence of ritualistic farinaceous foods in all parts of the world. They can be detected most frequently in the ceremonial reversion to a grain or seed which has passed or is passing out of everyday use in some particular form given to the cake or bread or some circumstance of time, place, and mode of manufacture and consumption which stamps it as a "survival." So deeply impressed was Grimm[483] with the wide horizon spreading around the consideration of this topic that he observed: "Our knowledge of heathen antiquities will gain both by the study of these drinking usages which have lasted into later times and also of the shapes given to baked meats, which either retained the actual forms of ancient idols or were accompanied by sacrificial observances. A history of German cakes and bread rolls might contain some unexpected disclosures....

Even the shape of cakes is a reminiscence of the sacrifices of heathenism."

The first bread or cake to be mentioned in this part of the subject is the pancake, still so frequently used on the evening of Shrove Tuesday. In antiquity it can be traced back before the Reformation, before the Crusades were dreamed of, before the Barbarians had subverted Rome, before Rome itself had fairly taken shape.

There seems to have been a very decided religious significance in the preparation of pancakes on Shrove Tuesday. In Leicestershire, "On Shrove Tuesday a bell rings at noon, which is meant as a signal for the people to begin frying their pancakes."[484]

"The Norman *Crispellæ* (Du Cange) are evidently taken from the *Fornacalia*, on the 18th of February, in memory of the method of making bread, before the Goddess *Fornax* invented ovens."[485]

Under "Crispellæ," Du Cange says: "Rustici apud Normannos vocant Crespes, ova pauca mixta cum farina, et in sartagine frixa," and says that they are "ex herba, farina et oleo."[486] These same Crispellæ are to be seen on the Rio Grande during Christmas week.

In the Greek Church and throughout Russia there is to the present time a "pancake feast" at Shrovetide.[487]

At one time a custom prevailed of going about from one friend's house to another, masked, and committing every conceivable prank. "Then the people feasted on blinnies—a pancake similar to the English crumpet."[488]

In the pancake we have most probably the earliest form of farinaceous food known to the nations which derived their civilization from the basin of the Mediterranean. Among these nations wheat has been in use from a time far beyond the remotest historical period, and to account for its introduction myth has been invoked; but this wheat was cooked without leaven, or was fried in a pan, after the style of the tortilla still used in Spanish-speaking countries, or of the pancake common among ourselves. Pliny[489] says that there were no bakers known in Rome until nearly six hundred years after the foundation of the city, in the days of the war with Persia; but he perhaps meant the public bakers authorized by law. The use of wheat and the art of baking bread, as we understand it to-day, were practically unknown to the nations of northern Europe until within the recent historical period.[490]

Nothing would be more in consonance with the mode of reasoning of a primitive people than that, at certain designated festivals, there should be a recurrence to the earlier forms of food, a reversion to an earlier mode of life. as a sort of propitiation of the gods or goddesses who had cared for the nation in its infancy and to secure the continuance of their beneficent offices. Primitive man was never so certain of the power of the gods of the era of his own greatest development that he could rely upon it implicitly and exclusively and ignore the deities who had helped him to stand upon his feet. Hence, the recurrence to pancakes, to unleavened breads of all kinds, among various peoples. This view of the subject was made plain to me while among the Zuñi Indians. Mr. Frank H. Cushing showed me that the women, when baking the "loaves" of bread, were always careful to place in the adobe ovens a tortilla with each batch of the newer kind, and no doubt for the reason just given.

UNLEAVENED BREAD.

The unleavened bread of the earliest period of Jewish history has come down to our own times in the Feast of Unleavened Bread, still observed by the Hebrews in all parts of the world, in the bread used in the eucharistic sacrifice by so large a portion of the Christian world, and apparently in some of the usages connected with the half-understood fast known as the "Ember Days." Brand quotes from an old work in regard to the Ember Days: "They were so called 'because that our elder fathers wolde on these days ete no brede but cakes made under ashes.'"[491]

The sacred cake or "draona" of the Parsi "is a small round pancake or wafer of unleavened bread, about the size of the palm of the hand. It is made of wheaten flour and water, with a little clarified butter, and is flexible."[492] A variety of the "draona," called a "frasast," is marked with the finger nail and set aside for the guardian spirits of the departed. [493]

Cakes and salt were used in religious rites by the ancients. The Jews probably adopted their appropriation from the Egyptians.[494] "During all the Passover week—14th to 21st Nisan, i.e., during this week's moon—Shemites fast, only eating unleavened bread, and most diligently—not without reason—cleansing their houses." "And especially had all leavened matter to be removed, for the new leavener had now arisen, and prayers with curses were offered up against any portions which might have escaped observation. The law of their fierce Jahveh was that, whoever during all this festival tasted leavened bread, 'that soul should be cut off,' which Godwyn mollifies by urging that this only meant the offender should die without children; which was still a pretty considerable punishment for eating a piece of bread!"[495]

"The great day of Pentecost is the 6th of Sivan, or, say, the 22d of May, 1874. From the first barley *two loaves* were

then made, 'the offering of which was the distinguishing rite of the day of Pentecost.'"[496]

On St. Bridget's Eve every farmer's wife in Ireland makes a cake, called *bairinbreac*; the neighbors are invited, the madder of ale and the pipe go round, and the evening concludes with mirth and festivity.[497] Vallencey identifies this as the same kind of offering that was made to Ceres, and to "the queen of heaven, to whom the Jewish women burnt incense, poured out drink offerings, and made cakes for her with their own hands."[498]

THE HOT CROSS BUNS OF GOOD FRIDAY.

The belief prevailed that these would not mold like ordinary bread.[499]

"In several counties [in England] a small loaf of bread is annually baked on the morning of Good Friday and then put by till the same anniversary in the ensuing year. This bread is not intended to be eaten, but to be used as a medicine, and the mode of administering it is by grating a small portion of it into water and forming a sort of panada. It is believed to be good for many disorders, but particularly for a diarrhæa, for which it is considered a sovereign remedy. Some years ago a cottager lamented that her poor neighbour must certainly die of this complaint, because she had already given her two doses of Good Friday bread without any benefit. No information could be obtained from the doctress respecting her nostrum, but that she had heard old folks say that it was a good thing and that she always made it."[500]

Brand quotes a writer in the Gentleman's Magazine who shows that they were "formerly, at least, unleavened," p. 156. They "are constantly marked with the form of the cross." "It is an old belief that the observance of the custom of eating buns on Good Friday protects the house from fire, and several other virtues are attributed to these buns," p. "Hutchinson, in his History of Northumberland, 156. following Bryant's Analysis, derives the Good Friday bun from the sacred cakes which were offered at the Arkite Temples, styled Boun, and presented every seventh day," p. 155. A very interesting dissertation upon these sacred cakes as used by the Greeks, Egyptians, and Jews in the time of their idolatry, is to be found in Brand's work, pp. 155-156. [501]

Practices analogous to those referred to are to be noted among the Pueblo Indians. They offer not only the kunque, but bread also in their sacrifices.

In the sacred rabbit hunt of the Zuñi, which occurs four times a year and is carried on for the purpose of procuring meat for the sacred eagles confined in cages, a great fire was made on the crest of a hill, into which were thrown piles of bread crusts and in the smoke of which the boomerangs or rabbit sticks were held while the hunter recited in an audible tone and with downcast head the prayers prescribed for the occasion. One of the early Spanish writers informs us that the women of the pueblo of Santo Domingo, on the Rio Grande, offered bread on bended knees to their idols and then preserved it for the remainder of the year, and the house which did not have a supply of such blessed bread was regarded as unfortunate and exposed to danger.[502]

A prehistoric farinaceous food of the Romans survives in our bridecake or wedding cake. It is well understood that among the Romans there were three kinds of marriage: that called "coemptio," that called "concubitu" or "usu," and the highest form of all, known as "confarratio," from the fact that bride and groom ate together of a kind of cake or bread made of the prehistoric flour, the "far." We have preserved the custom of having bridecake, which is still served with many superstitious ceremonies: "it must be cut by the bride herself; it must be broken in pieces (formerly these pieces were cast over the heads of the bridesmaids), and, after being passed through a wedding ring a certain number of times, it must be placed under the pillow of the anxious maiden to serve as a basis for her dreams."[503]

Exactly what this prehistoric food was it is now an impossibility to determine with exactness. Torquemada shows that long after the Romans had obtained the use of wheat they persisted in the sacrificial use of the "nola isla,"

"farro," and "escanda," forms of wild grain once roasted and ground and made into bread by their forefathers.[504] A similar usage prevailed among the Greeks. Pliny speaks of "the bearded red wheat, named in Latin 'far,'" and tells us that rye was called "secale" or "farrago."[505] The radical "far" is still to be found all over Europe in the word for flour, "farina," "farine," or "harina," while it is also possible that it may be detected in the ever-to-be-honored name of Farragut.[506]

In the eight marriage rites described by Baudhâyana, the initiatory oblation in the fourth (that in which the father gives his daughter away) consists of "parched grain." This rite is one of the four which are lawful for a Brahman. The parched grain to be used would seem to be either sesamum or barley, although this is not clear. Vasish*th*a says, chapter 27, concerning secret penances: "He who ... uses barley (for his food) becomes pure."[507]

The pages of Brand[508] are filled with references to various forms of cake which seem properly to be included under this chapter. In England there formerly prevailed the custom of preparing "soul cakes" for distribution among visitors to the family on that day and to bands of waifs or singers, who expected them as a dole for praying and singing in the interests of the souls of the dead friends and relatives of the family. On the island of St. Kilda the soul cake was "a large cake in the form of a triangle, furrowed round, and which was to be all eaten that night."[509] In Lancashire and Hertfordshire the cake was made of oatmeal, but in many other parts it was a "seed cake"[510] and in Warwickshire, "at the end of barley and bean seed time, there is a custom there to give the plowmen froise, a species of thick pancake."[511] "All-soul cakes" were distributed at time of All Souls' Day.

In England and Scotland the old custom[512] was to have a funeral feast, which all friends and relations were expected to attend. Wine, currant cake, meat, and other refreshments, varying according to the fortune of the family, were served liberally. The bread given out was called "arvilbread." There is no special reason for believing that this could be called a hoddentin custom, except that the writer himself calls attention to the fact that in the earlier times the bread was in the form of "wafers."[513]

The Romans had a college of priests called the "Fratres Arvales," nine, or, as some say, twelve in number, to whose care were committed the sacrifices in honor of Ceres at the old limits of the city, to propitiate that goddess and induce her to bestow fertility upon the fields. These ceremonies, which are believed by the editor of Bohn's Strabo to survive in the Rogation Day processions of the Roman Catholic Church, recall the notes already taken upon the subject of the Arval bread of the Scotch.[514] The sacrifices themselves were designated "Ambarva" and "Ambarvalia."

In Scotland and England it was customary for bands of singers to go from door to door on New Year's Eve, singing and receiving reward. In the latter country "cheese and oaten cakes, which are called *farls*, are distributed on this occasion among the cryers." In the former country "there was a custom of distributing sweet cakes and a particular kind of sugared bread."[515]

A fine kind of wheat bread called "wassail-bread" formed an important feature of the entertainment on New Year's Day in old England.[516]

Among love divinations may be reckoned the dumb cake, so called because it was to be made without speaking, and afterwards the parties were to go backward up the stairs to bed and put the cake under their pillows, when they were to dream of their lovers.[517]

References to the beal-tine ceremonies of Ireland and Scotland, in which oatmeal gruel figured as a dish, or cakes made of oatmeal and carraway seeds, may be found in Brand, Pop. Antiq., vol. 1, p. 226; in Blount, Tenures of Land and Customs of Manors, London, 1874, p. 131; and in Pennant's Tour in Scotland, in Pinkerton's Voyages, vol. 3, p. 49. In "A Charm for Bewitched Land" we find the mode of making a cake or loaf with holy water.

The mince pie and plum pudding of Christmas are evidently ancient preparations, and it is not unlikely that the shape of the former, which, prior to the Reformation, was that of a child's cradle, had a reminiscence of the sacrifice of babies at the time of the winter solstice. Grimm has taught that where human sacrifice had been abolished the figure of a coffin or a cradle was still used as a symbol.

There is a wide field of information to be gleaned in the investigation of the subject of bean foods at certain periods or festivals of the year, and upon this point I have some notes and memoranda, but, as my present remarks are limited to prehistoric *farinaceous* foods, I do not wish to add to the bulk of the present chapter.[518]

"Kostia—boiled rice and plums—is the only thing partaken of on Christmas Eve."[519]

GALENA.

At times one may find in the "medicine" of the more prominent and influential of the chiefs and medicine-men of the Apache little sacks which, when opened, are found to contain pounded galena; this they tell me is a "great medicine," fully equal to hoddentin, but more difficult to obtain. It is used precisely as hoddentin is used; that is, both as a face paint and as a powder to be thrown to the sun or other elements to be propitiated. The Apache are reluctant to part with it, and from living Apache I have never obtained more than one small sack of it.

No one seems to understand the reason for its employment. Mr. William M. Beebe has suggested that perhaps the fact that galena always crystallizes in cubes, and that it would thus seem to have a mysterious connection with the cardinal points to which all nomadic peoples pay great attention as being invested with the power of keeping wanderers from going astray, would not be without influence upon the minds of the medicine-men, who are quick to detect and to profit by all false analogies. The conjecture appears to me to be a most plausible one, but I can submit it only as a conjecture, for no explanation of the kind was received from any of the Indians. All that I can say is that whenever procurable it was always used by the Apache on occasions of unusual importance and solemnity and presented as a round disk painted in the center of the forehead.

The significance of all these markings of the face among savage and half-civilized nations is a subject deserving of the most careful research; like the sectarial marks of the Hindus, all, or nearly all, the marks made upon the faces of American Indians have a meaning beyond the ornamental or the grotesque.

Galena was observed in use among the tribes seen by Cabeza de Vaca. "Ils nous donnèrent beaucoup de bourses, contenant des sachets de marcassites et d'antimoine en poudre." ("Taleguillas de margaxita y de alcohol molido.") [520] This word "margaxita" means iron pyrites. The Encyclopædia Britannica says that the Peruvians used it for "amulets;" so also did the Apache. What Vaca took for

antimony was pounded galena no doubt. He was by this time in or near the Rocky Mountains.[521]

On the northwest coast of America we read of the natives: "One, however, as he came near, took out from his bosom some iron or lead-colored micaceous earth and drew marks with it across his cheeks in the shape of two pears, stuffed his nostrils with grass, and thrust thin pieces of bone through the cartilage of his nose."[522]

It is more than probable that some of the face-painting with "black earth," "ground charcoal," etc., to which reference is made by the early writers, may have been galena, which substance makes a deep-black mark. The natives would be likely to make use of their most sacred powder upon first meeting with mysterious strangers like Vaca and his companions. So, when the expedition of La Salle reached the mouth of the Ohio, in 1680, the Indians are described as fasting and making superstitious sacrifices; among other things, they marked themselves with "black earth" and with "ground charcoal." "Se daban con Tierra Negra o Carbon molido."[523]

From an expression in Burton, I am led to suspect that the application of kohl or antimony to the eyes of Arabian beauty is not altogether for ornament. "There are many kinds of kohl used in medicine and magic."[524]

Corbusier says of the Apache-Yuma: "Galena and burnt mescal are used on their faces, the former to denote anger or as war paint, being spread all over the face, except the chin and nose, which are painted red."[525]

In Coleman's Mythology of the Hindus, London, 1832, page 165, may be found a brief chapter upon the subject of the sectarial marks of the Hindus. With these we may fairly compare the marks which the Apache, on ceremonial

occasions, make upon cheeks and forehead. The adherents of the Brahminical sects, before entering a temple, must mark themselves upon the forehead with the tiluk. Among the Vishnuites, this is a longitudinal vermilion line. The Seevites use several parallel lines in saffron.[526] Maurice adds that the Hindus place the tiluk upon their idols in twelve places.[527] "Among the Kaffir the warriors are rendered invulnerable by means of a black cross on their foreheads and black stripes on the cheeks, both painted by the Inyanga, or fetich priest."[528]

A piece of galena weighing 7½ pounds was found in a mound near Naples, Illinois.[529] Occasionally with the bones of the dead are noticed small cubes of galena; and in our collection is a ball of this ore, weighing a pound and two ounces, which was taken from a mound, and which probably did service, enveloped in raw hide, as some form of weapon. [530] Galena was much prized by the former inhabitants of North America. "The frequent occurrence of galena on the altars of the sacrificial mounds proves, at any rate, that the ancient inhabitants attributed a peculiar value to it, deeming it worthy to be offered as a sacrificial gift."[531] See also Squier and Davis.[532]

CHAPTER III.

THE IZZE-KLOTH OR MEDICINE CORD OF THE APACHE.

There is probably no more mysterious or interesting portion of the religious or "medicinal" equipment of the Apache Indian, whether he be medicine-man or simply a member of the laity, than the "izze-kloth" or medicine cord, illustrations of which accompany this text. Less, perhaps, is known concerning it than any other article upon which he relies in his distress.

I regret very much to say that I am unable to afford the slightest clew to the meaning of any of the parts or appendages of the cords which I have seen or which I have procured. Some excuse for this is to be found in the fact that the Apache look upon these cords as so sacred that strangers are not allowed to see them, much less handle them or talk about them. I made particular effort to cultivate the most friendly and, when possible, intimate relations with such of the Apache and other medicine-men as seemed to offer the best chance for obtaining information in regard to this and other matters, but I am compelled to say with no success at all.

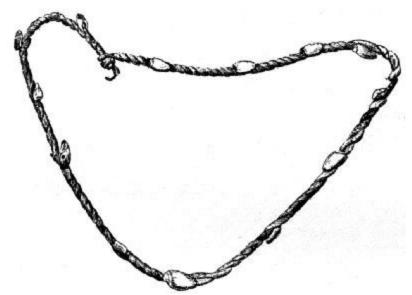


Fig. 435.—Single-strand medicine cord (Zuñi).

I did advance so far in my schemes that Na-a-cha, a prominent medicine-man of the Tonto Apache, promised to let me have his cord, but as an eruption of hostility on the part of the tribe called me away from the San Carlos Agency, the opportunity was lost. Ramon, one of the principal medicine-men of the Chiricahua Apache, made me the same promise concerning the cord which he wore and which figures in these plates. It was, unfortunately, sent me by mail, and, although the best in the series and really one of the best I have ever been fortunate enough to see on either living or dead, it was not accompanied by a description of the symbolism of the different articles attached. Ramon also gave me the head-dress which he wore in the spirit or ghost dance, and explained everything thereon, and I am satisfied that he would also, while in the same frame of mind, have given me all the information in his power in regard to the sacred or medicine cord as well. had I been near him.

There are some things belonging to these cords which I understand from having had them explained at other times, but there are others about which I am in extreme doubt and

ignorance. There are four specimens of medicine cords represented and it is worth while to observe that they were used as one, two, three, and four strand cords, but whether this fact means that they belonged to medicine-men or to warriors of different degrees I did not learn nor do I venture to conjecture.

The single-strand medicine cord with the thirteen olivella shells belonged to a Zuñi chief, one of the priests of the sacred order of the bow, upon whose wrist it was worn as a sign of his exalted rank in the tribe. I obtained it as a proof of his sincerest friendship and with injunctions to say nothing about it to his own people, but no explanation was made at the moment of the signification of the wristlet or cord itself or of the reason for using the olivella shells of that particular number or for placing them as they were placed.

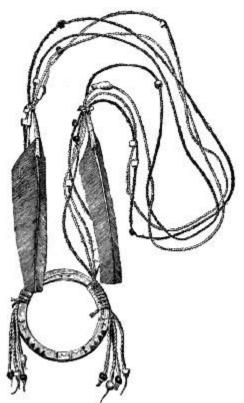


Fig. 436.—Four-strand medicine cord (Apache).

One of the four-strand cords was obtained from Ramon and is the most beautiful and the most valuable of the lot. Ramon called my attention to the important fact that it was composed of four strands and that originally each had been stained a different color. These colors were probably yellow, blue, white, and black, although the only ones still discernible at this time are the yellow and the blue.

The three-strand cord was sent to me at Washington by my old friend, Al. Seiber, a scout who has been living among the Apache for twenty-five years. No explanation accompanied it and it was probably procured from the body of some dead warrior during one of the innumerable scouts and skirmishes which Seiber has had with this warlike race during his long term of service against them. The two strand cord was obtained by myself so long ago that the circumstances connected with it have escaped my memory. These cords, in their perfection, are decorated with beads and shells strung along at intervals, with pieces of the sacred green chalchihuitl, which has had such a mysterious ascendancy over the minds of the American Indians—Aztec, Peruvian, Quiche, as well as the more savage tribes, like the Apache and Navajo; with petrified wood, rock crystal, eagle down, claws of the hawk or eaglet, claws of the bear, rattle of the rattlesnake, buckskin bags of hoddentin, circles of buckskin in which are inclosed pieces of twigs and branches of trees which have been struck by lightning, small fragments of the abalone shell from the Pacific coast, and much other sacred paraphernalia of a similar kind.

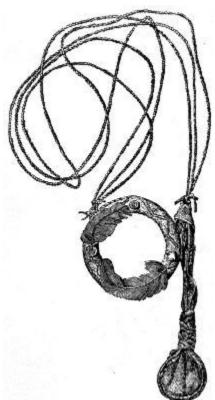


Fig. 437.—Three-strand medicine cord (Apache).

That the use of these cords was reserved for the most sacred and important occasions, I soon learned; they were not to be seen on occasions of no moment, but the dances for war, medicine, and summoning the spirits at once brought them out, and every medicine-man of any consequence would appear with one hanging from his right shoulder over his left hip.

Only the chief medicine-men can make them, and after being made and before being assumed by the new owner they must be sprinkled, Ramon told me, with "heap hoddentin," a term meaning that there is a great deal of attendant ceremony of a religious character.

These cords will protect a man while on the warpath, and many of the Apache believe firmly that a bullet will have no effect upon the warrior wearing one of them. This is not their only virtue by any means; the wearer can tell who has stolen ponies or other property from him or from his friends, can help the crops, and cure the sick. If the circle attached to one of these cords (see Fig. 436) is placed upon the head it will at once relieve any ache, while the cross attached to another (see Fig. 439) prevents the wearer from going astray, no matter where he may be; in other words, it has some connection with cross-trails and the four cardinal points to which the Apache pay the strictest attention. The Apache assured me that these cords were not mnemonic and that the beads, feathers, knots, etc., attached to them were not for the purpose of recalling to mind some duty to be performed or prayer to be recited.

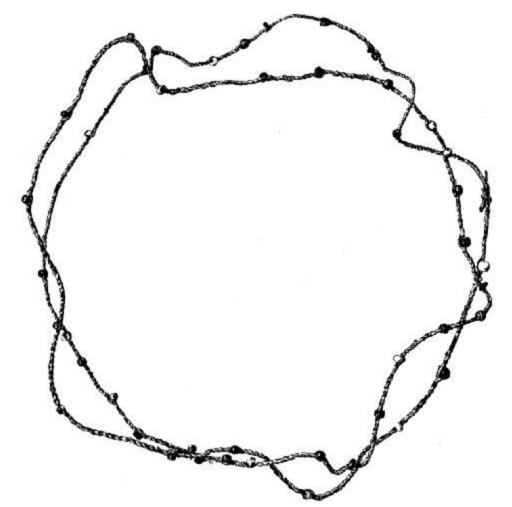


Fig. 438.—Two-strand medicine cord (Apache).

I was at first inclined to associate these cords with the guipus of the Peruvians, and also with the wampum of the aborigines of the Atlantic coast, and investigation only confirms this first suspicion. It is true that both the wampum and the guipu seem to have advanced from their primitive "medicine" attained. position as and ethnologically speaking, the higher plane of a medium for facilitating exchange or disseminating information, and for that reason their incorporation in this chapter might be objected to by the hypercritical; but a careful perusal of all the notes upon the subject can not fail to convince the reader that the use of just such medicine cords prevailed all over the world, under one form or another, and has survived to our own times.

First, let me say a word about rosaries, the invention of which has been attributed to St. Dominick, in Spain, and to St. Bridget, in Ireland. Neither of these saints had anything to do with the invention or introduction of the rosary, although each in his or her own province may have adapted to new and better uses a cord already in general service among all the peoples of Europe. The rosary, as such, was in general use in parts of the world long before the time of Christ. Again, the cords of the various religious orders were looked upon as medicine cords and employed in that manner by the ignorant peasantry.



Fig. 439.—Four-strand medicine cord (Apache).

In this chapter I will insert notes showing the use of such cords by other tribes, and follow with descriptions of the uses to which the cords of St. Francis and others were put, and with references to the rosaries of different races or different creeds; finally, I will remark upon the superstitions connected with cords, belts, and strings, knotted or unknotted, made of serpent skin, human skin, or human hair. The strangest thing about it all is that observers have, with scarcely an exception, contented themselves with noting the existence of such cords without making the slightest effort to determine why they were used.

There are certain cords with medicine bags attached to be seen in the figures of medicine-men in the drawings of the sacred altars given by Matthews in his account of the Navajo medicine-men.

Cushing also has noted the existence of such cords in Zuñi, and there is no doubt that some at least of the so-called "fishing lines" found in the Rio Verde cliff dwellings in Arizona were used for the same purposes.

Describing the tribes met on the Rio Colorado, in 1540-1541, Alarcon says: "Likewise on the brawne of their armes they weare a streit string, which they wind so often about that it becommeth as broad as one's hand."[533] It must be remembered that the Indians thought that Alarcon was a god, that they offered sacrifice to him, and that they wore all the "medicine" they possessed.

In 1680, the Pueblos, under the leadership of Popé, of the pueblo of San Juan, were successful in their attempt to throw off the Spanish yoke. He made them believe that he was in league with the spirits, and "that they directed him to make a rope of the palm leaf and tie in it a number of knots to represent the number of days before the rebellion was to take place; that he must send this rope to all the Pueblos in the kingdom, when each should signify its approval of, and union with, the conspiracy by untying one of the knots."[534]

I suspect that this may have been an izze-kloth. We know nothing about this rebellion excepting what has been derived through Spanish sources; the conquerors despised the natives, and, with a very few notable exceptions among the Franciscans, made no effort to study their peculiarities. The discontent of the natives was aggravated by this fact; they saw their idols pulled down, their ceremonial chambers closed, their dances prohibited, and numbers of their people tried and executed for witchcraft.[535] Fray Geronimo de

Zarate Salmeron was a striking example of the good to be effected by missionaries who are not above studying their people; he acquired a complete mastery of the language of the pueblo of Jemez, "and preached to the inhabitants in their native tongue." He is represented as exercising great influence over the people of Jemez, Sia, Santa Ana, and Acoma. In this rebellion of 1680 the Pueblos expected to be joined by the Apache.[536]

The izze-kloth of the Apache seems to have had its prototype in the sacred string of beans with which Tecumseh's brother, the Shawnee prophet, traveled among the Indian tribes, inciting them to war. Every young warrior who agreed to go upon the warpath touched this "sacred string of beans" in token of his solemn pledge.[537]

Tanner says in the narrative of his captivity among the Ojibwa: "He [the medicine-man] then gave me a small hoop of wood to wear on my head like a cap. On one-half of this hoop was marked the figure of a snake, whose office, as the chief told me, was to take care of the water."[538] The "small hoop of wood" of which Tanner speaks, to be worn on the head, seems to be analogous to the small hoop attached to the izze-kloth, to be worn or applied in cases of headache (Fig. 436). Reference to something very much like the izzekloth is made by Harmon as in use among the Carriers of British North America. He says: "The lads, as soon as they come to the age of puberty, tie cords, wound with swan'sdown, around each leg a little below the knee, which they wear during one year, and then they are considered as men."[539] Catlin speaks of "mystery-beads" in use among the Mandan.[540] "The negro suspends all about his person cords with most complicated knots."[541]

The female inhabitants of Alaska, Unalaska, and the Fox Islands were represented by the Russian explorers of 1768 (Captain Krenitzin) to "wear chequered strings around the

arms and legs."[542] These cords bear a striking resemblance to the "wresting cords" of the peasantry of Europe. Some of the Australians preserve the hair of a dead man. "It is spun into a cord and fastened around the head of a warrior."[543] "A cord of opossum hair around the neck, the ends drooping down on the back and fastened to the belt," is one of the parts of the costume assumed by those attaining manhood in the initiation ceremonies of the Australians.[544] Again, on pages 72 and 74, he calls it "the belt of manhood." "The use of amulets was common among the Greeks and Romans, whose amulets were principally formed of gems, crowns of pearls, necklaces of coral, shells, etc."[545]

When I first saw the medicine cords of the Apache, it occurred to me that perhaps in some way they might be an inheritance from the Franciscans, who, two centuries ago, had endeavored to plant missions among the Apache, and did succeed in doing something for the Navajo part of the tribe. I therefore examined the most convenient authorities and learned that the cord of S. François, like the cord of St. Augustine and the cord of St. Monica, was itself a medicine cord, representing a descent from a condition of thought perfectly parallel to that which has given birth to the izzekloth. Thus Picart tells us: "On appelle Cordon de S. François la grosse corde qui sert de ceinture aux Religieux qui vivent sous la Regle de ce Saint.... Cette corde ceint le corps du Moine, & pend à peu prés jusqu'aux pieds. Elle lui sert de discipline, & pour cet effet, elle est armée de distance en distance de fort gros nœuds.... La Corde de S. François a souvent gueri les malades, facilité les accouchemens, fortifié la santé, procuré lignée & fait une infinité d'autres miracles édifians."[546] This author says of the girdle of St. Augustine "Elle est de cuir," and adds that the Augustinians have a book which treats of the origin of their order, in which occur these words: "Il est probable que nos premiers Peres, qui vivoient sous la Loi de nature, étant habillés de

peau devoient porter une Ceinture de même étoffe."[547] This last assumption is perfectly plausible. For my part it has always seemed to me that monasticism is of very ancient origin, antedating Christianity and representing the most conservative element in the religious part of human nature. It clings obstinately to primitive ideas with which would naturally be associated primitive costume. The girdle of St. Monica had five knots. "The monks [of the Levant] use a girdle with twelve knots, to shew that they are followers of the twelve apostles."[548] Among the "sovereign remedies for the headache" is mentioned "the belt of St. Guthlac."[549] Buckle refers to the fact that English women in labor wore "blessed girdles." He thinks that they may have been Thomas Aguinas's girdles.[550]

And good Saynt Frances gyrdle, With the hamlet of a hyrdle, Are wholsom for the pyppe.[551]

Some older charms are to be found in Bale's Interlude concerning the Laws of Nature, Moses, and Christ, 4to, 1562. Idolatry says:

For lampes and for bottes
Take me Saynt Wilfride's knottes.[552]

The "girdle of St. Bridget," mentioned by Mooney[553] and by other writers, through which the sick were passed by their friends, was simply a "survival" of the "Cunni Diaboli" still to be found in the East Indies. This "girdle of St. Bridget" was made of straw and in the form of a collar.

The custom prevailing in Catholic countries of being buried in the habits of the monastic orders, of which we know that the cord was a prominent feature, especially in those of St. Francis or St. Dominick, is alluded to by Brand.[554] This custom seems to have been founded upon a prior

superstitious use of magical cords which were, till a comparatively recent period, buried with the dead. The Roman Catholic church anathematized those "qui s'imaginent faire plaisir aux morts ou leur mettant entre les mains, ou en jettant sur leurs fosses, ou dans leurs tombeaux de petites cordes nouées de plusieurs nœuds, & d'autres semblables, ce qui est expressement condamné par le Synode de Ferrare en 1612."[555] Evidently the desire was to be buried with cords or amulets which in life they dared not wear.

We may infer that cords and other articles of monastic raiment can be traced back to a most remote ancestry by reading the views of Godfrey Higgins, in Anacalypsis, to the effect that there was a tradition maintained among the Carmelites that their order had been established by the prophet Elisha and that Jesus Christ himself had been one of its members. Massingberd, speaking of the first arrival of the Carmelites in England (about A. D. 1215), says: "They professed to be newly arrived in Italy, driven out by the Saracens from the Holy Land, where they had remained on Mount Carmel from the time of Elisha the prophet. They assert that 'the sons of the prophets' had continued on Mount Carmel as a poor brotherhood till the time of Christ, soon after which they were miraculously converted, and that the Virgin Mary joined their order and gave them a precious vestment called a scapular."[556]

ANALOGUES TO BE FOUND AMONG THE AZTECS, PERUVIANS, AND OTHERS.

According to the different authorities cited below, it will be seen that the Aztec priests were in the habit of consulting Fate by casting upon the ground a handful of cords tied together; if the cords remained bunched together, the sign was that the patient was to die, but if they stretched out, then it was apparent that the patient was soon to stretch out his legs and recover. Mendieta says: "Tenian unos cordeles, hecho de ellos un manojo como llavero donde las mujeres traen colgadas las llaves, lanzábanlos en el suelo, y si quedaban revueltos, decian que era señal de muerte. Y si alguno ó algunos salian extendidos, teníanlo por señal de vida, diciendo: que ya comenzaba el enfermo á extender los piés y las manos."[557] Diego Duran speaks of the Mexican priests casting lots with knotted cords, "con nudillos de hilo echaban suertes."[558] When the army of Cortes advanced into the interior of Mexico, his soldiers found a forest of pine in which the trees were interlaced with certain cords and papers which the wizards had placed there, telling the Tlascaltecs that they would restrain the advance of the strangers and deprive them of all strength:

Hallaron un Pinar mui espeso, lleno de hilos i papeles, que enredaban los Arboles, i atravesaban el camino, de que mucho se rieron los Castellanos; i dixeron graciosos donaires, quando luego supieron que los Hechiceros havian dado à entender à los Tlascaltecas que con aquellos hilos, i papeles havian de tener à los Castellanos, i quitarles sus fuerças.[559]

Padre Sahagun speaks of the Aztec priests who cast lots with little cords knotted together: "Que hechan suertes con unas cordezuelas que atan unas con otros que llaman Mecatlapouhque."[560] Some such method of divining by casting cords must have existed among the Lettons, as we are informed by Grimm.[561] "Among the Lettons, the bride on her way to church, must throw a bunch of colored threads and a coin into every ditch and pond she sees."[562]

In the religious ceremonies of the Peruvians vague mention is made of "a very long cable," "woven in four colours,

black, white, red, and yellow."[563] The Inca wore a "llautu." "This was a red fringe in the fashion of a border, which he wore across his forehead from one temple to the other. The prince, who was heir apparent, wore a yellow fringe, which was smaller than that of his father."[564] In another place, Garcilaso says: "It was of many colours, about a finger in width and a little less in thickness. They twisted this fringe three or four times around the head and let it hang after the manner of a garland."[565] "The Ynca made them believe that they were granted by order of the Sun, according to the merits of each tribe, and for this reason they valued them exceedingly."[566] The investiture was attended imposing ceremonies. "When the Grounds of the Sun were to be tilled [by the Peruvians], the principal men went about the task wearing white cords stretched across the shoulders after the manner of ministers of the altar"[567] is the vague description to be gathered from Herrera.

Knotted cords were in use among the Carib; "ce qui revient aux Quippos des Péruviens."[568] The accompanying citation from Montfaucon would seem to show that among the Romans were to be found sacred baldrics in use by the war priests; such baldrics are to be seen also among the American aborigines, and correspond very closely to the medicine cords. Montfaucon describes the Saliens, who among the Romans were the priests of Mars, the god of war; these priests in the month of March had a festival which was probably nothing but a war dance, as that month would be most favorable in that climate for getting ready to attack their neighbors and enemies. He says that these Saliens "sont vêtus de robes de diverses couleurs, ceints de baudriers d'airain." These would seem to have been a sort of medicine cord with plates of brass affixed which would rattle when shaken by the dancer.[569]

Captain Cook found that the men of the tribes seen in Australia wore "bracelets of small cord, wound two or three times about the upper part of their arm."[570]

"Whilst their [the Congo natives'] children are young, these people bind them about with certain superstitious cords made by the wizards, who, likewise, teach them to utter a kind of spell while they are binding them."[571] Father Merolla adds that sometimes as many as four of these cords are worn.

Bosman remarks upon the negroes of the Gold Coast as follows: "The child is no sooner born than the priest (here called Feticheer or Consoe) is sent for, who binds a parcel of ropes and coral and other trash about the head, body, arms, and legs of the infant; after which he exorcises, according to their accustomed manner, by which they believe it is armed against all sickness and ill accidents."[572]

In the picture of a native of Uzinza, Speke shows us a man wearing a cord from the right shoulder to the left hip.[573]

In the picture of Lunga Mândi's son, in Cameron's Across Africa,[574] that young chief is represented as wearing a cord across his body from his right shoulder to the left side.

On the Lower Congo, at Stanley Pool, Stanley met a young chief: "From his shoulders depended a long cloth of check pattern, while over one shoulder was a belt, to which was attached a queer medley of small gourds containing snuff and various charms, which he called his Inkisi."[575] This no doubt was a medicine cord. "According to the custom, which seems to belong to all Africa, as a sign of grief the Dinka wear a cord round the neck."[576] "The Mateb, or baptismal cord, is *de rigueur*, and worn when nothing else is. It formed the only clothing of the young at Seramba, but was frequently added to with amulets, sure safeguards against

sorcery."[577] The Abyssinian Christians wear a blue cord as a sign of having been baptized, and "baptism and the blue cord are, in the Abyssinian mind, inseparable."[578] "The cord,[579] or mateb, without which nobody can be really said in Abyssinia to be respectable."[580] It further resembles the Apache medicine cord, inasmuch as it is "a blue cord around the neck."[581] The baptismal cords are made of "blue floss silk."[582]

THE MAGIC WIND KNOTTED CORDS OF THE LAPPS AND OTHERS.

"The navigators of the sixteenth and seventeenth centuries have related many wonderful stories about the magic of the Finns or Finno Lappes, who sold wind contained in a cord with three knots. If the first were untied, the wind became favourable, if the second, still more so, but, if the third were loosed, a tempest was the inevitable consequence."[583] The selling of wind knots was ascribed not only to the Lapps and Finns, but to the inhabitants of Greenland also.[584] "The northern shipmasters are such dupes to the delusions of these impostors that they often purchase of them a magic cord which contains a number of knots, by opening of which, according to the magician's directions, they expect to gain any wind they want."[585] "They [Lapland witches] further confessed, that while they fastened three knots on a linen towel in the name of the devil, and had spit on them, &c., they called the name of him they doomed to destruction." They also claimed that, "by some fatal contrivance they could bring on men disorders," ... as "by spitting three times on a knife and anointing the victims with that spittle."[586]

Scheffer describes the Laplanders as having a cord tied with knots for the raising of the wind; Brand says the same of the Finlanders, of Norway, of the priestesses of the island of Sena, on the coast of Gaul, in the time of the Emperor Claudius, the "witches" of the Isle of Man, etc.[587]

Macbeth, speaking to the witches, says:

Though you untie the winds, and let them fight Against the churches; though the yesty waves Confound and swallow navigation up.[588]

ROSARIES AND OTHER MNEMONIC CORDS.

The rosary being confessedly an aid to memory, it will be proper to include it in a chapter descriptive of the different forms of mnemonic cords which have been noticed in various parts of the world. The use of the rosary is not confined to Roman Catholics; it is in service among Mahometans, Tibetans, and Persians.[589] Picart mentions "chaplets" among the Chinese and Japanese which very strongly suggest the izze-kloth.[590]

Father Grébillon, in his account of Tartary, alludes several times to the importance attached by the Chinese and Tartars to the privilege of being allowed to touch the "string of beads" worn by certain Lamas met on the journey, which corresponds very closely to the rosaries of the Roman Catholics.[591]

"Mr. Astle informs us that the first Chinese letters were knots on cords."[592]

Speaking of the ancient Japanese, the Chinese chronicles relate: "They have no writing, but merely cut certain marks upon wood and make knots in cord."[593] In the very earliest myths of the Chinese we read of "knotted cords, which they used instead of characters, and to instruct their children." [594] Malte-Brun calls attention to the fact that "the hieroglyphics and little cords in use amongst the ancient Chinese recall in a striking manner the figured writing of the Mexicans and the Quipos of Peru."[595] "Each combination [of the quipu] had, however, a fixed ideographic value in a certain branch of knowledge, and thus the *quipu* differed

essentially from the Catholic rosary, the Jewish phylactery, or the knotted strings of the natives of North America and Siberia, to all of which it has at times been compared."[596]

E. B. Tylor differs in opinion from Brinton. According to Tylor, "the quipu is a near relation of the rosary and the wampumstring."[597]

The use of knotted cords by natives of the Caroline Islands, as a means of preserving a record of time, is noted by Kotzebue in several places. For instance: "Kadu kept his journal by moons, for which he made a knot in a string."[598]

During the years of my service with the late Maj. Gen. Crook in the Southwest, I was surprised to discover that the Apache scouts kept records of the time of their absence on campaign. There were several methods in vogue, the best being that of colored beads, which were strung on a string, six white ones to represent the days of the week and one black or other color to stand for Sundays. This method gave rise to some confusion, because the Indians had been told that there were four weeks, or Sundays ("Domingos"), in each "Luna," or moon, and yet they soon found that their own method of determining time by the appearance of the crescent moon was much the more satisfactory. Among the Zuñi I have seen little tally sticks with the marks for the days and months incised on the narrow edges, and among the Apache another method of indicating the flight of time by marking on a piece of paper along a horizontal line a number of circles or of straight lines across the horizontal datum line to represent the full days which had passed, a heavy straight line for each Sunday, and a small crescent for the beginning of each month.

Farther to the south, in the Mexican state of Sonora, I was shown, some twenty years ago, a piece of buckskin, upon which certain Opata or Yaqui Indians—I forget exactly which

tribe, but it matters very little, as they are both industrious and honest—had kept account of the days of their labor. There was a horizontal datum line, as before, with complete circles to indicate full days and half circles to indicate half days, a long heavy black line for Sundays and holidays, and a crescent moon for each new month. These accounts had to be drawn up by the overseer or superintendent of the rancho at which the Indians were employed before the latter left for home each night.

THE SACRED CORDS OF THE PARSIS AND BRAHMANS.

I have already apologized for my own ignorance in regard to the origin and symbolical signification of the izze-kloth of the Apache, and I have now to do the same thing for the writers who have referred to the use by the religious of India of the sacred cords with which, under various names, the young man of the Parsis or Brahmans is invested upon attaining the requisite age. No two accounts seem to agree and, as I have never been in India and cannot presume to decide where so many differ, it is best that I should lay before my readers the exact language of the authorities which seem to be entitled to greatest consideration.

"A sacred thread girdle (kûstîk), should it be made of silk, is not proper; the hair of a hairy goat and a hairy camel is proper, and from other hairy creatures it is proper among the lowly."[599]

Every Parsi wears "a triple coil" of a "white cotton girdle," which serves to remind him of the "three precepts of his morality—'good thoughts,' 'good words,' 'good deeds.'"[600]

Williams describes the sacred girdle of the Pārsīs as made "of seventy-two interwoven woollen threads, to denote the

seventy-two chapters of the Yasna, but has the appearance of a long flat cord of pure white wool, which is wound round the body in three coils." The Pārsī must take off this kustī five times daily and replace it with appropriate prayers. It must be wound round the body three times and tied in two peculiar knots, the secret of which is known only to the Pārsīs.[601]

According to Picart, the "sudra," or sacred cord of the Pārsīs, has four knots, each of which represents a precept.[602]

Marco Polo, in speaking of the Brahmans of India, says: "They are known by a cotton thread, which they wear over the shoulders, tied under the arm, crossing the breast."[603]

Picart described the sacred cord of the Brahmans, which he calls the Dsandhem, as made in three colors, each color of nine threads of cotton, which only the Brahmans have the right to make. It is to be worn after the manner of a scarf from the left shoulder to the right side. It must be worn through life, and, as it will wear out, new ones are provided at a feast during the month of August.[604] The Brahman "about the age of seven or nine ... is invested with 'the triple cord,' and a badge which hangs from his left shoulder."[605]

The Upavita or sacred cord, wound round the shoulders of the Brahmans, is mentioned in the Hibbert Lectures on the Origin and Growth of Religion. "Primarily, the sacred cord was the distinguishing mark of caste among the Aryan inhabitants. It consisted for the Brahmans of three cotton threads; for the Kshatriyas or warriors of three hempen threads; and for the Vaisyas or artisans and tradesmen of woollen threads."[606]

"All coiling roots and fantastic shrubs represent the serpent and are recognized as such all over India. In Bengal we find at the present day the fantastically growing Euphorbia antiquorum regularly worshipped, as the representative of the serpent god. The sacred thread, worn alike by Hindoo and Zoroastrian, is the symbol of that old faith; the Brahman twines it round his body and occasionally around the neck of the sacred bull, the Lingam, and its altar.... With the orthodox, the serpent thread should reach down to its closely allied faith, although this Ophite thread idea is now no more known to Hindoos than the origin of arks, altars, candles, spires, and our church fleur-de-lis to Jews and Christians."[607]

General Forlong alludes to the thigh as the symbol of phallic worship. "The serpent on head denoted Holiness, Wisdom, and Power, as it does when placed on gods and great ones of the East still; but the Hindoo and Zoroastrian very early adopted a symbolic thread instead of the ophite deity, and the throwing of this over the head is also a very sacred rite, which consecrates the man-child to his God; this I should perhaps have earlier described, and will do so now. The adoption of the Poita or sacred thread, called also the Zenar, and from the most ancient pre-historic times by these two great Bactro-Aryan families, points to a period when both had the same faith, and that faith the Serpent. The Investiture is the Confirmation or second birth of the Hindoo boy; until which he can not, of course, be married. After the worship of the heavenly stone—the Sāligrāma, the youth or child takes a branch of the Vilwa tree in his right hand, and a mystic cloth-bag in the left, when a Poita is formed of three fibres of the Sooroo tree (for the first cord must always be made of the genuine living fibres of an orthodox tree), and this is hung to the boy's left shoulder; he then raises the Vilwa branch over his right shoulder, and so stands for some time, a complete figure of the old faiths in Tree and Serpent, until the priest offers up various prayers

incantations to Soorya, Savitri or Sot, the Eternal God. The Sooroo-Poita is then removed as not durable enough, and the permanent thread is put over the neck. It also is formed of three threads, each 96 cubits or 48 yards long, folded and twisted together until only so long that, when thrown over the left shoulder, it extends half-way down the right thigh, or a little less; for the object appears to be to unite the Caput, Sol, or Seat of intellect with that of passion, and so form a perfect man."[608]

All Parsis wear the sacred thread of serpent and phallic extraction, and the investiture of this is a solemn and essential rite with both sects [i.e., the Hindus and Parsis], showing their joint Aryan origin in high Asia, for the thread is of the very highest antiquity. The Parsi does not, however, wear his thread across the shoulder, and knows nothing of the all-but-forgotten origin of its required length. He wears it next to his skin, tied carefully round the waist, and used to tie it round his right arm, as is still the custom with some classes of Brahmins who have lost purity of caste by intermarriage with lower classes.[609]

At the baptism or investiture of the thread, which takes the place of the Christian confirmation ceremony, but between the ages of 7 and 9, Fire and Water are the great sanctifying elements, and are the *essentials*. The fire is kindled from the droppings of the sacred cow, then sprinkled over with holy water and blessed; and when so consecrated by the priest it is called "Holy Fire."[610]

"The *Brahmans*, the *Rajas*, and the *Merchants*, distinguish themselves from the various casts of Sudras by a narrow belt of thread, which they always wear suspended from the

left shoulder to the opposite haunch like a sash."[611] But, as Dubois speaks of the division of all the tribes into "Righthand and Left-hand," a distinction which Coleman[612] explains as consisting in doing exactly contrariwise of each other, it is not a very violent assumption to imagine that both the present and a former method of wearing the izzekloth, akin to that now followed by the Apache, may once have obtained in India. The sectaries of the two Hands are bitterly antagonistic and often indulge in fierce quarrels, ending in bloodshed.[613]

"All the Brahmans wear a Cord over the shoulder, consisting of three black twists of cotton, each of them formed of several smaller threads.... The three threads are not twisted together, but separate from one another, and hang from the left shoulder to the right haunch. When a Brahman marries, he mounts nine threads instead of three." Children were invested with these sacred cords at the age of from 7 to 9. The cords had to be made and put on with much ceremony, and only Brahmans could make them. According to Dubois, the material was cotton; he does not allude to buckskin.[614]

Coleman[615] gives a detailed description of the manner in which the sacred thread of the Brahmans is made:

The sacred thread must be made by a Brahman. It consists of three strings, each ninety-six hands (forty-eight yards), which are twisted together: it is then folded into three and again twisted; these are a second time folded into the same number and tied at each end in knots. It is worn over the left shoulder (next the skin, extending half way down the right thigh), by the Brahmans, Ketries and Vaisya castes. The first are usually invested with it at eight years of age, the second at eleven, and the Vaisya at twelve.... The Hindus of the Sutra caste do not receive the poita.

The ceremony of investiture comprehends prayer, sacrifice, fasting, etc., and the wearing of a preliminary poita "of three threads, made of the fibers of the *suru*, to which a piece of deer's skin is fastened."[616] This piece of buckskin was added no doubt in order to let the neophyte know that once buckskin formed an important part of the garment. The Brahmans use three cords, while the Apache employ four; on this subject we shall have more to learn when we take up the subject of numbers.

Maurice says that the "sacred cord of India," which he calls the zennar, is "a cord of three threads in memory and honor of the three great deities of Hindostan."[617] It "can be woven by no profane hand; the Brahmin alone can twine the hallowed threads that compose it and it is done by him with the utmost solemnity, and with the addition of many mystic rites."[618] It corresponds closely to the izze-kloth; the Apache do not want people to touch these cords. The zennar "being put upon the left shoulder passes to the right side and hangs down as low as the fingers can reach."[619] The izze-kloth of the Apache, when possible, is made of twisted antelope skin; they have no cord of hemp; but when the zennar is "put on for the first time, it is accompanied with a piece of the skin of an antelope, three fingers in breadth, but shorter than the zennar."[620]

On p. 128 of Vining's An Inglorious Columbus, there is a figure of worshipers offering gifts to Buddha; from Buddha's left shoulder to his right hip there passes what appears to be a cord, much like the izze-kloth of the Apache.

Examples of the use of such cords are to be found elsewhere.

In the conjuration of one of the shamans, "They took a small line made of deers' skins of four fathoms long, and with a small knot the priest made it fast about his neck and under his left arm, and gave it unto two men standing on both sides of him, which held the ends together."[621] It is difficult to say whether this was a cord used on the present occasion only or worn constantly by the shaman. In either case the cord was "medicine."

Hagennaar relates that he "saw men wearing ropes with knots in them, flung over their shoulders, whose eyes turned round in their heads, and who were called Jammaboos, signifying as much as conjurors or exorcists."
[622]

The Mahometans believe that at the day of judgment Jesus Christ and Mahomet are to meet outside of Jerusalem holding a tightly-stretched cord between them upon which all souls must walk. This may or may not preserve a trace of a former use of such a cord in their "medicine," but it is well to refer to it.[623]

The sacred thread and garment which were worn by all the perfect among the Cathari, and the use of which by both Zends and Brahmans shows that its origin is to be traced back to a pre-historic period.[624]

"No religious rite can be performed by a (child) before he has been girt with the sacred girdle, since he is on a level with a Sûdra before his (new) birth from the Veda."[625]

In explaining the rules of external purification—that is, purification in which water is the medium—Baudhâyana says:[626]

The sacrificial thread (shall be made) of Kusa grass, or cotton, (and consist) of thrice three strings.

(It shall hang down) to the navel.

(In putting it on) he shall raise the right arm, lower the left, and lower the head.

The contrary (is done at sacrifices) to the manes.

(If the thread is) suspended around the neck (it is called) nivita.

(If it is) suspended below (the navel, it is called) adhopavita.

A former use of sacred cords would seem to be suggested in the constant appearance of the belief in the mystical properties and the power for good or evil of the knots which constitute the characteristic appendage of these cords. This belief has been confined to no race or people; it springs up in the literature of the whole world and survives with a pertinacity which is remarkable among the peasantry of Europe and among many in both America and Europe who would not hesitate to express resentment were they to be included among the illiterate.

The powers of these knots were recognized especially in strengthening or defeating love, as aiding women in labor, and in other ways which prove them to be cousins-german to the magic knots with which the medicine-men of the Lapps and other nations along the shores of the Baltic were supposed to be able to raise or allay the tempest. "One of the torments with which witchcraft worried men was the Knot by which a man was withheld so that he could not work his will with a woman. It was called in the Latin of the times Nodus and Obligamentum, and appears in the glossaries, translated by the Saxons into lyb, drug," "To make a 'ligatura' is pronounced 'detestable' by Theodoras, Archbishop of Canterbury, in 668. The knot is still known in France, and Nouer l'aiguillette is a resort of ill-will." Then is given the adventure of Hrut, prince of Iceland, and his bride Gunnhilld, princess of Norway, by whom a "knot" was duly tied to preserve his fidelity during his absence.[627] "Traces of this philosophy are to be found elsewhere," (references

are given from Pliny and Galens in regard to "nod").[628] "A knot among the ancient northern nations seems to have been the symbol of love, faith, and friendship, pointing out the indissoluble tie of affection and duty. Thus the ancient Runic inscriptions, as we gather from Hickes's Thesaurus, are in the form of a knot. Hence, among the northern English and Scots, who still retain, in a great measure, the language and manners of the ancient Danes, that curious kind of a knot, a mutual present between the lover and his mistress, which, being considered as the emblem of plighted fidelity, is therefore called a true-love knot: a name which is not derived, as one would naturally suppose it to be, from the words 'true' and 'love,' but formed from the Danish verb Trulofa, fidem do, I plight my troth, or faith.... Hence, evidently, the bride favors or the top-knots at marriages, which have been considered as emblems of the ties of duty and affection between the bride and her spouse, have been derived."[629]

Sir Thomas Browne, in his Vulgar Errors,[630] says "the truelover's knot is much magnified, and still retained in presents of love among us; which, though in all points it doth not make out, had, perhaps, its original from Nodus Herculanus, or that which was called Hercules, his knot resembling the snaky complications in the caduceus or rod of Hermes and in which form the zone or woolen girdle of the bride was fastened, as Turnebus observes in his Adversaria." Brand shows[631] that the true-lover's knot had to be tied three times. Another species of knot divination is given in the Connoisseur, No. 56: "Whenever I go to lye in a strange bed, I always tye my garter nine times round the bed-post, and knit nine knots in it, and say to myself: 'this knot I knit, this knot I tye, to see my love as he goes by,' etc. There was also a suggestion of color symbolism in the true-lover's knot, blue being generally accepted as the most appropriate tint. I find among the illiterate Mexican population of the lower Rio Grande a firm belief in the power possessed by a lock of hair tied into knots to retain a maiden's affections.

"I find it stated that headache may be alleviated by tying a woman's fillet round the head.[632] To arrest incontinence of urine, the extremities of the generative organs should be tied with a thread of linen or papyrus, and a binding passed round the middle of the thigh.[633] It is quite surprising how much more speedily wounds will heal if they are bound up and tied with a Hercules' knot; indeed, it is said that if the girdle which we wear every day is tied with a knot of this description, it will be productive of certain beneficial effects, Hercules having been the first to discover the fact."[634] "Healing girdles were already known to Marcellus."[635]

"In our times 'tis a common thing, saith Erastus in his book de Lamiis, for witches to take upon them the making of these philters, to force men and women to love and hate whom they will; to cause tempests, diseases, &c., by charms, spels, characters, knots."[636]

Burton[637] alludes to the "inchanted girdle of Venus, in which, saith Natales Comes, ... all witchcraft to enforce love was contained."

The first general council of Milan, in 1565, prohibited the use of what were called phylacteries, ligatures, and reliquaries (of heathen origin) which people all over Europe were in the habit of wearing at neck or on arms or knees. [638]

"King James[639] enumerates thus: 'Such kinde of charmes as ... staying married folkes to have naturally adoe with each other, by knitting so many knots upon a point at the time of their marriage.'"[640]

"Tying the point was another fascination, illustrations of which may be found in Reginald Scott's Discourse Concerning Devils and Spirits, p. 71; in the Fifteen Comforts of Marriage, p. 225; and in the British Apollo, vol. 2, No. 35, 1709. In the old play of The Witch of Edmonton, 1658, Young Banks says, 'Ungirt, unbless'd, says the proverb.'"[641]

Frommann speaks of the frequent appearance of knots in witchcraft, but, beyond alluding to the "Nodus Cassioticus" of a certain people near Pelusia, who seem, like the Laplanders, to have made a business of fabricating and selling magic knots, he adds nothing to our stock of information on the subject. He seems to regard the knot of Hercules and the Gordian knot as magical knots.[642]

Bogle mentions the adoration of the Grand Lama (Teshu Lama). The Lama's servants "put a bit of silk with a knot upon it, tied, or supposed to be tied, with the Lama's own hands, about the necks of the votaries."[643]

A girdle of Venus, "possessing qualities not to be described," was enumerated among the articles exhibited at a rustic wedding in England.[644]

In 1519, Torralva, the Spanish magician, was given by his guardian spirit, Zequiel, a "stick full of knots," with the injunction, "shut your eyes and fear nothing; take this in your hand, and no harm will happen to you."[645] Here the idea evidently was that the power resided in the knots.

"Immediately before the celebration of the marriage ceremony [in Perthshire, Scotland] every knot about the bride and bridegroom (garters, shoe-strings, strings of petticoats, &c.), is carefully loosened."[646]

"The precaution of loosening every knot about the newjoined pair is strictly observed [in Scotland], for fear of the penalty denounced in the former volumes. It must be remarked that the custom, is observed even in France, *nouer l'aiguillette* being a common phrase for disappointments of this nature."[647]

In some parts of Germany "a bride will tie a string of flax around her left leg, in the belief that she will thereby enjoy the full blessing of the married state."[648]

"There was formerly a custom in the north of England, which will be thought to have bordered very closely upon indecency ... for the young men present at a wedding to strive, immediately after the ceremony, who could first pluck off the bride's garters from her legs. This was done before the very altar ... I have sometimes thought this a fragment of the ancient ceremony of loosening the virgin zone, or girdle, a custom that needs no explanation." "It is the custom in Normandy for the bride to bestow her garter on some young man as a favour, or sometimes it is taken from her ... I am of opinion that the origin of the Order of the Garter is to be traced to this nuptial custom, anciently common to both court and country."[649]

Grimm quotes from Hincmar of Rheims to show the antiquity of the use for both good and bad purposes of "ligatures," "cum filulis colorum multiplicium."[650]

To undo the effects of a "ligature," the following was in high repute: "Si quem voles per noctem cum fæmina coire non posse, pistillum coronatum sub lecto illius pone."[651] But a pestle crowned with flowers could be nothing more or less than a phallus, and, therefore, an offering to the god Priapus.

"Owing to a supposed connection which the witches knew between the relations of husband and wife and the mysterious knots, the bridegroom, formerly in Scotland and to the present day in Ireland, presents himself occasionally, and in rural districts, before the clergyman, with all knots and fastenings on his dress loosened, and the bride, immediately after the ceremony is performed, retires to be undressed, and so rid of her knots."[652]

USE OF CORDS AND KNOTS AND GIRDLES IN PARTURITION.

Folk medicine in all regions is still relying upon the potency of mystical cords and girdles to facilitate labor. The following are a few of the many examples which might be presented:

Delivery was facilitated if the man by whom the woman has conceived unties his girdle, and, after tying it round her, unties it, saying: "I have tied it and I will untie it," and then takes his departure.[653]

"Henry, in his History of Britain, vol. 1, p. 459, tells us that 'amongst the ancient Britons, when a birth was attended with any difficulty, they put certain girdles made for that purpose about the women in labour which they imagined gave immediate and effectual relief. Such girdles were kept with care till very lately in many families in the Highlands of Scotland. They were impressed with several mystical figures; and the ceremony of binding them about the woman's waist was accompanied with words and gestures, which showed the custom to have been of great antiquity, and to have come originally from the Druids.'"[654]

"But my girdle shall serve as a riding *knit*, and a fig for all the witches in Christendom."[655] The use of girdles in labor must be ancient.

"Ut mulier concipiat, homo vir si solvat semicinctum suum et eam præcingat."[656] "Certum est quod partum mirabiliter facilirent, siveinstar cinguli circumdentur corpori." These

girdles were believed to aid labor and cure dropsy and urinary troubles.[657]

"The following customs of childbirth are noticed in the Traité des Superstitions of M. Thiers, vol. 1, p. 320: 'Lors qu'une femme est preste d'accoucher, prendre sa ceinture, aller à l'Eglise, lier la cloche avec cette ceinture et la faire sonner trois coups afin que cette femme accouche heureusement. Martin de Arles, Archidiacre de Pampelonne (Tract. de Superstition) asseure que cette superstition est fort en usage dans tout son pays.'"[658]

In the next two examples there is to be found corroboration of the views advanced by Forlong that these cords (granting that the principle upon which they all rest is the same) had originally some relation to ophic rites. Brand adds from Levinus Lemnius: "Let the woman that travels with her child (is in her labour) be girded with the skin that a serpent or a snake casts off, and then she will quickly be delivered."[659] A serpent's skin was tied as a belt about a woman in childbirth. "Inde puerperæ circa collum aut corporem apposito, victoriam in puerperii conflictu habuerunt, citissimeque liberatæ fuerunt."[660]

The following examples, illustrative of the foregoing, are taken from Flemming: The skins of human corpses were drawn off, preferably by cobblers, tanned, and made into girdles, called "Cingula" or Chirothecæ, which were bound on the left thigh of a woman in labor to expedite delivery. The efficacy of these was highly extolled, although some writers recommended a recourse to tiger's skin for the purposes indicated. This "caro humano" was euphemistically styled "mummy" or "mumia" by Von Helmont and others of the early pharmacists, when treating of it as an internal medicament.

There was a "Cingulum ex corio humano" bound round patients during epileptic attacks, convulsions, childbirth, etc., and another kind of belt described as "ex cute humana conficiunt," and used in contraction of the nerves and rheumatism of the joints,[661] also bound round the body in cramp.[662]

"The *girdle* was an essential article of dress, and early ages ascribe to it other magic influences: e.g., Thôr's divine strength lay in his girdle."[663] In speaking of the belief in lycanthropy he says: "The common belief among us is that the transformation is effected by *tying a strap round the body*; this girth is only three fingers broad, and is cut out of human skin."[664] Scrofulous tumors were cured by tying them with a linen thread which had choked a viper to death. [665] "Filum rubrum seraceum [silk] cum quo strangulata fuit vipera si circumdatur collo angina laborantes, eundem curare dicitur propter idem strangulationis et suffocationis." [666]

"Quidam commendant tanquam specificum, ad Anginam filum purpureum cum quo strangulata fuit vipera, si collo circumdetur."[667]

"MEDIDAS," "MEASURING CORDS," "WRESTING THREADS," ETC.

Black says:[668] "On the banks of the Ale and the Teviot the women have still a custom of wearing round their necks blue woollen threads or cords till they wean their children, doing this for the purpose of averting ephemeral fevers. These cords are handed down from mother to daughter, and esteemed in proportion to their antiquity. Probably these cords had originally received some blessing."

Black's surmise is well founded. These cords were, no doubt, the same as the "medidas" or measurements of the holy images of Spain and other parts of Continental Europe. "The ribands or serpent symbols [of Our Lady of Montserrat] are of silk, and exactly the span of the Virgin's head, and on them is printed 'medida de la cabeza de Nuestra Señora Maria Santísima de Montserrat,' i.e., exact head measurement of Our Lady of Montserrat."[669]

These same "medidas" may be found in full vogue in the outlying districts of Mexico to-day. Twenty years ago I saw them at the "funcion" of San Francisco, in the little town of Magdalena, in Sonora. I watched carefully to see exactly what the women did and observed that the statue of St. Francis (which, for greater convenience, was exposed outside of the church, where the devout could reach it without disturbing the congregation within) was measured from head to foot with pieces of ribbon, which were then wrapped up and packed away. In reply to my queries, I learned that the "medida" of the head was a specific for headache, that of the waist for all troubles in the abdominal region, those of the legs, arms, and other parts for the ailments peculiar to each of them respectively. This was in a community almost, if not absolutely, Roman Catholic; but in the thoroughly Protestant neighborhood of Carlisle, Pa., the same superstition exists in full vigor, as I know personally. Three years ago my second child was suffering from the troubles incident to retarded dentition and had to be taken to the mountains at Holly Springs, within sight of Carlisle. I was begged and implored by the women living in the place to have the child taken to "a wise woman" to be "measured." and was assured that some of the most intelligent people in that part of the country were firm believers in the superstition. When I declined to lend countenance to such nonsense I was looked upon as a brutal and unnatural parent, caring little for the welfare of his offspring.

"In John Bale's Comedye concernynge thre Lawes, 1538 ... Hypocrysy is introduced, mentioning the following charms against barrenness:

And as for Lyons, there is the length of our Lorde In a great pyller. She that will with a coorde Be fast bound to it, and *take soche chaunce as fall* Shall sure have chylde, for within it is hollowe all."
[670]

When a person in Shetland has received a sprain "it is customary to apply to an individual practiced in casting the 'wrested thread.' This is a thread spun from black wool, on which are cast nine knots, and tied round a sprained leg or arm." It is applied by the medicine-man with the usual amount of gibberish and incantation.[671] These "wresting or wrested threads" are also to be found among Germans, Norwegians, Swedes, and Flemings.[672]

Grimm quotes from Chambers's Fireside Stories, Edinburgh, 1842, p. 37: "During the time the operator is putting the thread round the afflicted limb he says, but *in such a tone of voice as not to be heard by the bystanders*, nor even by the person operated upon: "The *Lord* rade, and the foal slade; he lighted, and he righted, set joint to joint, bone to bone, and sinew to sinew. Heal in the Holy Ghost's name!"[673]

"Eily McGarvey, a Donegal wise woman, employs a green thread in her work. She measures her patient three times round the waist with a ribbon, to the outer edge of which is fastened a green thread.... She next hands the patient nine leaves of 'heart fever grass,' or dandelion, gathered by herself, directing him to eat three leaves on successive mornings."[674]

Miss Edna Dean Proctor, the poet, told me, June 9, 1887, that some years ago, while visiting relations in Illinois, she met a woman who, having been ill for a long time, had despaired of recovery, and in hope of amelioration had consulted a man pretending to occult powers, who prescribed that she wear next the skin a certain knotted red cord which he gave her.

On a previous page the views of Forlong have been presented, showing that there were reasons for believing that the sacred cords of the East Indies could be traced back to an ophic origin, and it has also been shown that, until the present day, among the peasantry of Europe, there has obtained the practice of making girdles of snake skin which have been employed for the cure of disease and as an assistance in childbirth. The snake itself, while still alive, as has been shown, is applied to the person of the patient by the medicine-men of the American Indians.

In connection with the remarks taken from Forlong's Rivers of Life on this subject, I should like to call attention to the fact that the long knotted blacksnake whip of the wagoners of Europe and America, which, when not in use, is worn across the body from shoulder to hip, has been identified as related to snake worship.

There is another view to take of the origin of these sacred cords which it is fair to submit before passing final judgment. The izze-kloth may have been in early times a cord for tying captives who were taken in war, and as these captives were offered up in sacrifice to the gods of war and others they were looked upon as sacred, and all used in connection with them would gradually take on a sacred character. The same kind of cords seem to have been used in the chase. This would explain a great deal of the superstition connected with the whole subject "hangman's rope" bringing luck, curing disease, and

averting trouble of all sorts, a superstition more widely disseminated and going back to more ancient times than most people would imagine. One of the tribes of New Granada, "quando iban à la Guerra llevaban Cordeles para atar à los Presos."[675] This recalls that the Apache themselves used to throw lariats from ambush upon travelers, and that the Thugs who served the goddess Bhowani, in India, strangled with cords, afterwards with handkerchiefs. The Spaniards in Peru, under Jorge Robledo, going toward the Rio Magdalena, in 1542, found a large body of savages "que llevaban Cordeles, para atar à los Castellanos, i sus Pedernales, para despedaçarlos, i Ollas para cocerlos."[676] The Australians carried to war a cord, called "Nerum," about 2 feet 6 inches long, made of kangaroo hair, used for strangling an enemy.[677]

The easiest method of taking the hyena "is for the hunter to tie his girdle with seven knots, and to make as many knots in the whip with which he guides his horse."[678] Maj. W. Cornwallis Harris^[679] describes a search made for a lost camel. A man was detailed to search for the animal and provided with the following charm to aid him in his search: "The rope with which the legs of the lost animal had been fettered was rolled betwixt his (the Ras el Káfilah's) hands, and sundry cabalistic words having been muttered whilst the Devil was dislodged by the process of spitting upon the cord at the termination of each spell, it was finally delivered over to the Dankáli about to be sent on the quest." Stanley describes the "lords of the cord" at the court of Mtesa, king of Uganda, but they seem to be provost officers and executioners merely.[680] "In cases of quartan fever they take a fragment of a nail from a cross, or else a piece of a halter that has been used for crucifixion, and after wrapping it in wool, attach it to the patient's neck, taking care, the moment he has recovered, to conceal it in some hole to which the light of the sun can not penetrate."[681] There is a

widespread and deeply rooted belief that a rope which has hanged a man, either as a felon or suicide, possesses talismanic powers.[682] Jean Baptiste Thiers[683] says: "Il y a des gens assez fous pour s'imaginer qu'ils seront heureux au jeu ... pourvu qu'ils ayent sur eux un morceau de corde de pendu." Brand says: "I remember once to have seen, at Newcastle upon Tyne, after a person executed had been cut down, men climb upon the gallows and contend for that part of the rope which remained, and which they wished to preserve for some lucky purpose or other. I have lately made the important discovery that it is reckoned a cure for the headache."[684] "A halter with which one had been hanged was regarded within recent times in England as a cure for headache if tied round the head."[685]

In the long list of articles employed by the ancients for the purpose of developing affection or hatred between persons of opposite sex, Burton mentions "funis strangulati hominis." [686] "A remarkable superstition still prevails among the lowest of our vulgar, that a man may lawfully sell his wife to another, provided he deliver her over with a halter about her neck. It is painful to observe that instances of this frequently occur in our newspapers."[687] While discussing this branch of the subject, it might be well to peruse what has already been inserted under the head of the uses to which were put the threads which had strangled vipers and other serpents.

UNCLASSIFIED SUPERSTITIONS UPON THIS SUBJECT.

In conclusion, I wish to present some of the instances occurring in my studies which apparently have a claim to be included in a treatise upon the subject of sacred cords and knots. These examples are presented without comment, as

they are, to all intents and purposes, "survivals," which have long ago lost their true significance. Attention is invited to the fact that the very same use seems to be made by the Irish of hair cords as we have already seen has been made by the Australians.

The Jewish garment with knots at the corners would appear to have been a prehistoric garment preserved in religious ceremonial; it would seem to be very much like the short blanket cloak, with tufts or knots at the four corners, still made by and in use among the Zuñi, Navajo, Tusayan, and Rio Grande Pueblos. But magic knots were by no means unknown to Jews, Assyrians, or other nations of Syria and Mesopotamia.

"In Memorable Things noted in the Description of the World, we read: About children's necks the wild Irish hung the beginning of St. John's Gospel, a crooked nail of a horseshoe, or a piece of a wolve's skin, and both the sucking child and nurse were girt with girdles finely plaited with woman's hair."[688]

Gainsford, in his Glory of England, speaking of the Irish, p. 150, says: "They use *incantations* and *spells*, wearing *girdles of woman's haire*, and *locks of their lover's*."

Camden, in his Ancient and Modern Manners of the Irish, says that "they are observed to present their lovers with bracelets of women's hair, whether in reference to Venus' cestus or not, I know not."[689] This idea of a resemblance between the girdle of Venus and the use of the maiden's hair may be worth consideration; on the same page Brand quotes from Beaumont and Fletcher:

Bracelets of our lovers' hair, Which they on our arms shall twist,

and garters of the women were generally worn by lovers. [690]

"Chaque habit qu'ils [the Jews] portent doit avoir quatre pands, & à chacun un cordon pendant en forme de houppe, qu'ils nomment Zizit. Ce cordon est ordinairement de huit fils de laine filée exprès pour cela, avec cinq nœuds chacun, qui occupent la moitié de la longueur. Ce qui n'est pas noué étant éfilé acheve de faire une espece de houppe, qu'ils se fassent, dit la Loi, des cordons aux pands de leurs habits." [691]

The following is from Black:[692]

When Marduk [Assyrian god] wishes to comfort a dying man his father Hea says: "Go—

Take a woman's linen kerchief!

Bind it round thy left hand: loose it from the left hand!

Knot it with seven knots: do so twice:

Sprinkle it with bright wine:

Bind it round the head of the sick man:

Bind it round his hands and feet, like manacles and fetters.

Sit round on his bed:

Sprinkle holy water over him.

He shall hear the voice of Hea.

Davkina shall protect him!

And Marduk, Eldest Son of heaven, shall find him a happy habitation."

A variant of the same formula is to be found in François Lenormant's Chaldean Magic.[693] Lenormant speaks of the

Chaldean use of "magic knots, the efficacy of which was so firmly believed in even up to the middle ages."

Again, he says that magic cords, with knots, were "still very common among the Nabathean sorcerers of the Lower Euphrates," in the fourteenth century, and in his opinion the use of these was derived from the ancient Chaldeans. In still another place he speaks of the "magic knots" used by Finnish conjurors in curing diseases.

"The Jewish phylactery was tied in a knot, but more generally knots are found in use to bring about some enchantment or disenchantment. Thus in an ancient Babylonian charm we have—

'Merodach, the Son of Hea, the prince, with his holy hands cuts the knots.'

That is to say, he takes off the evil influence of the knots. So, too, witches sought in Scotland to compass evil by tying knots. Witches, it was thought, could supply themselves with the milk of any neighbor's cows if they had a small quantity of hair from the tail of each of the animals. The hair they would twist into a rope and then a knot would be tied on the rope for every cow which had contributed hair. Under the clothes of a witch who was burned at St. Andrews, in 1572, was discovered 'a white claith, like a collore craig, with stringis, wheron was mony knottis vpon the stringis of the said collore craig.' When this was taken from her, with a prescience then wrongly interpreted, she said: 'Now I have no hope of myself.' 'Belyke scho thought,' runs the cotemporary account, 'scho suld not have died, that being vpon her,' but probably she meant that to be discovered with such an article in her possession was equivalent to the sentence of death. So lately as the beginning of the last century, two persons were sentenced to capital punishment for stealing a charm of knots, made by a woman as a device against the welfare of Spalding of Ashintilly."[694]

"Charmed belts are commonly worn in Lancashire for the cure of rheumatism. Elsewhere, a cord round the loins is worn to ward off toothache. Is it possible that there is any connection between this belt and the cord which in Burmah is hung round the neck of a possessed person while he is being thrashed to drive out the spirit which troubles him? Theoretically the thrashing is given to the spirit, and not to the man, but to prevent the spirit escaping too soon a charmed cord is hung round the possessed person's neck. When the spirit has been sufficiently humbled and has declared its name it may be allowed to escape, if the doctor does not prefer to trample on the patient's stomach till he fancies he has killed the demon."[695]

"The numerous notices in the folklore of all countries of magic stones, holy girdles, and other nurses' specials, attest the common sympathy of the human race."[696]

This is from Brand:[697] "Devonshire cure for warts. Take a piece of twine, tie in it as many knots as you have warts, touch each wart with a knot, and then throw the twine behind your back into some place where it may soon decay—a pond or a hole in the earth; but tell no one what you have done. When the twine is decayed your warts will disappear without any pain or trouble, being in fact charmed away."

"In our time, the anodyne necklace, which consists of beads turned out of the root of the white Bryony, and which is hung round the necks of infants, in order to assist their teething, and to ward off the convulsions sometimes incident to that process, is an amulet."[698]

"Rowan, ash, and red thread," a Scotch rhyme goes, "keep the devils frae their speed."[699]

For the cure of scrofula, grass was selected. From one, two, or three stems, as many as nine joints must be removed, which must then be wrapped in black wool, with the grease in it. The person who gathers them must do so fasting, and must then go, in the same state, to the patient's house while he is from home. When the patient comes in, the other must say to him three times, "I come fasting to bring a remedy to a fasting man," and must then attach the amulet to his person, repeating the same ceremony three consecutive days.[700]

Forlong says: "On the 2d [of May], fearing evil spirits and witches, Scotch farmers used to tie red thread upon their wives as well as their cows, saying these prevented miscarriages and preserved the milk."[701]

In Scotland "they hope to preserve the milk of their cows, and their wives from miscarriage, by tying threads about them."[702]

Brand gives a remedy for epilepsy: "If, in the month of October, a little before the full moon, you pluck a twig of the elder, and cut the cane that is betwixt two of its knees, or knots, in nine pieces, and these pieces, being bound in a piece of linnen, be in a thread so hung about the neck that they touch the spoon of the heart, or the sword-formed cartilage."[703]

Black says:[704] "To cure warts a common remedy is to tie as many knots on a hair as there are warts and throw the hair away. Six knots of elderwood are used in a Yorkshire incantation to ascertain if beasts are dying from witchcraft. Marcellus commended for sore eyes that a man should tie as many knots in unwrought flax as there are letters in his

name, pronouncing each letter as he worked; this he was to tie round his neck. In the Orkneys, the blue thread was used for an evil purpose because such a colour savored of Popery and priests; in the northern counties it was used because a remembrance of its once preeminent value still survived in the minds of those who wore it, unconsciously, though still actively, influencing their thoughts. In perhaps the same way we respect the virtue of red threads, because, as Conway puts it, 'red is sacred in one direction as symbolising the blood of Christ.'"[705]

"To cure ague [Hampshire, England] string nine or eleven snails on a thread, the patient saying, as each is threaded, 'Here I leave my ague.' When all are threaded they should be frizzled over a fire, and as the snails disappear so will the ague."[706]

Dr. Joseph Lanzoni scoffed at the idea that a red-silk thread could avail in erysipelas; "Neque filum sericum chermisinum parti affectæ circumligatum erysipelata fugat." The word "chermesinum" is not given in Ainsworth's Latin-English Dictionary, but it so closely resembles the Spanish "carmesi" that I have made bold to render it as "red" or "scarlet."[707]

"Red thread is symbolical of lightning," and is consequently laid on churns in Ireland "to prevent the milk from being bewitched and yielding no butter." "In Aberdeenshire it is a common practice with the housewife to tie a piece of red worsted thread round the cows' tails before turning them out for the first time in the season to grass. It secured the cattle from the evil-eye, elf-shots, and other dangers."[708] "It [blue] is the sky color and the Druid's sacred colour."[709] "In 1635, a man in the Orkney Islands was, we are led to believe, utterly ruined by nine knots cast on a blue thread and given to his sister."

"In a curious old book, 12mo., 1554, entitled A Short Description of Antichrist, is this passage: 'I note all their Popishe traditions of confirmacion of yonge children with oynting of oyle and creame, and with a ragge knitte about the necke of the younge babe.'"[710]

A New England charm for an obstinate ague. "The patient in this case is to take a string made of woolen yarn, of three colors, and to go by himself to an apple-tree; there he is to tie his left hand loosely with the right to the tree by the tricolored string, then to slip his hand out of the knot and run into the house without looking behind him."[711]

The dust "in which a hawk has bathed itself, tied up in a linen cloth with a red string, and attached to the body,"[712] was one of the remedies for fevers. Another cure for fever: "Some inclose a caterpillar in a piece of linen, with a thread passed three times round it, and tie as many knots, repeating at each knot why it is that the patient performs that operation."[713]

"To prevent nose-bleeding people are told to this day to wear a skein of scarlet silk thread round the neck, tied with nine knots down the front; if the patient is a man, the silk being put on and the knots tied by a woman; and if the patient is a woman, then these good services being rendered by a man."[714]

A cord with nine knots in it, tied round the neck of a child suffering from whooping cough, was esteemed a sovereign remedy in Worcester, England, half a century ago.

Again, references will be found to the superstitious use of "ligatures" down to a comparatively recent period, and "I remember it was a custom in the north of England for boys that swam to wear an eel's skin about their naked leg to prevent the cramp."[715]

THE MEDICINE HAT.

The medicine hat of the old and blind Apache medicineman, Nan-ta-do-tash, was an antique affair of buckskin, much begrimed with soot and soiled by long use. Nevertheless, it gave life and strength to him who wore it, enabled the owner to peer into the future, to tell who had stolen ponies from other people, to foresee the approach of an enemy, and to aid in the cure of the sick. This was its owner's own statement in conversation with me, but it would seem that the power residing in the helmet or hat was not very permanent, because when the old man discovered from his wife that I had made a rude drawing of it he became extremely excited and said that such a delineation would destroy all the life of the hat. His fears were allayed by presents of money and tobacco, as well as by some cakes and other food. As a measure of precaution, he insisted upon sprinkling pinches of hoddentin over myself, the hat, and the drawing of it, at the same time muttering various half-articulate prayers. He returned a month afterwards and demanded the sum of \$30 for damage done to the hat by the drawing, since which time it has ceased to "work" when needed.

This same old man gave me an explanation of all the symbolism depicted upon the hat and a great deal of valuable information in regard to the profession of medicinemen, their specialization, the prayers they recited, etc. The material of the hat, as already stated, was buckskin. How that was obtained I can not assert positively, but from an incident occurring under my personal observation in the Sierra Madre in Mexico in 1883, where our Indian scouts and the medicine-men with them surrounded a nearly grown fawn and tried to capture it alive, as well as from other circumstances too long to be here inserted, I am of the opinion that the buckskin to be used for sacred purposes

among the Apache must, whenever possible, be that of a strangled animal, as is the case, according to Dr. Matthews, among the Navajo.

The body of Nan-ta-do-tash's cap (Fig. 434, p. 503) was unpainted, but the figures upon it were in two colors, a brownish yellow and an earthy blue, resembling a dirty Prussian blue. The ornamentation was of the downy feathers and black-tipped plumes of the eagle, pieces of abalone shell, and chalchihuitl, and a snake's rattle on the apex.

Nan-ta-do-tash explained that the characters on the medicine hat meant: A, clouds; B, rainbow; C, hail; E, morning-star; F, the God of Wind, with his lungs; G, the black "kan"; H, great stars or suns.

"Kan" is the name given to their principal gods. The appearance of the kan himself and of the tail of the hat suggest the centipede, an important animal god of the Apache. The old man said that the figures represented the powers to which he appealed for aid in his "medicine" and the kan upon whom he called for help. There were other doctors with other medicines, but he used none but those of which he was going to speak to me.

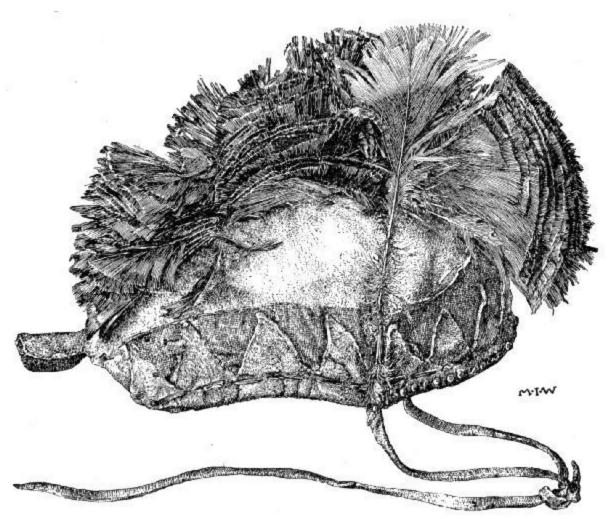


Fig. 440.—Apache war bonnet.

When an Apache or other medicine-man is in full regalia he ceases to be a man, but becomes, or tries to make his followers believe that he has become, the power he represents. I once heard this asserted in a very striking way while I was with a party of Apache young men who had led me to one of the sacred caves of their people, in which we came across a great quantity of ritualistic paraphernalia of all sorts.

"We used to stand down here," they said, "and look up to the top of the mountain and see the kan come down." This is precisely what the people living farther to the south told the early Spanish missionaries. The Mexicans were wont to cry out "Here come our gods!" upon seeing their priests masked and disguised, and especially when they had donned the skins of the women offered up in sacrifice.[716]

The headdresses worn by the gods of the American Indians and the priests or medicine-men who served them were persistently called "miters" by the early Spanish writers. Thus Quetzalcoatl wore "en la cabeça una Mitra de papel puntiaguda."[717] When Father Felician Lopez went to preach to the Indians of Florida, in 1697, among other matters of record is one to the effect that "the chief medicine man called himself bishop."[718] Possibly this title was assumed because the medicine-men wore "miters."

Duran goes further than his fellows. In the headdress used at the spirit dances he recognizes the tiara. He says that the Mexican priests at the feast of Tezcatlipoca wore "en las cabezas tiaras hechas de barillas."[719] The ghost dance headdress illustrated in this paper (Fig. 441) is known to the Chiricahua Apache as the "ich-te," a contraction from "chasa-i-wit-te," according to Ramon, the old medicine-man from whom I obtained it. He explained all the symbolism connected with it. The round piece of tin in the center is the sun; the irregular arch underneath it is the rainbow. Stars and lightning are depicted on the side slats and under them; the parallelograms with serrated edges are clouds; the pendant green sticks are rain drops; there are snakes and snake heads on both horizontal and vertical slats, the heads in the former case being representative of hail.

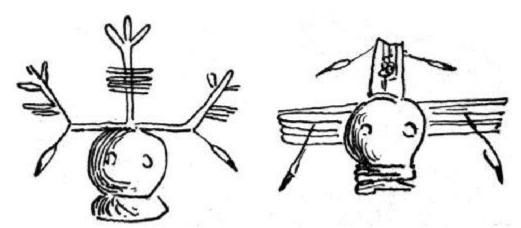


Fig. 441.—Ghost-dance headdress.

There are feathers of the eagle to conciliate that powerful bird, turkey feathers to appeal to the mountain spirits, and white gull feathers for the spirits of the water. There are also small pieces of nacreous shells and one or two fragments of the "duklij," or chalchihuitl, without which no medicine-man would feel competent to discharge his functions.

The spirit dance itself is called "cha-ja-la." I have seen this dance a number of times, but will confine my description to one seen at Fort Marion (St. Augustine, Fla.), in 1887, when the Chiricahua Apache were confined there as prisoners; although the accompanying figure represents a ghost dance headdress seen among the Apache in the winter of 1885. A great many of the band had been suffering from sickness of one kind or another and twenty-three of the children had died; as a consequence, the medicine-men were having the Cha-ja-la, which is entered into only upon the most solemn occasions, such as the setting out of a war party, the appearance of an epidemic, or something else of like portent. On the terreplein of the northwest bastion, Ramon, the old medicine-man, was violently beating upon a drum, which, as usual, had been improvised of a soaped rag drawn tightly over the mouth of an iron kettle holding a little water.

Although acting as master of ceremonies, Ramon was not painted or decorated in any way. Three other medicine-men were having the finishing touches put to their bodily decoration. They had an under-coating of greenish brown, and on each arm a yellow snake, the head toward the shoulder blade. The snake on the arm of one of the party was double-headed, or rather had a head at each extremity.

Each had insignia in yellow on back and breast, but no two were exactly alike. One had on his breast a yellow bear, 4 inches long by 3 inches high, and on his back a kan of the same color and dimensions. A second had the same pattern of bear on his breast, but a zigzag for lightning on his back. The third had the zigzag on both back and breast. All wore kilts and moccasins.

While the painting was going on Ramon thumped and sang with vigor to insure the medicinal potency of the pigments and the designs to which they were applied. Each held, one in each hand, two wands or swords of lathlike proportions, ornamented with snake-lightning in blue.

The medicine-men emitted a peculiar whistling noise and bent slowly to the right, then to the left, then frontward, then backward, until the head in each case was level with the waist. Quickly they spun round in full circle on the left foot; back again in a reverse circle to the right; then they charged around the little group of tents in that bastion, making cuts and thrusts with their wands to drive the maleficent spirits away.

It recalled to my mind the old myths of the angel with the flaming sword guarding the entrance to Eden, or of St. Michael chasing the discomfited Lucifer down into the depths of Hell. These preliminaries occupied a few moments only; at the end of that time the medicine-men advanced to where a squaw was holding up to them a little baby sick in its cradle. The mother remained kneeling while the medicine-men frantically struck at, upon, around, and over the cradle with their wooden weapons.

The baby was held so as successively to occupy each of the cardinal points and face each point directly opposite; first on the east side, facing the west; then the north side, facing the south; then the west side, facing the east; then the south side, facing the north, and back to the original position. While at each position, each of the medicine-men in succession, after making all the passes and gestures described, seized the cradle in his hands, pressed it to his breast, and afterwards lifted it up to the sky, next to the earth, and lastly to the four cardinal points, all the time prancing, whistling, and snorting, the mother and her squaw friends adding to the dismal din by piercing shrieks and ululations.

That ended the ceremonies for that night so far as the baby personally was concerned, but the medicine-men retired down to the parade and resumed their saltation, swinging, bending, and spinning with such violence that they resembled, in a faint way perhaps, the Dervishes of the East. The understanding was that the dance had to be kept up as long as there was any fuel unconsumed of the large pile provided; any other course would entail bad luck. It was continued for four nights, the colors and the symbols upon the bodies varying from night to night. Among the modes of exorcism enumerated by Burton, we find "cutting the air with swords."[720] Picart speaks of the "flêches ou les baguettes dont les Arabes Idolâtres se servoient pour deviner par le sort." He says that the diviner "tenoit à la

main" these arrows, which certainly suggest the swords or wands of the Apache medicine-men in the spirit dance.[721]

There were four medicine-men, three of whom were dancing and in conference with the spirits, and the fourth of whom was general superintendent of the whole dance, and the authority to whom the first three reported the result of their interviews with the ghostly powers.

The mask and headdress of the first of the dancers, who seemed to be the leading one, was so elaborate that in the hurry and meager light supplied by the flickering fires it could not be portrayed. It was very much like that of number three, but so fully covered with the plumage of the eagle, hawk, and, apparently, the owl, that it was difficult to assert this positively. Each of these medicine-men had pieces of red flannel tied to his elbows and a stick about four feet long in each hand. Number one's mask was spotted black and white and shaped in front like the snout of back was painted with large mountain lion. His arrowheads in brown and white. which recalled the protecting arrows tightly bound to the backs of Zuñi fetiches. Number two had on his back a figure in white ending between the shoulders in a cross. Number three's back was simply whitened with clay.

All these headdresses were made of slats of the Spanish bayonet, unpainted, excepting that on number two was a figure in black, which could not be made out, and that the horizontal crosspieces on number three were painted blue.

The dominos or masks were of blackened buckskin, for the two fastened around the neck by garters or sashes; the neckpiece of number three was painted red; the eyes seemed to be glass knobs or brass buttons. These three dancers were naked to the waist, and wore beautiful kilts of fringed buckskin bound on with sashes, and moccasins

reaching to the knees. In this guise they jumped into the center of the great circle of spectators and singers and began running about the fire shrieking and muttering, encouraged by the shouts and the singing, and by the drumming and incantation of the chorus which now swelled forth at full lung power.

THE SPIRIT OR GHOST DANCE HEADDRESS.

As the volume of music swelled and the cries of the onlookers became fiercer, the dancers were encouraged to the enthusiasm of frenzy. They darted about the circle, going through the motions of looking for an enemy, all the while muttering, mumbling, and singing, jumping, swaying, and whirling like the dancing Dervishes of Arabia.

Their actions, at times, bore a very considerable resemblance to the movements of the Zuñi Shálako at the Feast of Fire. Klashidu told me that the orchestra was singing to the four willow branches planted near them. This would indicate a vestige of tree worship, such as is to be noticed also at the sun dance of the Sioux.

At intervals, the three dancers would dart out of the ring and disappear in the darkness, to consult with the spirits or with other medicine-men seated a considerable distance from the throng. Three several times they appeared and disappeared, always dancing, running, and whirling about with increased energy. Having attained the degree of mental or spiritual exaltation necessary for communion with the spirits, they took their departure and kept away for at least half an hour, the orchestra during their absence rendering a mournful refrain, monotonous as a funeral dirge. My patience became exhausted and I turned to go to my quarters. A thrill of excited expectancy ran through the throng of Indians, and I saw that they were looking

anxiously at the returning medicine-men. All the orchestra now stood up, their leader (the principal medicine-man) slightly in advance, holding a branch of cedar in his left hand. The first advanced and bending low his head murmured some words of unknown import with which the chief seemed to be greatly pleased. Then the chief, taking his stand in front of the orchestra on the east side of the grove or cluster of trees, awaited the final ceremony, which was as follows: The three dancers in file and in proper order advanced and receded three times; then they embraced the chief in such a manner that the sticks or wands held in their hands came behind his neck, after which they mumbled and muttered a jumble of sounds which I can not reproduce, but which sounded for all the world like the chant of the "hooter" at the Zuñi Feast of Fire. They then pranced or danced through the grove three times. This was repeated for each point of the compass, the chief medicine-man, with the orchestra, taking a position successively on the east, south, west, and north and the three dancers advancing, receding, and embracing as at first.



Fig. 442.—Apache kan or gods. (Drawn by Apache.)

This terminated the "medicine" ceremonies of the evening, the glad shouts of the Apache testifying that the incantations of their spiritual leaders or their necromancy, whichever it was, promised a successful campaign. These dancers were, I believe, dressed up to represent their gods or kan, but not content with representing them aspired to be mistaken for them.



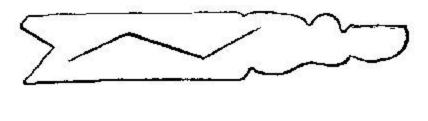
Plate V.

APACHE MEDICINE HAT USED IN GHOST DANCE.

AMULETS AND TALISMANS.

THE "TZI-DALTAI."

The Apache, both men and women, wear amulets, called tzidaltai, made of lightning-riven wood, generally pine or cedar or fir from the mountain tops, which are highly valued and are not to be sold. These are shaved very thin and rudely cut in the semblance of the human form. They are in fact the duplicates, on a small scale, of the rhombus, already described. Like the rhombus, they are decorated with incised lines representing the lightning. Very often these are to be found attached to the necks of children or to their cradles. Generally these amulets are of small size. Below will be found figures of those which I was permitted to examine and depict in their actual size. They are all unpainted. The amulet represented was obtained from a Chiricahua Apache captive. Deguele, an Apache of the Klukaydakaydn clan, consented to exhibit a kan, or god, which he carried about his person. He said I could have it for three ponies. It was made of a flat piece of lath, unpainted. of the size here given, having drawn upon it this figure in yellow, with a narrow black band, excepting the three snake heads, a, b, and c, which were black with white eyes; a was a yellow line and c a black line; flat pearl buttons were fastened at m and k respectively and small eagle-down feathers at k on each side of the idol. The rear of the tablet, amulet, or idol, as one may be pleased to call it, was almost an exact reproduction of the front.



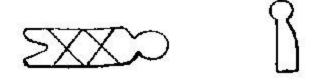


Fig. 443.—Tzi-daltai amulet (Apache).

The owner of this inestimable treasure assured me that he prayed to it at all times when in trouble, that he could learn from it where his ponies were when stolen and which was the right direction to travel when lost, and that when drought had parched his crops this would never fail to bring rain in abundance to revive and strengthen them. The symbolism is the rain cloud and the serpent lightning, the rainbow, rain drops, and the cross of the four winds.

These small amulets are also to be found inclosed in the phylacteries (Fig. 447) which the medicine-men wear suspended from their necks or waists.

Sir Walter Scott, who was a very good witness in all that related to prehistoric customs and "survivals" among the Celtic Scots, may be introduced at this point:

A heap of wither'd boughs was piled Of juniper and rowan wild, Mingled with shivers from the oak, Rent by the lightning's recent stroke.[722]

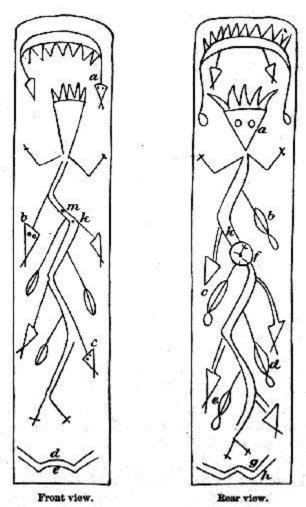


Fig. 444.—Tzi-daltai amulet (Apache).

CHALCHIHUITL.

The articles of dress depicted in this paper are believed to represent all those which exclusively belong to the office of the Apache "diyi" or "izze-nantan." Of late years it can not be said that every medicine-man has all these articles, but most of them will be found in the possession of the man in full practice.

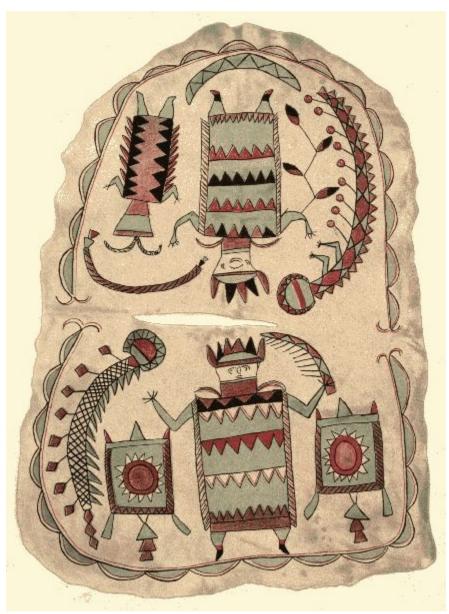


Plate VI.
APACHE MEDICINE SHIRT.

No matter what the medicine-man may lack, he will, if it be possible, provide himself with some of the impure malachite known to the whites of the Southwest as turquoise. In the malachite veins the latter stone is sometimes found and is often of good quality, but the difference between the two is apparent upon the slightest examination. The color of the malachite is a pea green, that of the turquoise a pale sky blue. The chemical composition of the former is a carbonate

of copper, mixed with earthy impurities; that of the latter, a phosphate of alumina, colored with the oxide of copper. The use of this malachite was widespread. Under the name of chalchihuitl or chalchihuite, it appears with frequency in the old Spanish writings, as we shall presently see, and was in all places and by all tribes possessing it revered in much the same manner as by the Apache. The Apache call it duklij, "blue (or green) stone," these two colors not being differentiated in their language. A small bead of this mineral affixed to a gun or bow made the weapon shoot accurately. It had also some relation to the bringing of rain, and could be found by the man who would go to the end of a rainbow, after a storm, and hunt diligently in the damp earth. It was the Apache medicine-man's badge of office, his medical diploma, so to speak, and without it he could not in olden times exercise his medical functions.

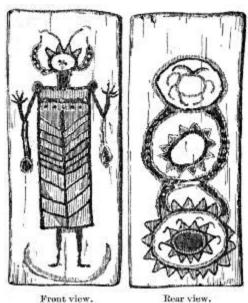


Fig. 445.—Tzi-daltai amulet (Apache).

In the curious commerce of the Indian tribes, some possessed articles of greater worth than those belonging to their neighbors. In the southwest the red paint sold by the tribes living in the Grand Canyon of the Colorado was held

in higher repute than any other, and the green stone to be purchased from the Rio Grande Pueblos always was in great demand, as it is to this day. Vetancurt[723] speaks of the Apache, between the years 1630 and 1680, coming to the pueblo of Pecos to trade for "chalchihuites." John de Laet speaks of "petites pierres verdes" worn in the lower lip by the Brazilians.[724]

Among the Mexicans the chalchihuitl seems to have been the distinguishing mark or badge of the priesthood. Duran, in speaking of the consecration of a sacrificial stone in Mexico by Montezuma the elder, and his assistant or coadjutor, Tlacaclel, says: "Echáronse á las espaldas unas olletas [I do not know what this word means] hechas de piedras verdes muy ricas, donde significaban que no solamente eran Reyes, pero juntamente Sacerdotes."[725]



Fig. 446.—Tzi-daltai amulet (Apache).

Among the tribes in Central America, a chalchihuitl was placed in the mouths of the dying to receive their souls: "que era para que recibiese su ánima."[726]

One of the Mexican myths of the birth of Quetzalcoatl narrates that his mother, Chimalma, while sweeping, found a chalchihuitl, swallowed it, and became pregnant: "Andando barriendo la dicha Chimalma halló un chalchihuitl, (que es una pedrezuela verde) y que la tragó y de esto se empreñó, y que así parió al dicho Quetzalcoatl."[727] The same author tells us that the chalchihuitl (which he calls "pedrezuela verde") are mentioned in the earliest myths of the Mexicans.[728]

In South America the emerald seems to have taken the place of the chalchihuitl. Bollaert[729] makes frequent mention of the use of the emerald by the natives of Ecuador and Peru, "a drilled emerald, such as the Incas wore;" "large emeralds, emblematic of their [the Incas'] sovereignty."

From Torquemada we learn that the Mexicans adorned their idols with the chalchihuitl, and also that they buried a chalchihuitl with their dead, saying that it was the dead man's heart.[730]

"Whenever rain comes the Indians [Pima and Maricopa] resort to these old houses [ruins] to look for trinkets of shells, and a peculiar green stone."[731] The idols which the people of Yucatan gave to Juan de Grijalva in 1518 were covered with these stones, "cubierta de pedrecicas."[732] Among the first presents made to Cortes in Tabasco were "unas turquesas de poco valor."[733] The fact that the Mexicans buried a "gem" with the bodies of their dead is mentioned by Squier, but he says it was when the body was cremated.[734]

The people of Cibola are said to have offered in sacrifice to their fountains "algunas turquesas que las tienen, aunque ruines."[735]

"Turquesas" were given to the Spaniards under Coronado by the people of the pueblo of Acoma.[736]

"The Mexicans were accustomed to say that at one time all men have been stones, and that at last they would all return to stones; and, acting literally on this conviction, they interred with the bones of the dead a small green stone, which was called the principle of life."[737]

The great value set upon the chalchihuitl by the Aztecs is alluded to by Bernal Diaz, who was with the expedition of Grijalva to Yucatan before he joined that of Cortes to Mexico. [738] Diaz says that Montezuma sent to Charles V, as a present "a few chalchihuis of such enormous value that I would not consent to give them to any one save to such a powerful emperor as yours."[739] These stones were put "in the mouth of the distinguished chiefs who died."[740]



Plate VII.
APACHE MEDICINE SHIRT.

Torquemada[741] repeats the Aztec myth already given from Mendieta. He says that in 1537 Fray Antonio de Ciudad-Rodrigo, provincial of the Franciscans, sent friars of his order to various parts of the Indian country; in 1538 he sent them to the north, to a country where they heard of a tribe of people wearing clothes and having many turquoises.[742] The Aztec priesthood adopted green as the sacred color. The

ceremony of their consecration ended thus: "puis on I'habillait tout en vert."[743]

Maximilian, Prince of Wied, saw some of the Piegans of northwestern Montana "hang round their necks a green stone, often of various shapes." He describes it as "a compact talc or steatite which is found in the Rocky Mountains."[744]

PHYLACTERIES.

The term phylactery, as herein employed, means any piece of buckskin or other material upon which are inscribed certain characters or symbols of a religious or "medicine" nature, which slip or phylactery is to be worn attached to the person seeking to be benefited by it, and this phylactery differs from the amulet or talisman in being concealed from the scrutiny of the profane and kept as secret as possible. This phylactery, itself "medicine," may be employed to enwrap other "medicine" and thus augment its own potentiality. Indians in general object to having their "medicine" scrutinized and touched; in this there is a wide margin of individual opinion; but in regard to phylacteries there is none that I have been able to discover, and the rule may be given as antagonistic to the display of these sacred "relics," as my Mexican captive interpreter persisted in calling them.

The first phylactery which it was my good fortune to be allowed to examine was one worn by Ta-ul-tzu-je, of the Kaytzentin gens. It was tightly rolled in at least half a mile of orange-colored saddlers' silk, obtained from some of the cavalry posts. After being duly uncovered, it was found to be a small piece of buckskin two inches square, upon which were drawn red and yellow crooked lines which the Apache said represented the red and yellow snake. Inside were a

piece of green chalchihuitl and a small cross of lightningriven twig (pine) and two very small perforated shells. The cross was called "intchi-dijin," the black wind.

A second phylactery which I was also allowed to untie and examine belonged to Na-a-cha and consisted of a piece of buckskin of the same size as the other, but either on account of age or for some other reason no characters could be discerned upon it. It, however, enwrapped a tiny bag of hoddentin, which, in its turn, held a small but very clear crystal of quartz and four feathers of eagle down. Na-a-cha took care to explain very earnestly that this phylactery contained not merely the "medicine" or power of the crystal, the hoddentin, and the itza-chu, or eagle, but also of the shoz-dijiji, or black bear, the shoz-lekay, or white bear, the shoz-litzogue, or yellow bear, and the klij-litzogue or yellow snake, though just in what manner he could not explain.

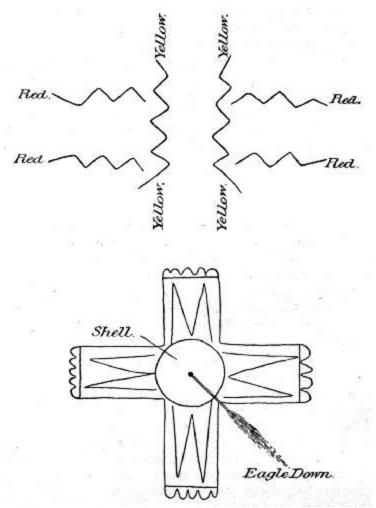


Fig. 447.—Phylacteries.

It would take up too much time and space to describe the manner in which it was necessary for me to proceed in order to obtain merely a glimpse of these and other phylacteries, all of the same general type; how I had to make it evident that I was myself possessed of great "medicine" power and able to give presents of great "medicine" value, as was the case. I had obtained from cliff dwellings, sacred caves, and other places beads of talc, of chalchihuitl, and of shell, pieces of crystal and other things, sacred in the eyes of the Apache, and these I was compelled to barter for the information here given.

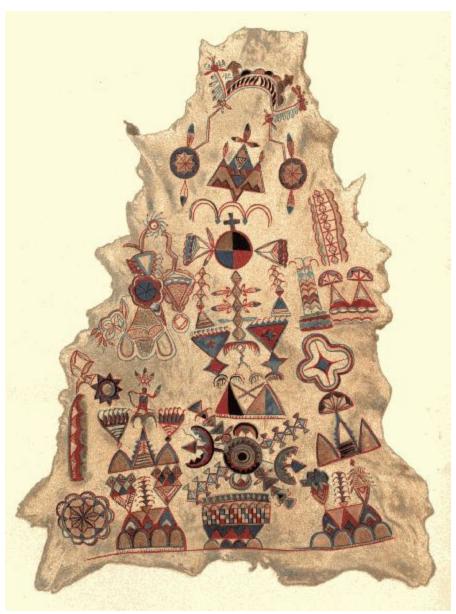


Plate VIII.

APACHE MEDICINE SHIRT.

The medicine shirts of the Apaches, several of which are here represented, do not require an extended description. The symbolism is different for each one, but may be generalized as typical of the sun, moon, stars, rainbow, lightning, snake, clouds, rain, hail, tarantula, centipede, snake, and some one or more of the "kan" or gods.

The medicine sashes follow closely in pattern the medicine shirts, being smaller in size only, but with the same symbolic decoration. Similar ornamentation will be found upon the amulets (ditzi), made of lightning-struck pine or other wood. All of these are warranted, among other virtues, to screen the wearer from the arrows, lances, or bullets of the enemy. In this they strongly resemble the salves and other means by which people in Europe sought to obtain "magical impenetrability." The last writer to give receipts for making such salves, etc., that I can recall, was Etmüller, who wrote in the early years of the seventeenth century.



Fig. 448.—Apache medicine sash.

Such as the reader can imagine the medicine-man to be from this description of his paraphernalia, such he has been since the white man first landed in America. Never desirous of winning proselytes to his own ideas, he has held on to those ideas with a tenacity never suspected until purposely investigated. The first of the Spanish writers seem to have employed the native terms for the medicine-men, and we come across them as cemis or zemis, bohiti, pachuaci, and others; but soon they were recognized as the emissaries of Satan and the preachers of witchcraft, and henceforth they appear in the documents as "hechicheros" and "brujos" almost exclusively. "Tienan los Apaches profetas ó adivinos que gozan de la mas alta estimacion. Esos adivinos pratican la medicina lamas rudimental, la aplicacion de algunas verbas y esto acompañado de ceremonias y cantos supersticiosos."[745] Pimentel seems to have derived his information from Cordero, a Spanish officer who had served

against the Apache at various times between 1770 and 1795, and seemed to understand them well.

"There was no class of persons who so widely and deeply influenced the culture and shaped the destiny of the Indian tribes as their priests. In attempting to gain a true conception of the race's capacities and history there is no one element of their social life which demands closer attention than the power of these teachers.... However much we may deplore the use they made of their skill, we must estimate it fairly and grant it its due weight in measuring the influence of the religious sentiment on the history of man."[746]

"Like Old Men of the Sea, they have clung to the neck of their nations, throttling all attempts at progress, binding them to the thraldom of superstition and profligacy, dragging them down to wretchedness and death. Christianity and civilization meet in them their most determined, most implacable foes."[747]

In spite of all the zeal and vigilance of the Spanish friars, supported by military power, the Indians of Bogotá clung to their idolatry. Padre Simon cites several instances and says tersely: "De manera que no lo hay del Indio que parece mas Cristiano y ladino, de que no tenga ídolos á quien adore, como nos lo dice cada dia la experiencia." (So that there is no Indian, no matter how well educated he may appear in our language and the Christian doctrine, who has not idols which he adores, as experience teaches us every day.)[748]

"The Indian doctor relied far more on magic than on natural remedies. Dreams, beating of the drum, songs, magic feasts and dances, and howling to frighten the female demon from the patient, were his ordinary methods of cure."[749]

In a very rare work by Padre José de Arriaga, published in Lima, 1621, it is shown that the Indians among whom this priest was sent on a special tour of investigation were still practicing their old idolatrous rites in secret. This work may be found quoted in Montesinos, Mémoires sur l'Ancien Pérou, in Ternaux-Compans, Voyages, vol. 17; the title of Arriaga's work is Extirpacion de la Idolatría de los Indios del Peru. Arriaga also states that the functions of the priesthood were exercised by both sexes.

It will only be after we have thoroughly routed the medicinemen from their intrenchments and made them an object of ridicule that we can hope to bend and train the mind of our Indian wards in the direction of civilization. In my own opinion, the reduction of the medicine-men will effect more for the savages than the giving of land in severalty or instruction in the schools at Carlisle and Hampton; rather, the latter should be conducted with this great object mainly in view: to let pupils insensibly absorb such knowledge as may soonest and most completely convince them of the impotency of the charlatans who hold the tribes in bondage.

Teach the scholars at Carlisle and Hampton some of the wonders of electricity, magnetism, chemistry, the spectroscope, magic lantern, ventriloquism, music, and then, when they return to their own people, each will despise the fraud of the medicine-men and be a focus of growing antagonism to their pretensions. Teach them to love their own people and not to despise them; but impress upon each one that he is to return as a missionary of civilization. Let them see that the world is free to the civilized, that law is liberty.

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FOOTNOTES:

- [1] Narrative of Captivity, Cincinnati, 1871, p. 141.
- [2] Padre Boscana, Chinigchinich, in Robinson's California, p. 261.
- [3] Origine de tous les Cultes, vol. 2, pt. 2, pp. 87, 88.
- [4] Diego Duran, vol. 3, pp. 237, 238.
- [5] Higgins, Anacalypsia, lib. 2, p. 77.
- [6] Balboa, Hist. du Pérou, in Ternaux-Compans, Voy., vol. 15.
- [7] Ross, Fur Hunters, quoted by Spencer, Desc. Soc.
- [8] Max Müller, Science of Religion, p. 88.
- [9] Davis, Spanish Conq. of N. M., p. 98.
- [10] I Samuel, XII, 17, 18.
- [11] Cérémonies et Coûtumes, vol. 6, p. 75.
- [12] Everard im Thurn, Indians of Guiana, London, 1883, p. 334.
- [13] Tanner's Narrative, p. 390.
- [<u>14</u>] Diego Duran, lib. 3, cap. 3, p. 201.
- [15] Dorman, Primitive Superstitions, p. 384.
- [16] Spencer, Desc. Sociology.
- [17] Picart, Cérémonies et Coûtumes Religieuses, Amsterdam, 1735, vol. 6, p. 122.
- [18] Myths of the New World, p. 281.
- [<u>19</u>] Domenech, Deserts, vol. 2, p. 392.
- [20] Bancroft, Nat. Races, vol. 1, p. 777.
- [<u>21</u>] Hakluyt, Voyages, vol. 5, p. 462.
- [22] Brinton, Myths of the New World, p. 281.
- [23] Spencer, Ecclesiastical Institutions, cap. V.
- [24] Salverte, Philosophy of Magic, vol. 2, pp. 6-7.

- [25] Tylor, Primitive Culture, London, 1871, vol. 2, p. 377.
- [26] "St. Patrick, we are told, floated to Ireland on an altar stone. Among other wonderful things, he converted a marauder into a wolf and lighted a fire with icicles."—James A. Froude, Reminiscences of the High Church Revival. (Letter V.)
- [27] Demonology and Witchcraft, p. 184.
- [28] Jesuits in North America, pp. 34, 35.
- [29] Herrera, dec. 4, lib. 8, cap. 5, 159.
- [30] Ibid., dec. 3, lib. 4, p. 121.
- [<u>31</u>] Hist. de las Indias, p. 283.
- [32] American Antiquarian, November, 1886, p. 334.
- [33] Dorman, Primitive Superstitions, p. 380, quoting Herrera, dec. 3, p. 262.
- [34] Descriptive Sociology.
- [35] Admiral Smyth's translation in Hakluyt Society, London, 1857, vol. 21, p. 9.
- [36] American Indians, p. 26.
- [37] Gomara, Hist. de las Indias, p. 173.
- [38] "Estos mascan cierta yerba, y con el zumo rocian las soldados estando para dar batalla." Gomara, ibid., p. 179.
- [39] Herrera, dec. 2, lib. 10, p. 260.
- [40] Father Dobrizhoffer, quoted by Spencer, Eccles. Institutions, cap. 10, sec. 630.
- [41] Catlin, N. A. Indians, London, 1845, vol. 2, p. 232.
- [42] Gomara, op. cit., p. 173.
- [43] Spencer, Eccles. Institutions, cap. 10, pp. 780, 781, quoting Stubb's Constitutional History of England.
- [44] Ibid., sec. 630, p. 781, quoting Turner (Geo.), Nineteen Years in Polynesia.
- [<u>45</u>] Vol. 3, p. 176.
- "In every part of the globe fragments of primitive languages are preserved in religious rites." Humboldt, Researches, London, 1814, vol. 1, p. 97.

"Et même Jean P. C., Prince de la Mirande, escrit que les mots barbares & non entendus ont plus de puissance en la Magie que ceux qui sont entendus." Picart, vol. 10, p. 45.

The medicine-men of Cumana (now the United States of Colombia, South America) cured their patients "con palabras muy revesadas y que aun el mismo médico no las entiende." Gomara, Hist. de las Indias, p. 208.

The Tlascaltecs had "oradores" who employed gibberish — "hablaban Gerigonça." Herrera, dec. 2, lib. 6, p. 163.

In Peru, if the fields were afflicted with drought, the priests, among other things, "chantaient un cantique dont le sens était inconnu du vulgaire." Balboa, Hist. du Pérou, p. 128, in Ternaux-Compans, vol. 15.

- [46] Assiniboine and Saskatchewan Exped., London, 1860, vol. 2, p. 155.
- [47] Cockayne, Leechdoms, vol. 1, p. xxx.
- [48] "The belief in the magic power of sacred words, whether religious formulas or the name of gods, was also acknowledged [i.e., in Egypt] and was the source of a frightful amount of superstition.... The superstitious repetition of names (many of which perhaps never had any meaning at all) is particularly conspicuous in numerous documents much more recent than the Book of the Dead."—Hibbert, Lectures, 1879, pp. 192, 193.
- [49] Salverte, Philosophy of Magic, vol. 1, p. 134.
- [<u>50</u>] Kingsborough, lib. 2, vol. 7, p. 102.
- [51] Popular Antiquities, vol. 2, p. 70.
- [<u>52</u>] Ibid., p. 160.
- [<u>53</u>] Ibid., p. 217.
- [<u>54</u>] Ibid., p. 218.
- [55] Ibid., p. 219.
- [<u>56</u>] Ibid., pp. 214, 215.
- [<u>57</u>] Ibid., p. 216.
- [58] "When the Carriers are severely sick, 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."—Harmon's Journal, p. 300. The Carriers or Ta-kully are Tinneh.

- [59] For identical notions among the Arawaks of Guiana, Tupis of Brazil, Creeks, Patagonians, Kaffirs, Chiqnitos, and others, see the works of Schoolcraft, Herbert Spencer, Schultze, and others.
- [60] Extract from the Jesuit Falkner's account of Patagonia, in Voyages of the *Adventure* and *Beagle*, London, 1839, vol. 2, p. 163.
- [61] "Nul de ces médecins ne peut mourir si'ls ne lui enlevent les testicules." Brasseur de Bourbourg, Trans. of Fra Roman Pane, Des Antiquités des Indiens, Paris, 1864, p. 451.
- [62] Hist. Gen., dec. 1, lib. 3, p. 69.
- [63] Madden, Shrines and Sepulchres, vol. 1, p. 14.
- [64] Gayarre, Louisiana; its Colonial History, p. 355.
- [65] Spencer, Desc. Sociology.
- [66] Balboa, Hist. du Pérou, Ternaux-Compans, vol. 15.
- [67] Davis, Conq. of New Mexico, p. 86.
- [68] Crónica Seráfica y Apostolica, Espinosa, Mexico, 1746, p. 421.
- [69] Desc. Sociology.
- [70] Mendieta, Hist. Eclesiástica Indiana, p. 136.
- [71] Ibid., p. 136.
- [72] Hist. de las Indias, p. 179.
- [73] Herrera, dec. 2, lib. 10, p. 260.
- [74] Ibid., dec. 3, lib. 4, p. 121.
- [75] Ibid., dec. 4, lib. 9, cap. 7, p. 188.
- [76] Keating's translation, p. 352, quoted by Samuel Farmar Jarvis, Religion of the Indian Tribes, in Coll. New York Historical Soc., vol. 3, 1819, p. 262.
- [<u>77</u>] Smith, Araucanians, pp. 238, 239.
- [78] Richardson, Arctic Searching Expedition, vol. 1, p. 366.
- [79] Schultze, Fetichism, New York, 1885, p. 49.
- [80] Spencer, Desc. Sociology.
- [81] Ternaux-Compans, vol. 7, p. 110.
- [82] Schultze, Fetichism, New York, 1885, p. 49.

- [83] Smithsonian Report for 1867.
- [84] Long's Expedition, Philadelphia, 1823, p. 238.
- [85] Hist. of the American Indians, p. 238.
- [86] Schultze, Fetichism, New York, 1885, p. 52.
- [87] Hist. de las Indias, p. 232.
- [88] Ternaux-Compans, vol. 7, pp. 114, 115.
- [89] Notes from Gomara, Hist. de las Indias, pp. 172-173.
- [90] History of California, vol. 1, p. 97.
- [91] Ternaux-Compans, vol. 10, p. 85.
- [<u>92</u>] Herrera, dec. 4, lib. 9, cap. 8, p. 188.
- [<u>93</u>] Smith, Araucanians, p. 234.
- [94] Bancroft, Native Races, vol. 1, p. 779.
- [95] Alegre, Historia de la Compañía de Jesus en Nueva-España, vol. 1, p. 401.
- [96] Desc. Sociology.
- [97] Kraskenninikoff, History of Kamtchatka and the Kurilski Islands, Grieve's translation, p. 219.
- [<u>98</u>] Ibid., p. 220.
- [99] Contributions to North American Ethnology, vol. 5.
- [100] Smith, Araucanians, p. 233.
- [101] Dr. Edwin G. Meek, Toner Collection, Library of Congress.
- [102] Lieut. Pettit in Jour. U. S. Mil. Serv. Instit., 1886, pp. 336-337.
- [103] Smyth, Aborigines of Victoria, vol. 1, p. 155.
- [104] Dennys, Folk Lore of China, p. 57.
- [105] "Chinigchinich" in Robinson's California, pp. 271, 272.
- [106] The reader interested in this matter may find something bearing upon it in Diego Duran, lib. 1, cap. 36, p. 387; Torquemada, Mon. Indiana, lib. 9, cap. 3; Venegas, History of California, vol. 1, p. 105; Gomara, Conq. de Mexico, p. 443; Herrera, dec. 4, lib. 8, p. 158; Maximilian of Wied, p. 431, and others; The "pelucas" mentioned of the Orinoco tribes by Padre

- Gumilla would seem to be nothing more than feather head-dresses; p. 66.
- [107] Tribes and Languages of Costa Rica, Proc. Am. Philos. Soc., Philadelphia, 1875, p. 503.
- [108] Corbusier, in American Antiquarian, Sept., 1886, p. 279.
- [109] Source of the Nile, p. 567.
- [110] Vol. 2, p. 193.
- [111] Ensayo Cronologico, p. 139.
- [112] For the Shamans of Kodiak, see Lisiansky, Voyage, London, 1814, p. 208; for the Mexicans, Padre José Acosta, Paris, 1600, cap. 26, p. 256; Society Islands, Malte-Brun, Univ. Geography, vol. 3, lib. 58, p. 634, Boston, 1825. Sir Samuel Baker, The Albert N'yanza, vol. 1, p. 211.
- [<u>113</u>] Ternaux-Compans, vol. 9, p. 294.
- [114] Catlin, North American Indians, London. 1845, vol. 1, p. 55.
- [115] Ibid., p. 95.
- [116] Parkman, Jesuits in North America, p. lxxxiv.
- [117] Wanderings of an Artist in North America, p. 40.
- [<u>118</u>] Dec. 2, lib. 6, p. 161.
- [119] Smithsonian Report for 1871.
- [120] Purchas, lib. 9, cap. 12, sec. 4, p. 1555, edition of 1622.
- [121] Chinigchinich, p. 253.
- [122] Theal, Kaffir Folk-lore, pp. 209-210.
- [123] Clements R. Markham, Note on Garcilasso de la Vega, in Hakluyt Soc., vol. 41, p. 183, quoting Acosta, lib. 5, cap. 4.
- [124] Andrew Lang, Custom and Myth, New York, 1885, chapter entitled "The bull roarer," pp. 29-44.
- [125] John Fraser, The Aborigines of Australia; their Ethnic Position and Relations, pp. 161-162.
- [126] "When the rain-maker of the Lenni Lennape would exert his power, he retired to some secluded spot and drew upon the earth the figure of a cross (its arms toward the cardinal points?), placed upon it a piece of tobacco, a gourd, a bit of some red stuff, and commenced to cry aloud to the spirits of the rains."—

- Brinton, Myths of the New World, New York, 1868, p. 96 (after Loskiel).
- [127] Père Chrestien Le Clercq, Gaspesie, Paris, 1691, p. 170.
- [128] Ibid., cap. x, pp. 172-199.
- [129] Dec. 2, lib. 2, p. 48.
- [130] Ibid., p. 59.
- [131] Assinniboine and Saskatchewan Expedition, vol. 2, p. 123.
- [132] New York, 1819, pp. x, xxix, 47.
- [133] Forster, Voyage Round the World, vol. 1, pp. 219, 519.
- [<u>134</u>] Hawkesworth, op. cit., vol. 2, p. 161.
- [<u>135</u>] Ibid., p. 257.
- [<u>136</u>] Ibid., vol. 1, p. 113.
- [137] Forlong, Rivers of Life, vol. 1, pp. 541, 542.
- [138] Nat. Races, vol. 1, p. 380.
- [<u>139</u>] Kohl, Kitchi-gami, pp. 345, 346.
- [140] Tanner's Narrative, p. 372.
- [141] John de Laet, lib. 3, cap. 18, p. 90, quoting Capt. John Smith.
- [142] Le Jeune in Jesuit Relations, 1633, vol. 1, Quebec, 1858.
- [143] Third Voyage of David Peter De Vries to New Amsterdam, in Trans. N. Y. Hist. Soc., vol. 3, p. 91.
- [144] Charlevoix, New France, New York, 1866, vol. 4, p. 105.
- [145] Squier, Serpent Symbol, p. 197.
- [146] Coleman, Mythology of the Hindus, London, 1832, p. 63.
- [147] Vol. 3.
- [148] Speke, Source of the Nile, London, 1863, p. 500.
- [<u>149</u>] Ibid.
- [150] Stanley, Through the Dark Continent, vol. 1, p. 327.
- [151] Miles, Demigods and Dæmonia, in Jour. Ethnol. Soc., London, vol. 3, p. 28, 1854.
- [152] Smyth, Aborigines of Victoria, vol. 1, p. 30.

- [<u>153</u>] Ibid., p. 131.
- [154] Ibid., p. 348.
- [155] Peter Kolben, speaking of the Hottentots, in Knox, vol. 2, p. 394.
- [156] O-kee-pa, pp. 28-29.
- [157] Frazer, Totemism, Edinburgh, 1887, pp. 54, 55; after Maximilian.
- [158] Kelly, Narrative of Captivity, Cincinnati, 1871, p. 143.
- [159] Différens Cultes, vol. 1, p. 57.
- [160] Judges, I, 7.
- [161] Brand, Pop. Ant., London, 1882, vol. 3, p. 278.
- [162] American Anthropologist, Washington, D. C., January, 1888.

- [163] Kingsborough, vol. 8, p. 70. The Aztec believed that the woman who died in childbirth was equal to the warrior who died in battle and she went to the same heaven. The middle finger of the left hand is the finger used in the necklace of human fingers.
- [164] Sahagun, in Kingsborough, vol. 7, p. 147.
- [165] Pliny, Nat. Hist., lib. 28, cap. 20. Holland's translation.
- [166] Shakespeare, Macbeth, act 4, scene 1.
- [<u>167</u>] Pliny, Nat. Hist., lib. 28, cap. 11.
- [168] Tractatus de Fascinatione, Nuremberg, 1675, p. 681.
- [<u>169</u>] Teutonic Mythology, vol. 3, p. 1073.
- [<u>170</u>] Brand, Pop. Ant., vol. 3, p. 10.
- [171] Montfaucon, l'Antiquité expliquée, vol. 2, liv. 4, cap. 6, p. 249.
- [172] Vâsish*th*a, cap. 3, pars. 64-68, p. 25 (Sacred Books of the East, Oxford, 1882, Max Müller's edition).
- [173] Travels of Two Mohammedans through India and China, in Pinkerton's Voyages, vol. 7, p. 218.
- [<u>174</u>] Every-Day Book, vol. 2, col. 95.
- [175] "Traen los dientes al cuello (como sacamuelas) por bravosidad."—Gomara, Historia de las Indias, p. 201.
- [176] "Los Caberres y muchos Caribes, usan por gala muchas sartas de dientes y muelas de gente para dar á entender que son muy valientes por los despojos que alli ostentan ser de sus enemigos que mataron."—Gumilla, Orinoco, Madrid, 1741, p. 65.
- [177] Padre Fray Alonzo Fernandez, Historia Eclesiastica, Toledo, 1611, p. 17.
- [178] Ibid., p. 161.
- [179] Cérémonies et Coûtumes, Amsterdam, 1735, vol. 6, p. 114.
- [180] "Formada la cara como de Sol, con rayos de Nacar al rededor, y perfilada de lo mismo; y en la boca embutidos los dientes, que quitaron à los Españoles, que avian muerto."— Villaguitierre, Hist. de la Conquista de la Provincia de el Itza,

- Madrid, 1701, p. 500. (Itza seems to have been the country of the Lacandones.)
- [181] Edwards, speaking of the Carib, quoted by Spencer, Desc. Sociology. The same custom is ascribed to the Tupinambi of Brazil. Ibid, quoting from Southey.
- [182] Through the Dark Continent, vol. 2, p. 286.
- [<u>183</u>] Ibid., p. 288.
- [184] Ibid., p. 290.
- [185] Speke, Source of the Nile, London, 1863, p. 500.
- [186] Heart of Africa, vol. 2, p. 54.
- [187] Ibid., vol. 1, p. 285.
- [188] Sir Samuel Baker, The Albert N'yanza, Philadelphia, 1869, p. 154 et seq.
- [189] Burton, Mission to Gelele, vol. 1, p. 135 et seq.
- [190] Voyage Round the World, London, 1823, pp. 209, 210.
- [191] Kotzebue, Voyage, London, 1821, vol. 2, p. 202. See also Villaguitierre, cited above.
- [192] Capt. Cook's First Voyage, in Pinkerton's Voyages, London, 1812, vol. 11, pp. 513, 515.
- [<u>193</u>] Campbell, Voyage Round the World, N. Y., 1819, p. 153.
- [<u>194</u>] Frazer, Totemism, Edinburgh, 1887, p. 28.
- [<u>195</u>] Historia de Chile, Madrid, 1795, vol. 2, p. 80.
- [196] Spencer, Desc. Sociology.
- [197] Indian Myths, Boston, 1884, p. 256.
- [198] Tanner's Narrative, p. 122.
- [<u>199</u>] Kitchi-gami, p. 344.
- [200] Voyages, p. 323.
- [201] Kane, Wanderings of an Artist in North America, p. 399.
- [202] Native Races, vol. 1, p. 553.
- [203] Hawkins, quoted by Gatschet, Migration Legend of the Creeks, Philadelphia, 1884, vol. 1, p. 185.
- [204] Corbusier, in American Antiquarian, September, 1886, p. 279.

- [205] Everard F. im Thurn, Indians of Guiana, p. 218.
- [206] Crantz, History of Greenland, London, 1767, vol. 1, pp. 210-211.
- [207] Forster, Voyage Round the World, vol. 2, pp. 275, 288.
- [208] Hakluyt, Voyages, vol. 3, p. 508.
- [209] Grimm, Teutonic Mythology, vol. 2, p. 544.
- [210] Travels to discover the source of the Nile in the years 1768, etc., Dublin, 1791, vol. 3, p. 410.
- [211] Desc. Sociology.
- [212] Ibid., quoting Schoolcraft.
- [213] "Saca de su carcax algunos pies y unas de águila secos y endurecidos, con los cuales, comienza á sajarle desde los hombros hasta las muñecas."—Historia de la Compañía de Jesus en Nueva España, Mexico, 1842, vol. 2, pp. 218, 219.
- [214] Shâyast lâ-shâyast, cap. 3, par. 32, p. 284 (Max Müller edition, Oxford, 1880). When the "drôn" has been marked with three rows of finger-nail scratches it is called a "frasast."
- [215] Head-Hunters of Borneo, London, 1881, p. 139.
- [216] See, for the New Hebrides, Forster, Voyage Round the World, vol. 2, p. 255.
- [217] Report of the Bureau of Ethnology, 1882-'83, p. 482.
- [218] Speke, Source of the Nile, London, 1863, pp. 306, 310.
- [219] Cameron, Across Africa, London, 1877, vol. 1, p. 276.
- [220] De Gama's Discovery of the East Indies, in Knox, Voyages, London, 1767, vol. 2, p. 324.
- [221] Andrew K. Ober, in the Salem Gazette, Salem, Mass.
- [222] Hakluyt, Voyages, vol. 3, p. 508; also, Ternaux-Compans, Voy., vol. 9, pp. 307, 308.
- [223] Forster, Voyage Round the World, vol. 1, p. 435
- [224] Smyth, Aborigines of Victoria, vol. 1, p. 66.
- [225] English edition, New York, 1842, p. 271.
- [226] Kingsborough, vol. 6, p. 100.
- [227] Godfrey Higgins, Anacalypsis, vol. 2, book 1, cap. 4, sec. 9, p. 81.

- [228] Y ponía delante un canuto grande y queso [grueso?] para con que bebiese: este canuto llamaban "bebedero del Sol."—Diego Duran, vol. 1, cap. 38, p. 386.
- [229] Smithsonian Contributions, vol. 1, p. 151.
- [230] The reed, which is the proper meaning of the word "acatl," is the hieroglyphic of the element water. Veytia, quoted by Thomas, in 3rd Ann. Rep., Bu. Eth., 1881-1882, p. 42 et seq.
- [231] Indian Myths, Boston, 1884, p. 260.
- [232] Picart, Cérémonies et Coûtumes Religieuses de tous les Peuples du Monde, Amsterdam, 1735, vol. 6, part 2, p. 103.
- [233] Vâsish*th*a, cap. 3, pars. 26-30, pp. 20-21. Sacred Books of the East, Oxford, 1882, vol. 14, edition of Max Müller.
- [234] Ibid.
- [235] Diego Duran, loc. cit.
- [236] See Dall, Masks and Labrets, p. 151.
- [237] Peter Carder, an Englishman captive among the Brazilians, 1578-1586, in Purchas, vol. 4, lib. 6, cap. 5, p. 1189.
- [238] Purchas, vol. 4, lib. 8, cap. 1, sec. 2, p. 1508.
- [239] Dec. 4, lib. 4, p. 69.
- [240] Dec. 3, lib. 2, p. 67.
- [241] Ibid., p. 70.
- [242] Histoire Naturelle des Indes, Paris, 1600, lib. 5, cap. 9, p. 224.
- [243] History of Mexico, Philadelphia, 1817, vol. 2, p. 6.
- [244] Duran, op. cit., vol. 3, cap. 4, p. 211.
- [245] Brasseur de Bourbourg's translation, cap. 12, p. 175.
- [246] Picart, Cérémonies et Coûtumes Religieuses de tous les Peuples du Monde, Amsterdam, 1743, vol. 8, p. 287.
- [247] Deane, Serpent Worship, London, 1833, p. 410.
- [248] The medicine sack or bag of the Apache, containing their "hoddentin," closely resembles the "bullæ" of the Romans—in which "On y mettait des préservatifs contre les maléfices." Musée de Naples, London, 1836, p. 4. Copy shown me by Mr. Spofford, of the Library of Congress.

- [249] Information of Tze-go-juni.
- [250] Information of Concepcion.
- [251] See notes, a few pages farther on, from Kohl; also those from Godfrey Higgins. The word "opé" suggests the name the Tusayan have for themselves, Opi, or Opika, "bread people."
- [252] Information of Tze-go-juni.
- [253] Information of Mike Burns.
- [254] Information of Mickey Free.
- [255] Information of Alchise, Mike, and others.
- [256] Information of Francesca and other captive Chiricahua squaws.
- [257] Information of Moses Henderson.
- [258] Information of Chato.
- [259] Information of Tze-go-juni.
- [260] Information of Moses Henderson and other Apache at San Carlos.
- [261] Bureau of Ethnology, Report for 1883-'84.
- [262] Information of Francesca and others.
- [263] Information of Tze-go-juni.
- [264] Smart, in Smithsonian Report for 1867, p. 419.
- [265] Snake Dance of Moquis of Arizona, New York, 1884.
- [266] In the third volume of Kingsborough, on plate 17 (Aztec picture belonging to M. Pejernavy, Pesth, Hungary), an Aztec, probably a priest, is shown offering food to a snake, which eats it out of his hand.
- [267] Corbusier, in American Antiquarian, November, 1886, pp. 336-37.
- [268] Information of Moses Henderson.
- [269] American Antiquarian, Sept. and Nov., 1886.
- [270] Ann. Rep. Bu. Eth., 1883-'84.
- [271] Snake Dance of the Moquis.
- [272] Interview with Pedro Pino.

- [273] Kunque has added to the cornmeal the meal of two varieties of corn, blue and yellow, a small quantity of pulverized sea shells, and some sand, and when possible a fragment of the blue stone called "chalchihuitl." In grinding the meal on the metates the squaws are stimulated by the medicine-men who keep up a constant singing and drumming.
- [274] Simpson, Expedition to the Navajo Country, in Senate Doc. 64, 31st Cong., 1st sess., 1849-'50, p. 95.
- [275] Hakluyt, Voyages, vol. 3, p. 470. "Echavan mucha harina de maiz por el suelo para que la pisassen los caballos."—Padre Fray Juan Gonzales de Mendoza, De las Cosas de Chino, etc., Madrid, 1586, p. 172. See also the Relacion of Padre Fray Alonso Fernandez, Historia Eclesiastica de Nuestros Tiempos, Toledo, 1611, pp. 15, 16.
- [276] P. 162.
- [277] Diego Duran, vol. 2, cap. 49, pp. 506, 507.
- [278] Herrera, dec. 5., lib. 4, cap. 5, p. 92.
- [279] Padre Christoval de Molina, Fables and Rites of the Yncas, translated by Markham in Hakluyt Soc. Trans., vol. 48, p. 63, London, 1873.
- [280] Montesinos, pp. 161, 162, in Ternaux-Compans, vol. 17, Mémoires sur l'ancien Pérou.
- [281] Relation of the voyage of Don Fernando Alarcon, in Hakluyt Voyages, vol. 3, p. 508.
- [282] Alarcon in Ternaux-Compans, Voy., vol. 9, p. 330. See also in Hakluyt Voyages, vol. 3, p. 516.
- [283] Kitchi-gami, London, 1860, p. 51.
- [284] See also on the subject Acosta, Hist. Naturelle des Indes, lib. 5, cap. 19, p. 241.
- [285] Landa, Cosas de Yucatan, Paris, 1864, page 148.
- [286] Bancroft, Native Races, vol. 2, p. 145. See also Clavigero, Hist. of Mexico, Philadelphia, 1817, vol. 2, p. 128.
- [287] Smith, Araucanians, 1855, pp. 274-275.
- [288] Smith, True Travels, Adventures and Observations, Richmond, 1819, vol. 1, p. 161.
- [289] Cérémonies et Coûtumes, Amsterdam, 1735, vol. 6, p. 74.
- [290] Historia de las Indias, p. 284.

- [291] Colonial Records of North Carolina, 1886, vol. 1, p. 930.
- [292] Mœurs des Sauvages, Paris, 1724, vol. 1, p. 386.
- [293] Personal notes of May 26, 1881; conversation with Chi and Damon at Fort Defiance. Navajo Agency, Arizona.
- [294] Ibid.
- [295] Barcia, Ensayo Cronologico, p. 160.
- [296] Schoolcraft, Ind. Tribes, vol. 4, p. 213.
- [297] Columbus Letters, in Hakluyt Soc. Works, London, 1847, vol. 2, p. 192.
- [298] Barcia, Ensayo Cronologico, p. 279.
- [299] The medicine-men of the Swampy Crees, as described in Bishop of Rupert's Land's works, quoted by Henry Youle Hind, Canadian Exploring Expedition, vol. 1, p. 113.
- [300] Personal notes, November 22, 1885, at Baker's ranch, summit of the Sierra Ancha, Arizona.
- [<u>301</u>] Tanner's Narrative, p. 174.
- [302] Blount, Tenures of Land and Customs of Manors, London, 1874, p. 355.
- [303] Brand, Popular Antiquities, London, 1882, vol. 3, pp. 307 et seq.
- [304] Crónica Seráfica, p. 434.
- [305] Nicolas Perrot, Mœurs, Coustumes et Relligion des sauvages de l'Amérique Septentrionale (Ed. of Rev. P. J. Tailhan, S.J.,) Leipzig, 1864. Perrot was a coureur de bois, interpreter, and donné of the Jesuit missions among the Ottawa, Sioux, lowa, etc., from 1665 to 1701.
- [306] Leems', Account of Danish Lapland, in Pinkerton's Voyages, London, 1814, vol. 1, p. 484.
- [307] Across Africa, London, 1877, vol. 1, p. 277.
- [308] Ibid., vol. 2, pp. 118, 120.
- [309] Source of the Nile, London, 1863, introd., p. xxi.
- [310] Cameron, Across Africa, London, 1877, vol. 2, p. 201.
- [311] Source of the Nile, London, 1863, pp. 130, 259.
- [312] Dark Continent, vol. 2, p. 260.

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[313] Schultze, Fetichism, New York, 1885, p. 53.
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- [314] Ibid., footnote, page 53.
- [<u>315</u>] Ibid., p. 67.
- [316] Asiatick Researches, Calcutta, 1805, vol. 8, p. 78.
- [317] Coleman, Mythology of the Hindus, London, 1832, p. 44.
- [318] History of the Sect of the Mahárájahs, quoted by Inman, Ancient Faiths, etc., vol. 1, p. 393.

- [<u>319</u>] Higgins, Anacalypsis, vol. 1, p. 261.
- [320] Picart, Cérémonies et Coûtumes, etc., vol. 6, part 2, p. 119.
- [321] Among the Mongols, London, 1883, p. 179.
- [322] Wright, Sorcery and Magic, London, 1851, vol. 1, p. 346.
- [<u>323</u>] Anacalypsis, vol. 2, p. 244.
- [324] Rivers of Life, vol. 1, p. 161.
- [325] Source of the Nile, London, 1863, pp. 205, 208.
- [326] Sahagun, vol. 2, in Kingsborough, vol. 6, p. 29.
- [327] Forlong, Rivers of Life, vol. 1, p. 184.
- [328] Ibid., pp. 185, 186.
- [329] Ibid., p. 186.
- [330] Dec. 6, lib. 1, p. 9.
- [331] Ternaux-Compans, Voyages, vol. 7, pp. 242, 250.
- [332] Relation of Cabeza de Vaca in Purchas, vol. 4, lib. 8, cap. 1, sec. 4, p. 1524.
- [333] Conquest of New Mexico, p. 100.
- [334] Ensayo Cronologico, pp. 12 et seq.
- [335] See also on this point Corbusier, in American Antiquarian, November, 1886.
- [336] Rau's translation in Smithsonian Ann. Rep., 1863, p. 364.
- [337] Probably the Lake of Parras.
- [338] Historia de la Compañía de Jesus en Nueva-España, vol. 1, p. 284.
- [339] History of Virginia.
- [340] See also article by J. Howard Gore, Smithsonian Report, 1881.
- [341] Pinkerton, Voyages, London, 1814, vol. 13, p. 468.
- [342] Personal notes, April 5, 1881.
- [343] Drake, World Encompassed, pp. 124-126, quoted by H. H. Bancroft, Native Races, vol. 1, pp. 387-388. (This chaplain stated so many things ignorantly that nothing is more probable

than that he attempted to describe, without seeing it, the plant from which the Indians told him that hoddentin (or downe) was obtained. The principal chief or "king" would, on such an aweinspiring occasion as meeting with strange Europeans, naturally want to cover himself and followers with all the hoddentin the country afforded.)

- [344] Kennan, Tent Life in Siberia, p. 66.
- [345] Quoted by Kingsborough, vol. 6, p. 100.
- [346] Torquemada, Monarchia Indiana, vol. 2, lib. 10, cap. 22, p. 274.
- [347] Gallatin, in Trans. Am. Ethnol. Soc., vol. 1, pp. 117-118.
- [348] Vetancurt, Teatro Mexicano, vol. 1, p. 271.
- [349] Mœurs des Sauvages, vol. 2, pp. 194, 195.
- [350] Madrid, 1870, vol. 14, p. 320.
- [<u>351</u>] Ibid.
- [352] Ternaux-Compans, Voyages, vol. 9, p. 159.
- [353] Among others consult Crónica Seráfica y Apostolica of Espinosa, Mexico, 1746, p. 419, speaking of the Asinai of Texas in 1700: "Siembran tambien cantidad de Gyrasoles que se dan muy corpulentos y la flor muy grande que en el centro tienen la semilla como de piñones y de ella mixturada con el maiz hacen un bollo que es de mucho sabor y sustancia."
- [354] Brasseur de Bourbourg, Hist. Nations Civilisées, quoted by Bancroft, Native Races, vol. 3, p. 421.
- [355] Sahagun, in book 7, Kingsborough, p. 71.
- [356] Squier, Serpent Symbol, p. 193, quoting Torquemada, lib. 7, cap. 8.
- [357] History of Mexico, Philadelphia, 1817, vol. 2, p. 79. See the additional note from Clavigero, which would seem to show that this etzalli was related to the espadaña or rush.
- [358] Monarchia Indiana, vol. 2, lib. 6, cap. 38, p. 71.
- [<u>359</u>] Ibid., p. 72.
- [<u>360</u>] Ibid., p. 73.
- [<u>361</u>] Dec. 3, lib. 2, pp. 71, 72.
- [362] Native Races, vol. 3, p. 323.

- [<u>363</u>] Diego Duran, vol. 3, p. 187.
- [364] See notes already given from Buckingham Smith's translation of Vaca.
- [365] Diego Duran, vol. 3, p. 195.
- [366] José Acosta, Hist. des Indes, ed. of Paris, 1600, liv. 5, cap. 24, p. 250.
- [367] Monarchia Indiana, lib. 10, cap. 33.
- [368] Ibid., lib. 6, cap. 48.
- [369] From Paris to Pekin, London, 1885, pp. 312, 313.
- [370] New York, 1830, p. 191.
- [371] Dubois, People of India, London, 1817, p. 490.
- [372] Gomara, Historia de Méjico, p. 445.
- [373] Mendieta, Hist. Eclesiástica Ind., p. 108.
- [374] Ibid., p. 402.
- [375] Ibid., p. 515.
- [376] Gomara, Historia de Méjico, p. 446.
- [377] From the account of lecture appearing in the Evening Star, Washington, D. C., May 19, 1888.
- [378] Herrera, dec. 5, lib. 4, cap. 5, p. 92
- [379] Balboa, Histoire du Pérou, in Ternaux-Compans, Voyages, vol. 15, pp. 124 and 127.
- [380] See the explanatory text to the Codex Mendoza, in Kingsborough, vol. 5, p. 90 et seq.
- [<u>381</u>] Historia de Méjico, p. 439.
- [382] Clavigero, History of Mexico, Philadelphia, 1817, vol. 2, p. 101.
- [383] "They strewed the temple in a curious way with rushes."—Ibid., p. 78.
- [384] Native Races, vol. 3, pp. 334-343.
- [385] Sahagun, in Kingsborough, vol. 7, p. 16.
- [386] British Monachism, London, 1817, p. 289.
- [387] Kingsborough, vol. 7, p. 83, from Sahagun.

- [388] Ximenez, Guatemala, Translated by Scherzer, p. 13.
- [389] Cérémonies et Coûtumes, etc., vol. 1, p. 27.
- [390] "Tanta diferencia de manjares y de géneros de pan que era cosa estraña."—Diego Duran, vol. 3, cap. 4, p. 219.
- [391] Davis, Conquest of New Mexico, p. 273.
- [392] Commerce of the Prairies, vol. 2, p. 54.
- [393] Pacific R. R. Report, 1856, vol. 3, pt. 1, p. 34.
- [394] Ibid., p. 34.
- [395] Ibid., p. 38.
- [396] "Los Apaches traian pieles de cibolas, gamuzas y otras cosas, á hacer cambio por maíz." "Venian con sus recuas de perros cargados mas de quinientos mercaderes cada año."— Teatro Mexicano, vol. 3, p. 323.
- [397] In burlesque survivals the use of flour prevails not only all over Latin Europe, but all such portions of America as are now or have been under Spanish or Portuguese domination. The breaking of eggshells over the heads of gentlemen upon entering a Mexican ball room is one manifestation of it. Formerly the shell was filled with flour.
- [398] Dr. W. Norton Whitney, Notes from the History of Medical Progress in Japan. Yokohama, 1885, p. 248.
- [399] The prayer of a Navajo Shaman, in American Anthropologist, vol. 1, No. 2, 1888, p. 169.
- [400] Kitchi-gami, pp. 416, 423, 424.
- [401] Anacalypsis, London, 1836, vol. 2, pp. 242-244.
- [402] Brand, Pop. Antig., vol. 3, p. 285.
- [403] Ibid., vol. 1, p. 69.
- [404] Ibid., vol. 3, pp. 329 et seq.
- [405] Brinton, Myths of the New World, New York, 1868, pp. 278, 279.
- [<u>406</u>] Ximenez, Guatemala, p. 177.
- [407] Herrera, dec. 4, lib. 9, cap. 8, p. 188.
- [408] Balboa, Hist. du Pérou, in Ternaux-Compans, Voy., vol. 15, p. 29.

- [409] Mendieta, Hist. Eclesiástica Ind., p. 110.
- [410] Henry Youle Hind, Assiniboine and Saskatchewan Exped., vol. 2, pp. 165, 166.
- [411] Lisiansky, Voyage Round the World, London, 1814, pp. 158, 221, 223.
- [412] London, 1814, pt. 2, pl. III, p. 113.
- [413] Ibid., pl. IV, pp. 194, 195.
- [414] Voyage, vol. 1, p. 282.
- [415] Native Races, vol. 1, p. 179.
- [416] Ibid., vol. 1, pp. 170, 171.
- [417] Père Louis Hennepin, Voyage, etc., Amsterdam, 1714, pp. 339-240. Ibid., translated by B. F. French, in Historical Collections of Louisiana, pt. 1, 1846.
- [418] Joutel's Journal, in Historical Collections of Louisiana, tr. by B. F. French, pp. 181, 1846.
- [419] Maj. Rogers, Account of North America, in Knox's Voyages, vol. 2, London, 1767, p. 167.
- [420] Picart, Cérémonies et Coûtumes Religieuses, etc., Amsterdam, 1735, vol. 6, p. 77.
- [421] Ibid., p. 89.
- [422] John De Laet, lib. 18, cap. 4; Gomara, Hist. de las Indias, p. 203; Padre Gumilla, Orinoco, pp. 68, 96.
- [423] Hans Staden, in Ternaux-Compans, Voyages, vol. 3, pp. 269, 299.
- [424] Peter Martyr, in Hakluyt's Voyages, vol. 5, p. 460.
- [425] Bancroft, Nat. Races of the Pacific Slope, vol. 1, p. 750.
- [426] Smyth, Aborigines of Victoria, vol. 1, p. 73; vol. 2, p. 302. See also Carteret's description of the natives of the Queen Charlotte Islands, visited by him in 1767.
- [427] Hawkesworth, Voyages, vol. 1, p. 379.
- [428] Perry S. Heath, A Hoosier in Russia, New York, 1888, p. 114.
- [429] Fosbrooke, British Monachism, p. 442.

- [430] See works cited in Buckle's Common place Book, vol. 2, of "Works," London, 1872, p. 47.
- [431] Picart, Cérémonies et Coûtumes Religieuses, vol. 6, p. 20.
- [432] Voyage Round the World, London, 1777, pp. 462, 463.
- [433] Archibald Campbell, Voyage Round the World, N. Y., 1819, p. 136.
- [434] Voyage of La Pérouse, London, 1829, vol. 2, p. 275.
- [435] Peter Kolben's Voyage to the Cape of Good Hope, in Knox's Voyage and Travels, London, 1767, vol. 2, pp. 391, 395, 406, 407.
- [436] Ibid., p. 406.
- [437] Spencer, Desc. Sociology, art. "Abipones."
- [438] Gubernatis, Zoological Mythology, London, 1872, vol. 1, p. 423.
- [439] Fosbrooke, British Monachism, p. 83.
- [440] Gaule, Mag-astromancers Posed and Puzzel'd, p. 165, quoted in Brand, Popular Antiquities, vol. 3, pp. 329 et seq.
- [441] Brand, Popular Antiquities, vol. 1, pp. 337, 338.
- [442] Laird and Oldfield's Expedition into the Interior of Africa, quoted in Buckle's Common place Book, p. 466.
- [443] Smyth, Aborigines of Victoria, vol. 2, p. 273.
- [444] Gayarre, Louisiana, 1851, p. 308.
- [445] Notes and Queries, 4th ser., vol. 8, p. 505.
- [446] Tractatus de Fascinatione, Nuremberg, 1675, 197.
- [447] Southey, quoting Ward, in Buckle's Common place Book, London, 1849, 2d ser., p. 521.
- [448] North American, October 27, 1888.
- [<u>449</u>] Kingsborough, vol. 5, p. 198.
- [450] Serpent Symbols, p. 55.
- [<u>451</u>] Hist. de Méjico, p. 348.
- [<u>452</u>] Lib. 2, cap. 47, p. 490.
- [<u>453</u>] Lib. 1, cap. 18, p. 208.
- [454] New Survey of the West Indies, London, 1648, p. 51.

- [455] Op. cit., vol. 3, cap. 4.
- [456] Popol-Vuh (Brasseur de Bourbourg), p. 65.
- [457] Ternaux-Compans, Voy., vol. 7, p. 143.
- [458] Ibid., p. 202.
- [459] Purchas, vol. 4, lib. 8, cap. 1, p. 1519; also, Davis, Conquest of New Mexico, p. 84.
- [460] Gomara, Hist. de las Indias, p. 182.
- [461] Buckingham Smith, Coleccion de Varios Documentos para la Historia de Florida, London, 1857, vol. 1, p. 46.
- [462] Bollaert, Researches in South America, London, 1860, p. 63.
- [463] Boscana, Chinigchinich, pp. 245, 253.
- [464] Powers, Contrib. to N. A. Ethnol., vol. 3, p. 140.
- [465] Long's Expedition, vol. 1, p. 240.
- [466] Second Expedition to the Polar Sea, p. 19.
- [467] Oregon Missions, p. 192.
- [468] Gmelin, quoted by Southey, in Common place Book, 1st ser., London, 1849, p. 239.
- [469] Malte-Brun, Univ. Geog., Philadelphia, 1827, vol. 1, lib. 87, p. 483.
- [470] Von Wrangel, Polar Expedition, New York, 1842, p. 188.
- [471] Smyth, Aborigines of Victoria, vol. 1, p. xxxiv.
- [472] Travels on the Amazon, p. 311.
- [473] Gumilla, Orinoco, Madrid, 1741, p. 102; the Guamas, also, ibid., pp. 102 and 108.
- [474] Malte-Brun, Univ. Geog., Phila., 1827, vol. 3, lib. 87, p. 323.
- [475] Anthropology, vol. 1, p. 116.
- [476] Spencer, Desc. Sociology.
- [477] Pliny, Nat. History, lib. 18, cap. 29.
- [478] Asiatick Researches, Calcutta, 1801, vol. 7, p. 440.
- [479] Blount, Tenures of Land and Customs of Manors, London, 1874, p. 2233.

[481] Voyage of Capt. Amasa Delano, Boston, 1847, p. 230. Compare with the ordeal of Scotch conspirators, who ate a fragment of barley bread together.

[482] Gauthier de la Peyronie, Voyages de Pallas, Paris, 1793, vol. 4, p. 75.

[483] Teutonic Mythology, vol. 1, p. 63.

[484] Macaulay quoted in Brand, Pop. Ant., vol. 1, p. 85.

[485] Fosbrooke, British Monachism, p. 83.

[486] Du Cange, Glossarium, articles "Crispellæ" and "Crespellæ."

[487] Brand, Pop. Ant., vol. 1, p. 88.

[488] Heath, A Hoosier in Russia, p. 109.

[489] Nat. Hist., lib. 18, cap. 28.

[490] Wheat, which, is now the bread corn of twelve European nations and is fast supplanting maize in America and several inferior grains in India, was no doubt widely grown in the prehistoric world. The Chinese cultivated it 2700 B. C. as a gift direct from Heaven; the Egyptians attributed its origin to Isis and the Greeks to Ceres. A classic account of the distribution of wheat over the primeval world shows that Ceres, having taught her favorite Triptolemus agriculture and the art of breadmaking, gave him her chariot, a celestial vehicle which he used in useful travels for the purpose of distributing corn to all nations.

Ancient monuments show that the cultivation of wheat had been established in Egypt before the invasion of the shepherds, and there is evidence that more productive varieties of wheat have taken the place of one, at least, of the ancient sorts. Innumerable varieties exist of common wheat. Colonel Le Couteur, of Jersey, cultivated 150 varieties; Mr. Darwin mentions a French gentleman who had collected 322 varieties, and the great firm of French seed merchants, Vilmorin-Andrieux et C^{ie}, cultivate about twice as many in their trial ground near Paris. In their recent work on Les meilleurs blés M. Henry L. de Vilmorin has described sixty-eight varieties of best wheat, which he has classed into seven groups, though these groups can hardly be called distinct species, since M. Henry L. de Vilmorin has crossbred three of them, *Triticum vulgare, Triticum turgidum* and *Triticum durum*, and has found the offspring fertile.

Three small-grained varieties of common wheat were cultivated by the first lake dwellers of Switzerland (time of Trojan war), as well as by the less ancient lake dwellers of western Switzerland and of Italy, by the people of Hungary in the stone age, and by the Egyptians, on evidence of a brick of a pyramid in which a grain was embedded and to which the date of 3359 B. C. has been assigned.

The existence of names for wheat in the most ancient languages confirms this evidence of the antiquity of its culture in all the more temperate parts of Europe, Asia, and Africa, but it seems improbable that wheat has ever been found growing persistently in a wild state, although the fact has often been asserted by poets, travelers, and historians. In the Odyssey, for example, we are told that wheat grew in Sicily without the aid of man, but a blind poet could not have seen this himself, and a botanical fact can hardly be accepted from a writer whose own existence has been contested. Diodorus repeats the tradition that Osiris found wheat and barley growing promiscuously in Palestine, but neither this nor other discoveries of persistent wild wheat seem to us to be credible, seeing that wheat does not appear to be endowed with a power of persistency except under culture.—Edinburgh Review.

The origin of baking precedes the period of history and is involved in the obscurity of the early ages of the human race. Excavations made in Switzerland gave evidence that the art of making bread was practiced by our prehistoric ancestors as early as the stone period. From the shape of loaves it is thought that no ovens were used at that time, but the dough was rolled into small round cakes and laid on hot stones, being covered with glowing ashes. Bread is mentioned in the book of Genesis, where Abraham, wishing to entertain three angels, offered to "fetch a morsel of bread." Baking is again referred to where Sarah has instructions to "make ready quickly three measures of fine meal, knead it and make cakes upon the hearth." Lot entertained two angels by giving them unleavened bread. The mere mention of unleavened bread shows that there were two kinds of bread made even at that time.

The art of baking was carried on to a high perfection among the Egyptians, who are said to have baked cakes in many fantastic shapes, using several kinds of flour. The Romans took up the art of baking, and public bakeries were numerous on the streets of Rome. In England the business of the baker was considered to be one so closely affecting the interests of the public that in 1266 an act of Parliament was passed regulating the price to be charged for bread. This regulation continued in operation until 1822 in London and until 1836 in the rest of the country. The art

of making bread has not yet reached some countries in Europe and Asia. In the rural parts of Sweden no bread is made, but rye cakes are baked twice a year and are as hard as flint. It is less than a century ago that bread was used in Scotland, the Scotch people of every class living on barley bannocks and oaten cakes.—Chicago News.

[491] Pop. Antiq., vol. 1, p. 96.

[492] Shâyast lâ-Shâyast, par. 32, note 6, pp. 283, 284 (Max Müller's ed., Oxford, 1880).

[493] Ibid., p. 315, note 3.

[494] "And if thou bring an oblation of a meat offering baken in the oven, it shall be unleavened cakes of fine flour" (Levit., II, 4); "With all thine offerings thou shalt offer salt" (Ibid., 13)—Brand, Pop. Ant., vol. 2, p. 82.

[495] Forlong, Rivers of Life, vol. 1, p. 441.

[496] Ibid., p. 447.

[497] Brand, Pop. Antiq., vol. 1, pp. 345, 346, quoting Gen. Vallencey's Essay on the Antiquity of the Irish Language.

[498] Ibid., p. 345.

[<u>499</u>] Ibid., p. 154.

[<u>500</u>] Ibid., pp. 155, 156.

[501] See also "Buns" in Inman's Ancient Faiths.

[502] "Ofrecian el pan al ídolo, hincados de rodillas. Bendezianlo los sacerdotes, y repartian como pan bendito, con lo qual se acabaua la fiesta. Guardauan aquel pan todo el año, teniendo por desdichada, y sugeta a muchos peligros la casa que sin el estaua."—Padre Fray Alonso Fernandez (Dominican). Historia Eclesiastica de Nuestros Tiempos, Toledo, 1611, p. 16.

[503] Brand, Popular Antiquities, vol. 2, pp. 100 et seq., quoting Blount, Moffet, and Moresin.

[504] Torquemada, Monarchia Indiana, vol. 2, lib. 7, cap. 9, p. 100.

[<u>505</u>] Nat. Hist., lib. xviii, caps 10 et seq. and 39.

[506] "Var (from the Hebrew word *var frumentum*) Grain. It not only means a particular kind of grain, between wheat and barley, less nourishing than the former, but more so than the latter, according to Vossius; but it means bread corn, grain of any kind. Ætius gives this application to any kind of

frumentaceous grain, decorticated, cleansed from the husks, and afterwards bruised and dried." London Medical Dictionary, Bartholomew Parr, M. D., Philadelphia, 1820, article "Far".

"Ador or Athor was the most sacred wheat, without beard, offered at adoration of gods. In Latin Adorea was a present of such after a victory, and Ad-oro is 'I adore,' from oro, 'I pray to.'"—Forlong, Rivers of Life, vol. 1, p. 473, footnote, speaking of both Greeks and Romans.

[507] Sacred Books of the East, edition of Max Müller, vol. 14, pp. 131, 205.

[508] Brand, Popular Antiquities, vol. 1, pp. 391 et seq., article "Allhallow even."

[509] Ibid., p. 391.

[<u>510</u>] Ibid., p. 392.

[<u>511</u>] Ibid., p. 393.

[<u>512</u>] Ibid., vol. 2, pp. 237 et seq.

[<u>513</u>] Ibid., p. 244.

[514] Strabo, Geography, Bohn's edition, London, 1854, vol. 1, pp. 341, 342, footnote.

[515] Brand, Popular Antiquities, vol. 1, p. 460.

[<u>516</u>] Ibid., p. 7.

[517] Strutt, Sports and Pastimes, pp. 3, 180. On the same page: "Dumb cake, a species of dreaming bread prepared by unmarried females with ingredients traditionally suggested in witching doggerel. When baked, it is cut into three divisions; a part of each to be eaten and the remainder put under the pillow. When the clock strikes twelve, each votary must go to bed backwards and keep a profound silence, whatever may appear."

[518] A writer in the Gentleman's Magazine for July, 1783, inquires: "May not the *minced pye*, a compound of the choicest productions of the East, have in view the offerings made by the wise men who came from afar to worship, bringing *spices*, etc." Quoted in Brand, Pop. Ant., vol. 1, p. 526. The mince pie was before the Reformation made in the form of a crib, to represent the manger in which the holy child lay in the stable. Ibid., p. 178.

[519] Heath, A Hoosier in Russia, p. 109.

- [520] Alvar Nuñez Cabeça de Vaca, in Ternaux-Compans, Voy., vol. 7, p. 220.
- [521] See also Davis, Conquest of New Mexico, p. 90.
- [522] William Coxe, Russian Discoveries between Asia and America, London, 1803, p. 57, quoting Steller.
- [523] Barcia, Ensayo Cronologico, Madrid, 1723.
- [524] Arabian Nights, Burton's edition, vol. 8, p. 10, footnote.
- [525] American Antiguarian, September, 1886, p. 281.
- [526] Maurice, Indian Antiquities, London, 1801, vol. 5, pp. 82 and 83.
- [<u>527</u>] Ibid., vol. 5, p. 85.
- [528] Schultze, Fetichism, N. Y., 1885, p. 32.
- [529] Paper by Dr. John G. Henderson on "Aboriginal remains near Naples, III.," Smith. Rept., 1882.
- [530] J. F. Snyder, "Indian remains in Cass County, Illinois," Smith. Rept., 1881, p. 575.
- [<u>531</u>] Rau, in Sm. Rept., 1872, p. 356.
- [532] "Ancient monuments of the Mississippi Valley," in Smithsonian Contributions, vol. 1, p. 160.
- [533] Relation of the Voyage of Don Fernando Alarcon, in Hakluyt's Voyages, vol. 3, p. 508.
- [534] Davis, Conquest of New Mexico, p. 288.
- [535] Davis, ibid., pp. 280, 284, 285.
- [536] Ibid., pp. 277, 292.
- [537] Catlin, North American Indians, London, 1845, vol. 2, p. 117.
- [<u>538</u>] Tanner's Narrative, p. 188.
- [<u>539</u>] Journal, p. 289.
- [540] North American Indians, London, 1845, vol. 1, p. 135.
- [541] Schultze, Fetichism, New York, 1885, p. 32, quoting Bastian.
- [542] Coxe, Russian Discoveries between America and Asia, London, 1803, p. 254.

- [543] Smyth, Aborigines of Victoria, vol. 1, pp. xxix, 112.
- [544] Ibid., vol. 1, p. 68.
- [545] Pettigrew, Medical Superstitions, Philadelphia, 1844, pp. 67, 72, 74.
- [546] Cérémonies et Coûtumes Religieuses, Amsterdam, 1739, vol. 2, pp. 28, 29
- [547] Ibid., p. 29.
- [548] Higgins, Anacalypsis, vol. 2, book 2, p. 77
- [549] Pettigrew, Medical Superstitions, Philadelphia, 1844, p. 61. See also Black, Folk-Medicine, p. 93.
- [550] Citations, Common place Book, p. 395, London, 1872.
- [<u>551</u>] Brand, Popular Antiquities, vol. 3, pp. 310, 311.
- [552] Brand, Popular Antiquities, vol. 3, p. 310.
- [553] Holiday Customs of Ireland, pp. 381 et seq.
- [554] Popular Antiquities, vol. 3, p. 325.
- [555] Picart, Cérémonies et Coûtumes, etc., vol. 10, p. 56.
- [<u>556</u>] Massingberd, The English Reformation, London, 1857, p. 105.
- [<u>557</u>] Mendieta, p. 110.
- [<u>558</u>] Vol. 3, cap. 5, p. 234.
- [<u>559</u>] Herrera, dec. 2, lib. 6, p. 141.
- [560] Kingsborough, vol. 7, chap. 4.
- [<u>561</u>] Teutonic Mythology, vol. 3, p. 1233.
- [<u>562</u>] Ibid.
- [563] Fables and Rites of the Incas, Padre Christoval de Molina (Cuzco, 1570-1584), transl. by Clements R. Markham, Hakluyt Society trans., vol. 48, London, 1873, p. 48.
- [<u>564</u>] The common people wore a black "llautu." See Garcilaso, Comentarios, Markham's transl., Hak. Soc., vol. 41, pp. 88, 89.
- [565] Ibid., p. 85.
- [566] Ibid., p. 89.
- [567] "Quando vàn à sembrar las Tierras del Sol, vàn solos los Principales à trabajar, i vàn con insignias blancas, i en las

- espaldas unos Cordones tendidos blancos, à modo de Ministros del Altar."—Herrera, dec. 5, lib. 4, cap. 6, pp. 94-95.
- [568] Picart, Cérémonies et Coûtumes, etc., Amsterdam, 1735, vol. 6, p. 92.
- [569] Montfaucon, L'antiquité expliquée, tome 2, pt. 1, p. 33.
- [570] Hawkesworth, Voyages, vol. 3, p. 229.
- [571] Voyage to Congo, in Pinkerton's Voyages, vol. 16, p. 237.
- [<u>572</u>] Pinkerton, Voyages, vol. 16, p. 388.
- [573] Speke, Source of the Nile, London, 1863, p. 125.
- [574] London, 1877, vol. 2, p. 131.
- [575] Stanley, Through the Dark Continent, vol. 2, p. 330.
- [576] Schweinfurth, Heart of Africa, London, 1873, vol. 1, p. 154.
- [577] Winstanley, Abyssinia, vol. 2, p. 68.
- [578] This cord is worn about the neck. Ibid., p. 257.
- [<u>579</u>] Ibid., vol. 1, p. 235.
- [<u>580</u>] Ibid., vol. 2, p. 132.
- [581] Ibid., p. 165.
- [<u>582</u>] Ibid., p. 292.
- [583] Malte-Brun, Universal Geography, vol. 4, p. 259, Phila., 1832.
- [584] Grimm, Teutonic Mythology, vol. 2, p. 640.
- [585] Nightingale, quoted in Madden, Shrines and Sepulchres, vol. 1, pp. 557, 558.
- [586] Leems, Account of Danish Lapland, in Pinkerton, Voyages, London, 1808, vol. 1, p. 471.
- [<u>587</u>] Brand, Popular Antiquities, vol. 3, p. 5. See also John Scheffer, Lapland, Oxford, 1674, p. 58.
- [<u>588</u>] Act IV, scene 1.
- [<u>589</u>] Benjamin, Persia, London, 1877, p. 99.
- [590] Cérémonies et Coûtumes, vol. 7, p. 320.
- [591] Du Halde, History of China, London, 1736, vol. 4, pp. 244, 245, and elsewhere.

- [<u>592</u>] Higgins, Anacalypsis, vol. 2, p. 218.
- [593] Vining, An Inglorious Columbus, p. 635.
- [594] Du Halde, History of China, London, 1736, vol. 1, p. 270.
- [<u>595</u>] Univ. Geog., vol. 3, book 75, p. 144, Phila., 1832.
- [596] Brinton, Myths of the New World, N. Y., 1868, p. 15.
- [597] Early History of Mankind, London, 1870, p. 156.
- [<u>598</u>] Voyages, vol. 3, p. 102.
- [599] Shâyast lâ-Shâyast, cap. 4, pp. 285, 286. In Sacred Books of the East, Max Müller's edition, vol. 5.
- [600] Monier Williams, Modern India, p. 56.
- [601] Ibid., pp. 179, 180.
- [602] Cérémonies et Coûtumes, vol. 7, p. 28.
- [603] Marco Polo, Travels, in Pinkerton's Voyages, vol. 7, p. 163.
- [604] Picart, Cérémonies et Coûtumes, etc., vol. 6, pt. 2, p. 99.
- [605] Malte-Brun, Univ. Geog., vol. 2, lib. 50, p. 235, Philadelphia, 1832.
- [606] Dr. J. L. August Von Eye, The history of culture, in Iconographic Encyc., Philadelphia, 1886, vol. 2, p. 169.
- [<u>607</u>] Forlong, Rivers of Life, vol. 1, p. 120.
- [608] Ibid., pp. 240-241.
- [609] Forlong, Rivers of Life, vol. 1, p. 328.
- [610] Ibid., p. 323.
- [611] Dubois, People of India, p. 9.
- [612] Mythology of the Hindus.
- [613] Mythology of the Hindus, pp. 9, 10, 11.
- [<u>614</u>] Ibid., p. 92.
- [<u>615</u>] Ibid., p. 155.
- [616] Ibid., pp. 135, 154, 155.
- [617] Maurice, Indian Antiquities, London, 1801, vol. 5, p. 205.
- [618] Ibid., vol. 4, p. 375, where a description of the mode of weaving and twining is given.

- [619] Ibid., p. 376.
- [<u>620</u>] Ibid., vol. 5, p. 206.
- [621] Notes of Richard Johnson, Voyages of Sir Hugh Willoughby and others to the northern part of Russia and Siberia, Pinkerton's Voyages, vol. 1, p. 63.
- [622] Caron's account of Japan in Pinkerton's Voyages, vol. 7, p. 631.
- [623] Rev. Father Dandini's Voyage to Mount Libanus, in Pinkerton's Voyages, vol. 10, p. 286.
- [624] Henry Charles Lea, History of the Inquisition in the Middle Ages, vol. 1, p. 92, New York, 1888.

- [625] Müller, Sacred Books of the East, vol. 14, Vasish*th*a, cap. 2, par 6.
- [626] Ibid., Baudhâyana, prasna 1, adhyâya 5, kandikâ 8, pars. 5-10, p. 165.
- [627] Saxon Leechdoms, vol. 1, pp. xli-xliii.
- [628] Ibid., p. xliii.
- [629] Brand, Popular Antiquities, vol. 2, pp. 108,109.
- [630] Browne, Religio Medici, p. 392.
- [631] Brand, op. cit., p. 110.
- [632] Pliny, Nat. Hist., lib. 28, cap. 22.
- [633] Ibid., lib. 28, cap. 17.
- [<u>634</u>] Ibid.
- [635] Grimm, Teutonic Mythology, vol. 3, p. 1169.
- [636] Burton, Anatomy of Melancholy, London, 1827, vol. 1, p. 91; vol. 2, pp. 288, 290.
- [637] Burton, Anatomy of Melancholy, London, 1827, vol. 1, p. 91; vol. 2, p. 290.
- [638] Picart, Cérémonies et Coûtumes, etc., vol. 10, pp. 69-73.
- [639] Dæmonology, p. 100.
- [640] Brand, Pop. Ant., vol. 3, p. 299.
- [641] Ibid., p. 170.
- [642] Frommann, Tractatus de Fascinatione, Nuremberg, 1675, p. 731.
- [643] Markham, Bogle's mission to Tibet, London, 1876, p. 85.
- [<u>644</u>] Brand, Pop. Ant., vol. 2, p. 149.
- [645] Thomas Wright, Sorcery and Magic, London, 1851, vol. 2, p. 10.
- [<u>646</u>] Brand, Pop. Ant., vol. 2, p. 143.
- [647] Pennant, in Pinkerton, Voyages, vol. 3, p. 382.
- [648] Hoffman, quoting Friend, in Jour. Am. Folk Lore, 1888, p. 134.
- [649] Brand, Pop. Ant., vol. 2, pp. 127 et seq.

- [650] Grimm, Teutonic Mythology, vol. 3, p. 1174. He also speaks of the "nouer l'aiguillette", ibid., p. 1175.
- [651] Saxon Leechdoms, vol. 1, p. xliv.
- [652] Black, Folk-Medicine, London, 1883, pp. 185, 186.
- [653] Pliny, Nat. Hist., lib. 28, cap. 9.
- [654] Brand, Pop. Ant., vol. 2, p. 67.
- [655] Ibid., p. 170.
- [656] Sextus Placitus, De Medicamentis ex Animalibus, Lyons, 1537, pages not numbered, article "de Puello et Puellæ Virgine."
- [657] Etmüller, Opera Omnia, Lyons, 1690, vol. 2, p. 279, Schroderii Dilucidati Zoologia.
- [658] Brand, Pop. Ant., vol. 2, p. 68, footnote.
- [659] Ibid., p. 67.
- [660] Paracelsus, Chirurgia Minora, in Opera Omnia, Geneva, 1662, vol. 2, p. 70.
- [<u>661</u>] Ibid., p. 174.
- [662] Beckherius, Medicus Microcosmus, London, 1660, p. 174.
- [663] Grimm, Teutonic Mythology, vol. 3, p. 1094, footnote.
- [664] Ibid., p. 1096.
- [665] Pliny, Nat. Hist., lib. 30, cap. 12.
- [666] Etmüller, Opera Omnia, Lyons, 1690, vol. 2, pp. 282, 283, Schroderii Dilucidati Zoologia.
- [<u>667</u>] Ibid., p. 278a.
- [668] Black, Folk-Medicine, London, 1883, p. 113.
- [669] Forlong, Rivers of Life, London, 1883, vol. 2, p. 313.
- [670] Brand, Pop. Ant., vol. 2, p. 69.
- [671] Notes and Queries, 1st series, vol. 4, p. 500.
- [672] See also Black, Folk-Medicine, London, 1883, p. 79.
- [673] Grimm, Teutonic Mythology, vol. 3, p. 1233.
- [674] Black, Folk-Medicine, London, 1883, p. 114.
- [675] Herrera, dec. 6, lib. 8, cap. 1, p. 171.

- [676] Ibid., dec. 7, lib. 4, cap. 5, p. 70.
- [677] Smyth, Aborigines of Victoria, vol. 1, p. 351. See also previous references to the use of such cords by the Australians.
- [678] Pliny, Nat. Hist., lib. 28, cap. 27.
- [679] Highlands of Æthiopia, vol. 1, p. 247.
- [680] Through the Dark Continent, vol. 1, p. 398.
- [681] Pliny, Nat. Hist., lib. 28, cap. 11.
- [682] Notes and Queries, 4th series, vol. 5, pp. 295, 390.
- [683] Traité des Superstitions, tome 1, chap. 3, paragraph 8.
- [684] Pop. Ant., vol. 3, p. 276.
- [685] Black, Folk-Medicine, p. 109.
- [686] Anatomy of Melancholy, vol. 2, pp. 288, 290.
- [687] Brand, Pop. Ant., vol. 2, p. 107.
- [688] Brand, Pop. Ant., vol. 2, p. 78.
- [<u>689</u>] Ibid., p. 91.
- [690] Ibid., p. 93.
- [691] Picart, Cérémonies et Coûtumes, etc., vol. 1, p. 41.
- [692] Folk-Medicine, London, 1883, pp. 185, 186.
- [<u>693</u>] P. 41.
- [694] Black, Folk-Medicine, p. 186.
- [695] Ibid., (after Tylor) pp. 176, 177.
- [696] Ibid., p. 178.
- [697] Pop. Ant., vol. 3, p. 276.
- [698] Salverte, Philosophy of Magic, vol. 1, p. 195.
- [699] Black, Folk-Medicine, London, 1883, p. 197.
- [700] Pliny, Nat. Hist., lib. 24, cap. 118.
- [<u>701</u>] Forlong, Rivers of Life, vol. 1, p. 451.
- [702] Pennant, quoted by Brand, Popular Antiquities, vol. 3, p. 54.
- [<u>703</u>] Ibid., p. 285.

- [704] Folk-Medicine, London, 1883, pp. 185, 186.
- [705] Folk-Medicine, London, 1883, p. 113.
- [706] Ibid., p. 57.
- [707] Ephemeridum Physico-medicarum, Leipzig, 1694, vol. 1, p. 49.
- [708] Black, Folk-Medicine, p. 112.
- [709] Black, Folk-Medicine, p. 112.
- [710] Brand, Pop. Ant., vol. 2, p. 86.
- [711] Black, Folk-Medicine, p. 38.
- [712] Pliny, Nat. Hist., lib. 30, cap. 38.
- [713] Ibid.
- [714] Black, Folk-Medicine, p. 111.
- [715] Brand, Pop. Ant., vol. 3, pp. 288, 324.
- [716] This fact is stated by Torquemada, Monarchia Indiana, lib. 10, cap. 33, and by Gomara, Hist. of the Conq. of Mexico, p. 446; see also Diego Duran, lib. 1, cap. 20, p. 226.
- [<u>717</u>] Herrera, dec. 3, lib. 2, p. 67.
- [718] John Gilmary Shea, The Catholic Church in Colonial Days, p. 472.
- [719] Diego Duran, vol. 3, cap. 4, p. 217.
- [720] Anatomy of Melancholy, London, 1827, vol. 1, p. 337.
- [721] Picart, Cérémonies et Coûtumes, etc., Amsterdam, 1729, vol. 5, p. 50.
- [722] Lady of the Lake, canto 3, stanza 4, Sir Rhoderick Dhu, summoning Clan Alpine against the king.
- [723] Teatro Mexicano, vol. 3, p. 323.
- [724] Lib. 14, cap. 4, and lib. 16, cap. 16.
- [725] Lib. 1, cap. 23, pp. 251-252.
- [726] Ximenez, Hist. Orig. Indios, p. 211.
- [<u>727</u>] Mendieta, p. 83.
- [728] Ibid., p. 78.
- [729] Researches in South America, p. 83.

- [730] Monarchia Indiana, vol. 2, lib. 13, cap. 45, and elsewhere.
- [731] Emory, Reconnoissance, p. 88.
- [732] Gomara, Historia de la Conquista de Méjico, Veytia's edition, p. 299.
- [733] Ibid., p. 310.
- [734] Smithsonian Contributions, "Ancient monuments of New York," vol. 2.
- [735] Buckingham Smith, Relacion de la Jornada de Coronado á Cibola, Coleccion de Documentos para la Historia de Florida, London, 1857, vol. 1, p. 148.
- [736] Ibid., vol. 1, p. 150.
- [737] Brinton, Myths of the New World, p. 253.
- [738] London, 1844, vol. 1, pp. 26, 29, 36, 93.
- [<u>739</u>] Ibid., p. 278.
- [740] Ibid., vol. 2, p. 389.
- [741] Monarchia Indiana, lib. 6, cap. 45, p. 80.
- [742] Ibid., lib. 19, cap. 22, pp. 357-358.
- [743] Ternaux-Compans, vol. 10, p. 240.
- [744] London, 1843, p. 248.
- [745] Pimentel, Lenguas Indígenas de México, vol. 3, pp. 498, 499.
- [746] Brinton, Myths of the New World, pp. 285, 286.
- [<u>747</u>] Ibid., p. 264.
- [748] Kingsborough, vol. 8, sup., p. 249.
- [749] Parkman, Jesuits, introduction, p. lxxxiv.

Transcriber's Notes

Obvious typographical errors have been repaired. Nonstandard spellings, including those in other languages, were retained as in the original.

Hyphenation and accent variants that could not be clearly resolved, were retained.

The few cases of ellipses shown as asterisks were also retained.

<u>p. 579</u>, paragraph beginning "Dr. Joseph Lanzoni": both "chermisinum" and "chermesinum" occurred in the original as shown.

<u>p. 585</u>, paragraph beginning "At intervals": "Three several times they" is as in the original.

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The Mide'wiwin or "Grand Medicine Society" of the Ojibwa

Seventh Annual Report of the Bureau of Ethnology to the Secretary of the Smithsonian Institution, 1885-1886, Government Printing Office,

Walter James Hoffman



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Title: The Mide'wiwin or "Grand Medicine Society" of the Ojibwa Seventh Annual Report of the Bureau of Ethnology to the Secretary of the Smithsonian Institution, 1885-1886, Government Printing Office, Washington, 1891, pages 143-300

Author: Walter James Hoffman

Release Date: September 25, 2006 [EBook #19368]

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Some typographical errors have been corrected. They have been marked in the text with mouse-hover popups. The variation between "Ojibwa" and "Ojibway" is as in the original.

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THE MIDE WIWIN OR "GRAND MEDICINE SOCIETY"

OF

THE OJIBWA.

BY

W. J. HOFFMAN.

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Larger Map

PLATE II. OJIBWA INDIAN RESERVATIONS IN MINNESOTA AND WISCONSIN.

I Red Lake. II White Earth. III Winnibigoshish. IV Cass Lake. V Leech Lake. VI Deer Creek. VII Bois Forte. VIII Vermillion Lake. IX Fond du Lac. X Mille Lacs. XI Lac Court Oreílle. XII La Pointe. XIII Lac de Flanibeau. XIV Red Cliff. XV Grand Portage.

THE MIDĒ WIWIN OR "GRAND MEDICINE SOCIETY" OF THE OJIBWAY.

By W. J. HOFFMAN.

INTRODUCTION.

The Ojibwa is one of the largest tribes of the United States, and it is scattered over a considerable area, from the Province of Ontario, on the east, to the Red River of the North, on the west, and from Manitoba southward through the States of Minnesota, Wisconsin, and Michigan. This tribe

is, strictly speaking, a timber people, and in its westward migration or dispersion has never passed beyond the limit of the timber growth which so remarkably divides the State of Minnesota into two parts possessing distinct physical features. The western portion of this State is a gently undulating prairie which sweeps away to the Rocky Mountains, while the eastern portion is heavily timbered. The dividing line, at or near the meridian of 95° 50' west longitude, extends due north and south, and at a point about 75 miles south of the northern boundary the timber line trends toward the northwest, crossing the State line, 49° north latitude, at about 97° 10' west longitude.

Minnesota contains many thousand lakes of various sizes, some of which are connected by fine water courses, while others are entirely isolated. The wooded country is undulating, the elevated portions being covered chiefly with pine, fir, spruce, and other coniferous trees, and the lowest depressions being occupied by lakes, ponds, or marshes, around which occur the tamarack, willow, and other trees which thrive in moist ground, while the regions between these extremes are covered with oak, poplar, ash, birch, maple, and many other varieties of trees and shrubs.

Wild fowl, game, and fish are still abundant, and until recently have furnished to the Indians the chief source of subsistence.

Tribal organization according to the totemic system is practically broken up, as the Indians are generally located upon or near the several reservations set apart for them by the General Government, where they have been under more or less restraint by the United States Indian agents and the missionaries. Representatives of various totems or gentes may therefore be found upon a single reservation, where they continue to adhere to traditional customs and beliefs, thus presenting an interesting field for ethnologic research.

The present distribution of the Ojibwa in Minnesota and Wisconsin is indicated upon the accompanying map, Pl. II. In the southern portion many of these people have adopted civilized pursuits, but throughout the northern and northwestern part many bands continue to adhere to their primitive methods and are commonly designated "wild Indians." The habitations of many of the latter are rude and primitive. The bands on the northeast shore of Red Lake, as well as a few others farther east, have occupied these isolated sites for an uninterrupted period of about three centuries, as is affirmed by the chief men of the several villages and corroborated by other traditional evidence.

Father Claude Alloüez, upon his arrival in 1666 at Shagawaumikong, or La Pointe, found the Ojibwa preparing to attack the Sioux. The settlement at this point was an extensive one, and in traditions pertaining to the "Grand Medicine Society" frequent allusion is made to the fact that at this place the rites were practiced in their greatest purity.

Mr. Warren, in his History of the Ojibwa Indians,¹ bases his belief upon traditional evidence that the Ojibwa first had knowledge of the whites in 1612. Early in the seventeenth century the French missionaries met with various tribes of the Algonkian linguistic stock, as well as with bands or subtribes of the Ojibwa Indians. One of the latter, inhabiting the vicinity of Sault Ste. Marie, is frequently mentioned in the Jesuit Relations as the Saulteurs. This term was applied to all those people who lived at the Falls, but from other statements it is clear that the Ojibwa formed the most important body in that vicinity. La Hontan speaks of the "Outchepoues, alias Sauteurs," as good warriors. The name Saulteur survives at this day and is applied to a division of the tribe.

According to statements made by numerous Ojibwa chiefs of importance the tribe began its westward dispersion from

La Pointe and Fond du Lac at least two hundred and fifty years ago, some of the bands penetrating the swampy country of northern Minnesota, while others went westward and southwestward. According to a statement² of the location of the tribes of Lake Superior, made at Mackinaw in 1736, the Sioux then occupied the southern and northern extremities of that lake. It is possible, however, that the northern bands of the Ojibwa may have penetrated the region adjacent to the Pigeon River and passed west to near their present location, thus avoiding their enemies who occupied the lake shore south of them.

From recent investigations among a number of tribes of the Algonkian linguistic division it is found that the traditions and practices pertaining to the Mide´wiwin, Society of the Mide´ or Shamans, popularly designated as the "Grand Medicine Society," prevailed generally, and the rites are still practiced at irregular intervals, though in slightly different forms in various localities.

In the reports of early travelers and missionaries no special mention is made of the Mide, the Jes'sakkid, or the Wâbĕnō´, but the term sorcerer or juggler is generally employed to designate that class of persons who professed the power of prophecy, and who practiced incantation and administered medicinal preparations. Constant reference is made to the opposition of these personages to the introduction of Christianity. In the light of recent investigation the cause of this antagonism is seen to lie in the fact that the traditions of Indian genesis and cosmogony and the ritual of initiation into the Society of the Mide' constitute what is to them a religion, even more powerful and impressive than the Christian religion is to the average civilized man. This opposition still exists among the leading classes of a number of the Algonkian tribes, and especially among the Ojibwa, many bands of whom have been more or less isolated and beyond convenient reach of the Church.

The purposes of the society are twofold; first, to preserve the traditions just mentioned, and second, to give a certain class of ambitious men and women sufficient influence through their acknowledged power of exorcism and necromancy to lead a comfortable life at the expense of the credulous. The persons admitted into the society are firmly believed to possess the power of communing with various supernatural beings—manidos—and in order that certain desires may be realized they are sought after and consulted. The purpose of the present paper is to give an account of this society and of the ceremony of initiation as studied and observed at White Earth, Minnesota, in 1889. Before proceeding to this, however, it may be of interest to consider a few statements made by early travelers respecting the "sorcerers or jugglers" and the methods of medication.

In referring to the practices of the Algonkian tribes of the Northwest, La Hontan³ says:

When they are sick, they only drink Broth, and eat sparingly; and if they have the good luck to fall asleep, they think themselves cur'd: They have told me frequently, that sleeping and sweating would cure the most stubborn Diseases in the World. When they are so weak that they cannot get out of Bed, their Relations come and dance and make merry before 'em, in order to divert 'em. To conclude, when they are ill, they are always visited by a sort of Quacks, (Jongleurs); of whom 't will now be proper to subjoin two or three Words by the bye.

A Jongleur is a sort of Physician, or rather a Quack, who being once cur'd of some dangerous Distemper, has the Presumption and Folly to fancy that he is immortal, and possessed of the Power of curing all Diseases, by speaking to the Good and Evil Spirits. Now though every

Body rallies upon these Fellows when they are absent, and looks upon 'em as Fools that have lost their Senses by some violent Distemper, yet they allow 'em to visit the Sick; whether it be to divert 'em with their Idle Stories, or to have an Opportunity of seeing them rave, skip about, cry, houl, and make Grimaces and Wry Faces, as if they were possess'd. When all the Bustle is over, they demand a Feast of a Stag and some large Trouts for the Company, who are thus regal'd at once with Diversion and Good Cheer.

When the Quack comes to visit the Patient, he examines him very carefully; If the Evil Spirit be here, says he, we shall quickly dislodge him. This said, he withdraws by himself to a little Tent made on purpose, where he dances, and sings houling like an Owl; (which gives the Jesuits Occasion to say, That the Devil converses with 'em.) After he has made an end of this Quack Jargon, he comes and rubs the Patient in some part of his Body, and pulling some little Bones out of his Mouth, acquaints the Patient, That these very Bones came out of his Body; that he ought to pluck up a good heart, in regard that his Distemper is but a Trifle; and in fine, that in order to accelerate the Cure. 't will be convenient to send his own and his Relations Slaves to shoot Elks. Deer, &c., to the end they may all eat of that sort of Meat, upon which his Cure does absolutely depend.

Commonly these Quacks bring 'em some Juices of Plants, which are a sort of Purges, and are called *Maskikik*.

Hennepin, in "A Continuation of the New Discovery," etc.,⁴ speaks of the religion and sorcerers of the tribes of the St. Lawrence and those living about the Great Lakes as follows:

We have been all too sadly convinced, that almost all the Salvages in general have no notion of a God, and that they are not able to comprehend the most ordinary Arguments on that Subject; others will have a Spirit that commands, say they, in the Air. Some among 'em look upon the Skie as a kind of Divinity; others as an *Otkon* or *Manitou*, either Good or Evil.

These People admit of some sort of Genius in all things; they all believe there is a Master of Life, as they call him, but hereof they make various applications; some of them have a lean Raven, which they carry always along with them, and which they say is the Master of their Life; others have an Owl, and some again a Bone, a Sea-Shell, or some such thing;

There is no Nation among 'em which has not a sort of Juglers or Conjuerers, which some look upon to be Wizards, but in my Opinion there is no Great reason to believe 'em such, or to think that their Practice favours any thing of a Communication with the Devil.

These Impostors cause themselves to be reverenced as Prophets which fore-tell Futurity. They will needs be look'd upon to have an unlimited Power. They boast of being able to make it Wet or Dry; to cause a Calm or a Storm; to render Land Fruitful or Barren; and, in a Word to make Hunters Fortunate or Unfortunate. They also pretend to Physick, and to apply Medicines, but which are such, for the most part as have little Virtue at all in 'em, especially to Cure that Distemper which they pretend to.

It is impossible to imagine, the horrible Howlings and strange Contortions that those Jugglers make of their Bodies, when they are disposing themselves to Conjure, or raise their Enchantments.

Marquette, who visited the Miami, Mascontin and Kickapoo Indians in 1673, after referring to the Indian herbalist,

mentions also the ceremony of the "calumet dance," as follows:

They have Physicians amongst them, towards whom they are very liberal when they are sick, thinking that the Operation of the Remedies they take, is proportional to the Presents they make unto those who have prescrib'd them.

In connection with this, reference is made by Marquette to a certain class of individuals among the Illinois and Dakota, who were compelled to wear women's clothes, and who were debarred many privileges, but were permitted to "assist at all the Superstitions of their *Juglers*, and their solemn Dances in honor of the *Calumet*, in which they may sing, but it is not lawful for them to dance. They are call'd to their Councils, and nothing is determin'd without their Advice; for, because of their extraordinary way of Living, they are look'd upon as *Manitous*, or at least for great and incomparable Genius's."

That the calumet was brought into requisition upon all occasions of interest is learned from the following statement, in which the same writer declares that it is "the most mysterious thing in the World. The Sceptres of our Kings are not so much respected; for the Savages have such a Deference for this Pipe, that one may call it *The God of Peace and War, and the Arbiter of Life and Death*. Their *Calumet of Peace* is different from the *Calumet of War*; They make use of the former to seal their Alliances and Treaties, to travel with safety, and receive Strangers; and the other is to proclaim War."

This reverence for the calumet is shown by the manner in which it is used at dances, in the ceremony of smoking, etc., indicating a religious devoutness approaching that recently observed among various Algonkian tribes in connection with the ceremonies of the Midē´wiwin. When the calumet dance

was held, the Illinois appear to have resorted to the houses in the winter and to the groves in the summer. The abovenamed authority continues in this connection:

They chuse for that purpose a set Place among Trees, to shelter themselves against the Heat of the Sun, and lay in the middle a large Matt, as a Carpet, to lay upon the God of the Chief of the Company, who gave the Ball; for every one has his peculiar God, whom they call *Manitoa*. It is sometime a Stone, a Bird, a Serpent, or anything else that they dream of in their Sleep; for they think this Manitoa will prosper their Wants, as Fishing, Hunting, and other Enterprizes. To the Right of their *Manitoa* they place the Calumet, their Great Deity, making round about it a Kind of Trophy with their Arms, viz. their Clubs, Axes, Bows, Quivers, and Arrows. * * * Body sits down afterwards, round about, as they come, having first of all saluted the *Manitoa*, which they do in blowing the Smoak of their Tobacco upon it, which is as much as offering to it Frankincense. * * * This Preludium being over, he who is to begin the Dance appears in the middle of the Assembly, and having taken the Calumet, presents it to the Sun, as if he wou'd invite him to smoke. Then he moves it into an infinite Number of Postures sometimes laying it near the Ground, then stretching its Wings, as if he wou'd make it fly, and then presents it to the Spectators, who smoke with it one after another, dancing all the while. This is the first Scene of this famous Ball.

The infinite number of postures assumed in offering the pipe appear as significant as the "smoke ceremonies" mentioned in connection with the preparatory instruction of the candidate previous to his initiation into the Midē´wiwin.

In his remarks on the religion of the Indians and the practices of the sorcerers, Hennepin says:

As for their Opinion concerning the Earth, they make use of a Name of a certain *Genius*, whom they call Micaboche, who has cover'd the whole Earth with water (as they imagine) and relate innumerable fabulous Tales, some of which have a kind of Analogy with the Universal Deluge. These Barbarians believe that there are certain Spirits in the Air, between Heaven and Earth, who have a power to foretell future Events, and others who play the part of Physicians, curing all sorts of Distempers. Upon which account, it happens, that these Savages are very Superstitious, and consult their Oracles with a great deal of exactness. One of these Masters-Jugglers who pass for Sorcerers among them, one day caus'd a Hut to be erected with ten thick Stakes, which he fix'd very deep in the Ground, and then made a horrible noise to Consult the Spirits, to know whether abundance of Snow wou'd fall ere long, that they might have good game in the Hunting of Elks and Beavers: Afterward he bawl'd out aloud from the bottom of the Hut, that he saw many Herds of Elks, which were as yet at a very great distance, but that they drew near within seven or eight Leagues of their Huts, which caus'd a great deal of joy among those poor deluded Wretches.

That this statement refers to one or more tribes of the Algonkian linguistic stock is evident, not only because of the reference to the sorcerers and their peculiar methods of procedure, but also that the name of *Micaboche*, an Algonkian divinity, appears. This Spirit, who acted as an intercessor between Ki´tshi Man´idō (Great Spirit) and the Indians, is known among the Ojibwa as Mi´nabō´zho; but to this full reference will be made further on in connection with the Myth of the origin of the Midē´wiwin. The tradition of Nokomis (the earth) and the birth of Manabush (the Mi´nabō´zho of the Menomoni) and his brother, the Wolf, that

pertaining to the re-creation of the world, and fragments of other myths, are thrown together and in a mangled form presented by Hennepin in the following words:

Some Salvages which live at the upper end of the River St. *Lawrence*, do relate a pretty diverting Story. They hold almost the same opinion with the former [the Iroquois], that a Woman came down from Heaven, and remained for some while fluttering in the Air, not finding Ground whereupon to put her Foot. But that the Fishes moved with Compassion for her, immediately held a Consultation to deliberate which of them should receive her. The Tortoise very officiously offered its Back on the Surface of the Water. The Woman came to rest upon it, and fixed herself there. Afterwards the Filthiness and Dirt of the Sea gathering together about the Tortoise, there was formed by little and little that vast Tract of Land. which we now call *America*.

They add that this Woman grew weary of her Solitude, wanting some body for to keep her Company, that so she might spend her time more pleasantly. Melancholy and Sadness having seiz'd upon her Spirits, she fell asleep, and a Spirit descended from above, and finding her in that Condition approach'd and knew her unperceptibly. From which Approach she conceived two Children, which came forth out of one of her Ribs, But these two Brothers could never afterwards agree together. One of them was a better Huntsman than the other; they guarreled every day; and their Disputes grew so high at last, that one could not bear with the other. One especially being of a very wild Temper, hated mortally his Brother who was of a milder Constitution, who being no longer able to endure the Pranks of the other, he resolved at last to part from him. He retired then into Heaven, whence, for a Mark of his just

Resentment, he causeth at several times his Thunder to rore over the Head of his unfortunate Brother.

Sometime after the Spirit descended again on that Woman, and she conceived a Daughter, from whom (as the Salvages say) were propagated these numerous People, which do occupy now one of the greatest parts of the Universe.

It is evident that the narrator has sufficiently distorted the traditions to make them conform, as much as practicable, to the biblical story of the birth of Christ. No reference whatever is made in the Ojibwa or Menomoni myths to the conception of the Daughter of Nokomis (the earth) by a celestial visitant, but the reference is to one of the wind gods. Mi´nabō´zho became angered with the Ki´tshi Man´idō, and the latter, to appease his discontent, gave to Mi´nabō´zho the rite of the Midēwiwin. The brother of Mi´nabō´zho was destroyed by the malevolent underground spirits and now rules the abode of shadows,—the "Land of the Midnight Sun."

Upon his arrival at the "Bay of Puans" (Green Bay, Wisconsin), Marquette found a village inhabited by three nations, viz: "Miamis, Maskoutens, and Kikabeux." He says:

When I arriv'd there, I was very glad to see a great Cross set up in the middle of the Village, adorn'd with several White Skins, Red Girdles, Bows and Arrows, which that good People had offer'd to the Great *Manitou*, to return him their Thanks for the care he had taken of them during the Winter, and that he had granted them a prosperous Hunting. *Manitou*, is the Name they give in general to all Spirits whom they think to be above the Nature of Man.

Marquette was without doubt ignorant of the fact that the cross is the sacred post, and the symbol of the fourth

degree of the Midē´wiwin, as will be fully explained in connection with that grade of the society. The erroneous conclusion that the cross was erected as an evidence of the adoption of Christianity, and possibly as a compliment to the visitor, was a natural one on the part of the priest, but this same symbol of the Midē´ Society had probably been erected and bedecked with barbaric emblems and weapons months before anything was known of him.

The result of personal investigations among the Ojibwa, conducted during the years 1887, 1888 and 1889, are presented in the accompanying paper. The information was obtained from a number of the chief Mide priests living at Red Lake and White Earth reservations, as well as from members of the society from other reservations, who visited the last named locality during the three years. Special mention of the peculiarity of the music recorded will be made at the proper place; and it may here be said that in no instance was the use of colors detected, in any birch-bark or other records or mnemonic songs, simply to heighten the artistic effect; though the reader would be led by an examination of the works of Schoolcraft to believe this to be a common practice. Col. Garrick Mallery; U.S. Army, in a paper read before the Anthropological Society of Washington, District of Columbia, in 1888, says, regarding this subject:

The general character of his voluminous publications has not been such as to assure modern critics of his accuracy, and the wonderful minuteness, as well as comprehension, attributed by him to the Ojibwa hieroglyphs has been generally regarded of late with suspicion. It was considered in the Bureau of Ethnology an important duty to ascertain how much of truth existed in these remarkable accounts, and for that purpose its pictographic specialists, myself and Dr. W. J. Hoffman as assistant, were last summer directed to

proceed to the most favorable points in the present habitat of the tribe, namely, the northern region of Minnesota and Wisconsin, to ascertain how much was yet to be discovered. * * * The general results of the comparison of Schoolcraft's statements with what is now found shows that, in substance, he told the truth, but with much exaggeration and coloring. The word "coloring" is particularly appropriate, because, in his copious illustrations, various colors were used freely with apparent significance, whereas, in fact, the general rule in regard to the birch-bark rolls was that they were never colored at all; indeed, the bark was not adapted to coloration. The metaphorical coloring was also used by him in a manner which, to any thorough student of the Indian philosophy and religion, seems absurd. Metaphysical expressions are attached to some of the devices, or, as he calls them, symbols, which, could never have been entertained by a people in the stage of culture of the Ojibwa.

SHAMANS.

There are extant among the Ojibwa Indians three classes of mystery men, termed respectively and in order of importance the Mide´, the Jes´sakkīd´, and the Wâbeno´, but before proceeding to elaborate in detail the Society of the Mide´, known as the Mide´wiwin, a brief description of the last two is necessary.

The term Wâběnō´ has been explained by various intelligent Indians as signifying "Men of the dawn," "Eastern men," etc. Their profession is not thoroughly understood, and their number is so extremely limited that but little information respecting them can be obtained. Schoolcraft,⁵ in referring to the several classes of Shamans, says "there is a third

form or rather modification of the medawin, * * * the Wâbĕnō´; a term denoting a kind of midnight orgies, which is regarded as a corruption of the Meda." This writer furthermore remarks⁶ that "it is stated by judicious persons among themselves to be of modern origin. They regard it as a degraded form of the mysteries of the Meda."

From personal investigation it has been ascertained that a Wâbĕnō´ does not affiliate with others of his class so as to constitute a society, but indulges his pretensions individually. A Wâbĕnō´ is primarily prompted by dreams or visions which may occur during his youth, for which purpose he leaves his village to fast for an indefinite number of days. It is positively affirmed that evil man'idos favor his desires, and apart from his general routine of furnishing "hunting medicine," "love powders," etc., he pretends also to practice medical magic. When a hunter has been successful through the supposed assistance of the Wâbĕnō´, he supplies the latter with part of the game, when, in giving a feast to his tutelary daimon, the Wâbĕnō´ will invite a number of friends, but all who desire to come are welcome. This feast is given at night; singing and dancing are boisterously indulged in, and the Wâbĕnō´, to sustain his reputation, entertains his visitors with a further exhibition of his skill. By the use of plants he is alleged to be enabled to take up and handle with impunity red-hot stones and burning brands, and without evincing the slightest discomfort it is said that he will bathe his hands in boiling water, or even boiling maple sirup. On account of such performances the general impression prevails among the Indians that the Wâbĕnō´ is a "dealer in fire," or "firehandler." Such exhibitions always terminate at the approach of day. The number of these pretenders who are not members of the Mide wiwin, is very limited; for instance, there are at present but two or three at White Earth Reservation and none at Leech Lake.

As a general rule, however, the Wâbĕnō´ will seek entrance into the Midē´wiwin when he becomes more of a specialist in the practice of medical magic, incantations, and the exorcism of malevolent man´idōs, especially such as cause disease.

The Jes'sakkid' is a seer and prophet; though commonly designated a "juggler," the Indians define him as a "revealer of hidden truths." There is no association whatever between the members of this profession, and each practices his art singly and alone whenever a demand is made and the fee presented. As there is no association, so there is no initiation by means of which one may become a Jes'sakkid'. The gift is believed to be given by the thunder god, or Animiki', and then only at long intervals and to a chosen few. The gift is received during youth, when the fast is undertaken and when visions appear to the individual. His renown depends upon his own audacity and the opinion of the tribe. He is said to possess the power to look into futurity; to become acquainted with the affairs and intentions of men; to prognosticate the success or misfortune of hunters and warriors, as well as other affairs of various individuals, and to call from any living human being the soul, or, more strictly speaking, the shadow, thus depriving the victim of reason, and even of life. His power consists in invoking, and causing evil, while that of the Midē ' is to avert it; he attempts at times to injure the Midē' but the latter, by the aid of his superior man'idos, becomes aware of, and averts such premeditated injury. It sometimes happens that the demon possessing a patient is discovered, but the Mide alone has the power to expel him. The exorcism of demons is one of the chief pretensions of this personage, and evil spirits are sometimes removed by sucking them through tubes, and startling tales are told how the Jes'sakkīd' can, in the twinkling of an eye, disengage himself of the most complicated tying of cords and ropes,

etc. The lodge used by this class of men consists of four poles planted in the ground, forming a square of three or four feet and upward in diameter, around which are wrapped birch bark, robes, or canvas in such a way as to form an upright cylinder. Communion is held with the turtle, who is the most powerful man'idō of the Jes'sakkīd', and through him, with numerous other malevolent man'idōs, especially the Animiki', or thunder-bird. When the prophet has seated himself within his lodge the structure begins to sway violently from side to side, loud thumping noises are heard within, denoting the arrival of man'idos, and numerous voices and laughter are distinctly audible to those without. Questions may then be put to the prophet and, if everything be favorable, the response is not long in coming. In his notice of the Jes'sakkid', Schoolcraft affirms that "while he thus exercises the functions of a prophet, he is also a member of the highest class of the fraternity of the Midâwin—a society of men who exercise the medical art on the principles of magic and incantations." The fact is that there is not the slightest connection between the practice of the Jes'sakkid' and that of the Mide'wiwin, and it is seldom, if at all, that a Mide' becomes a Jes'sakkid', although the latter sometimes gains admission into the Mide wiwin, chiefly with the intention of strengthening his power with his tribe.

The number of individuals of this class who are not members of the Midē´wiwin is limited, though greater than that of the Wâběnō´. An idea of the proportion of numbers of the respective classes may be formed by taking the case of Menomoni Indians, who are in this respect upon the same plane as the Ojibwa. That tribe numbers about fifteen hundred, the Midē´ Society consisting, in round numbers, of one hundred members, and among the entire population there are but two Wâběnō´ and five Jěs´sakkīd´.

It is evident that neither the Wâbĕnō´ nor the Jĕs´sakkīd´ confine themselves to the mnemonic songs which are employed during their ceremonial performances, or even prepare them to any extent. Such bark records as have been observed or recorded, even after most careful research and examination extending over the field seasons of three years, prove to have been the property of Wâběnō´ and Jes'sakkid', who were also Mide'. It is probable that those who practice either of the first two forms of ceremonies and nothing else are familiar with and may employ for their own information certain mnemonic records; but they are limited to the characteristic formulæ of exorcism, as their practice varies and is subject to changes according to circumstances and the requirements and wants of the applicant when words are chanted to accord therewith.

Some examples of songs used by Jěs´sakkīd´, after they have become Midē´, will be given in the description of the several degrees of the Midē 'wiwin.

There is still another class of persons termed Mashkī'kĭkē winini, or herbalists, who are generally denominated "medicine men," as the Ojibwa word implies. Their calling is a simple one, and consists in knowing the mysterious properties of a variety of plants, herbs, roots, and berries, which are revealed upon application and for a fee. When there is an administration of a remedy for a given complaint, based upon true scientific principles, it is only in consequence of such practice having been acquired from the whites, as it has usually been the custom of the Catholic Fathers to utilize all ordinary and available remedies for the treatment of the common disorders of life. Although these herbalists are aware that certain plants or roots will produce a specified effect upon the human system, they attribute the benefit to the fact that such remedies are distasteful and injurious to the demons who are present in the system

and to whom the disease is attributed. Many of these herbalists are found among women, also; and these, too, are generally members of the Mide´wiwin. In Fig. 1 is shown an herbalist preparing a mixture.

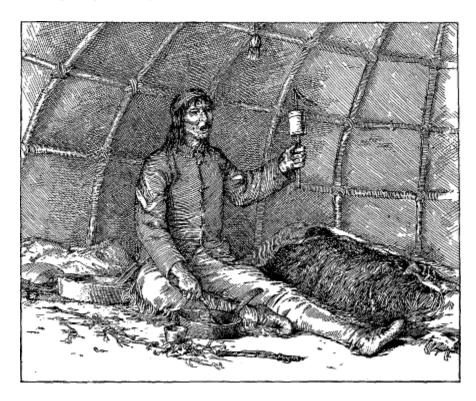


Fig. 1.—Herbalist preparing medicine and treating patient.

The origin of the Midē´wiwin or Midē´ Society, commonly, though erroneously, termed Grand Medicine Society, is buried in obscurity. In the Jesuit Relations, as early as 1642, frequent reference is made to sorcerers, jugglers, and persons whose faith, influence, and practices are dependent upon the assistance of "Manitous," or mysterious spirits; though, as there is no discrimination made between these different professors of magic, it is difficult positively to determine which of the several classes were met with at that early day. It is probable that the Jěs´sakkīd´, or juggler, and the Midē´, or Shaman, were referred to.

The Mide, in the true sense of the word, is a Shaman, though he has by various authors been termed powwow,

medicine man, priest, seer, prophet, etc. Among the Ojibwa the office is not hereditary; but among the Menomoni a curious custom exists, by which some one is selected to fill the vacancy one year after the death of a Shaman. Whether a similar practice prevailed among other tribes of the Algonkian linguistic stock can be ascertained only by similar research among the tribes constituting that stock.

Among the Ojibwa, however, a substitute is sometimes taken to fill the place of one who has been prepared to receive the first degree of the Midē´wiwin, or Society of the Midē´, but who is removed by death before the proper initiation has been conferred. This occurs when a young man dies, in which case his father or mother may be accepted as a substitute. This will be explained in more detail under the caption of Dzhibai´ Midē´wigân or "Ghost Lodge," a collateral branch of the Midē´wiwin.

As I shall have occasion to refer to the work of the late Mr. W. W. Warren, a few words respecting him will not be inappropriate. Mr. Warren was an Ojibwa mixed blood, of good education, and later a member of the legislature of Minnesota. His work, entiled "History of the Ojibwa Nation," was published in Vol. v of the Collections of the Minnesota Historical Society, St. Paul, 1885, and edited by Dr. E. D. Neill. Mr. Warren's work is the result of the labor of a lifetime among his own people, and, had he lived, he would undoubtedly have added much to the historical material of which the printed volume chiefly consists. His manuscript was completed about the year 1852, and he died the following year. In speaking of the Society of the Midē´,8 he says:

The grand rite of Me-da-we-win (or, as we have learned to term it, "Grand Medicine,") and the beliefs incorporated therein, are not yet fully understood by the whites. This important custom is still shrouded in

mystery even to my own eyes, though I have taken much pains to inquire and made use of every advantage possessed by speaking their language perfectly, being related to them, possessing their friendship and intimate confidence has given me, and yet I frankly acknowledge that I stand as yet, as it were, on the threshold of the Me-da-we lodge. I believe, however, that I have obtained full as much and more general and true information on this matter than any other person who has written on the subject, not excepting a great and standard author, who, to the surprise of many who know the Ojibways well, has boldly asserted in one of his works that he has been regularly initiated into the mysteries of this rite, and is a member of the Me-da-we Society. This is certainly an assertion hard to believe in the Indian country; and when the old initiators or Indian priests are told of it they shake their heads in incredulity that a white man should ever have been allowed in truth to become a member of their Me-da-we lodge.

An entrance into the lodge itself, while the ceremonies are being enacted, has sometimes been granted through courtesy; though this does not initiate a person into the mysteries of the creed, nor does it make him a member of the Society.

These remarks pertaining to the pretensions of "a great and standard authority" have reference to Mr. Schoolcraft, who among numerous other assertions makes the following, in the first volume of his Information Respecting the Indian Tribes of the United States, Philadelphia, 1851, p. 361, viz:

I had observed the exhibitions of the Medawin, and the exactness and studious ceremony with which its rites were performed in 1820 in the region of Lake Superior; and determined to avail myself of the advantages of my official position, in 1822, when I returned as a

Government agent for the tribes, to make further inquiries into its principles and mode of proceeding. And for this purpose I had its ceremonies repeated in my office, under the secrecy of closed doors, with every means of both correct interpretation and of recording the result. Prior to this transaction I had observed in the hands of an Indian of the Odjibwa tribe one of those symbolic tablets of pictorial notation which have been sometimes called "music boards," from the fact of their devices being sung off by the initiated of the Meda Society. This constituted the object of the explanations, which, in accordance with the positive requisitions of the leader of the society and three other initiates, was thus ceremoniously made.

This statement is followed by another,⁹ in which Mr. Schoolcraft, in a foot-note, affirms:

Having in 1823 been myself admitted to the class of a Meda by the Chippewas, and taken the initiatory step of a Sagima and Jesukaid in each of the other fraternities, and studied their pictographic system with great care and good helps, I may speak with the more decision on the subject.

Mr. Schoolcraft presents a superficial outline of the initiatory ceremonies as conducted during his time, but as the description is meager, notwithstanding that there is every evidence that the ceremonies were conducted with more completeness and elaborate dramatization nearly three-quarters of a century ago than at the present day, I shall not burden this paper with useless repetition, but present the subject as conducted within the last three years.

Mr. Warren truly says:

In the Me-da-we rite is incorporated most that is ancient amongst them—songs and traditions that have

descended not orally, but in hieroglyphs, for at least a long time of generations. In this rite is also perpetuated the purest and most ancient idioms of their language, which differs somewhat from that of the common everyday use.

As the ritual of the Midē´wiwin is based to a considerable extent upon traditions pertaining to the cosmogony and genesis and to the thoughtful consideration by the Good Spirit for the Indian, it is looked upon by them as "their religion," as they themselves designate it.

In referring to the rapid changes occurring among many of the Western tribes of Indians, and the gradual discontinuance of aboriginal ceremonies and customs, Mr. Warren remarks¹⁰ in reference to the Ojibwa:

Even among these a change is so rapidly taking place, caused by a close contact with the white race, that ten years hence it will be too late to save the traditions of their forefathers from total oblivion. And even now it is with great difficulty that genuine information can be obtained of them. Their aged men are fast falling into their graves, and they carry with them the records of the past history of their people; they are the initiators of the grand rite of religious belief which they believe the Great Spirit has granted to his red children to secure them long life on earth and life hereafter; and in the bosoms of these old men are locked up the original secrets of this their most ancient belief. * *

They fully believe, and it forms part of their religion, that the world has once been covered by a deluge, and that we are now living on what they term the "new earth." This idea is fully accounted for by their vague traditions; and in their Me-da-we-win or religion, hieroglyphs are used to denote this second earth.

Furthermore,

They fully believe that the red man mortally angered the Great Spirit which caused the deluge, and at the commencement of the new earth it was only through the medium and intercession of a powerful being, whom they denominate Manab-o-sho, that they were allowed to exist, and means were given them whereby to subsist and support life; and a code of religion was more lately bestowed on them, whereby they could commune with the offended Great Spirit, and ward off the approach and ravages of death.

It may be appropriate in this connection to present the description given by Rev. Peter Jones of the Midē´ priests and priestesses. Mr. Jones was an educated Ojibwa Episcopal clergyman, and a member of the Missasauga—i.e., the Eagle totemic division of that tribe of Indians living in Canada. In his work¹¹ he states:

Each tribe has its medicine men and women—an order of priesthood consulted and employed in all times of sickness. These powwows are persons who are believed to have performed extraordinary cures, either by the application of roots and herbs or by incantations. When an Indian wishes to be initiated into the order of a powwow, in the first place he pays a large fee to the faculty. He is then taken into the woods, where he is taught the names and virtues of the various useful plants; next he is instructed how to chant the medicine song, and how to pray, which prayer is a vain repetition offered up to the Master of Life, or to some munedoo whom the afflicted imagine they have offended.

The powwows are held in high veneration by their deluded brethren; not so much for their knowledge of medicine as for the magical power which they are supposed to possess. It is for their interest to lead these

credulous people to believe that they can at pleasure hold intercourse with the munedoos, who are ever ready to give them whatever information they require.

The Ojibwa believe in a multiplicity of spirits, or man'idōs, which inhabit all space and every conspicuous object in nature. These man'idos, in turn, are subservient to superior ones, either of a charitable and benevolent character or those which are malignant and aggressive. The chief or superior man'idō is termed Ki'tshi Man'idō—Great Spirit approaching to a great extent the idea of the God of the Christian religion; the second in their estimation is Dzhe Man'idō, a benign being upon whom they look as the quardian spirit of the Mide wiwin and through whose divine provision the sacred rites of the Mide wiwin were granted to man. The Ani'miki or Thunder God is, if not the supreme, at least one of the greatest of the malignant man'idos, and it is from him that the Jes'sakkīd' are believed to obtain their powers of evil doing. There is one other, to whom special reference will be made, who abides in and rules the "place" of shadows," the hereafter; he is known as Dzhibai' Man'idō —Shadow Spirit, or more commonly Ghost Spirit. The name of Ki'tshi Man'idō is never mentioned but with reverence, and thus only in connection with the rite of Mide wiwin, or a sacred feast, and always after making an offering of tobacco.

The first important event in the life of an Ojibwa youth is his first fast. For this purpose he will leave his home for some secluded spot in the forest where he will continue to fast for an indefinite number of days; when reduced by abstinence from food he enters a hysterical or ecstatic state in which he may have visions and hallucinations. The spirits which the Ojibwa most desire to see in these dreams are those of mammals and birds, though any object, whether animate or inanimate, is considered a good omen. The object which first appears is adopted as the personal mystery, guardian

spirit, or tutelary daimon of the entranced, and is never mentioned by him without first making a sacrifice. A small effigy of this man'idō is made, or its outline drawn upon a small piece of birch bark, which is carried suspended by a string around the neck, or if the wearer be a Mide he carries it in his "medicine bag" or pinji gosan. The future course of life of the faster is governed by his dream; and it sometimes occurs that because of giving an imaginary importance to the occurrence, such as beholding, during the trance some powerful man'idō or other object held in great reverence by the members of the Mide Society, the faster first becomes impressed with the idea of becoming a Mide'. Thereupon he makes application to a prominent Mide' priest, and seeks his advice as to the necessary course to be pursued to attain his desire. If the Mide priest considers with favor the application, he consults with his confrères and action is taken, and the questions of the requisite preliminary instructions, fees, and presents, etc., are formally discussed. If the Mide priests are in accord with the desires of the applicant an instructor or preceptor is designated, to whom he must present himself and make an agreement as to the amount of preparatory information to be acquired and the fees and other presents to be given in return. These fees have nothing whatever to do with the presents which must be presented to the Mide priests previous to his initiation as a member of the society, the latter being collected during the time that is devoted to preliminary instruction, which period usually extends over several years. Thus ample time is found for hunting, as skins and peltries, of which those not required as presents may be exchanged for blankets, tobacco, kettles, guns, etc., obtainable from the trader. Sometimes a number of years are spent in preparation for the first degree of the Mide 'wiwin, and there are many who have impoverished themselves in the payment of fees and the preparation for the feast to which all visiting priests are also invited.

Should an Indian who is not prompted by a dream wish to join the society he expresses to the four chief officiating priests a desire to purchase a mī'gis, which is the sacred symbol of the society and consists of a small white shell, to which reference will be made further on. His application follows the same course as in the preceding instance, and the same course is pursued also when a Jĕs'sakkīd' or a Wâbĕnō' wishes to become a Midē'.

MIDĒ'WIWIN.

The Mide wiwin—Society of the Mide or Shamans—consists of an indefinite number of Mide of both sexes. The society is graded into four separate and distinct degrees, although there is a general impression prevailing even among certain members that any degree beyond the first is practically a mere repetition. The greater power attained by one in making advancement depends upon the fact of his having submitted to "being shot at with the medicine sacks" in the hands of the officiating priests. This may be the case at this late day in certain localities, but from personal experience it has been learned that there is considerable variation in the dramatization of the ritual. One circumstance presents itself forcibly to the careful observer, and that is that the greater number of repetitions of the phrases chanted by the Mide' the greater is felt to be the amount of inspiration and power of the performance. This is true also of some of the lectures in which reiteration and prolongation in time of delivery aids very much in forcibly impressing the candidate and other observers with the importance and sacredness of the ceremony.

It has always been customary for the Midē´ priests to preserve birch-bark records, bearing delicate incised lines to represent pictorially the ground plan of the number of

degrees to which the owner is entitled. Such records or charts are sacred and are never exposed to the public view, being brought forward for inspection only when an accepted candidate has paid his fee, and then only after necessary preparation by fasting and offerings of tobacco.

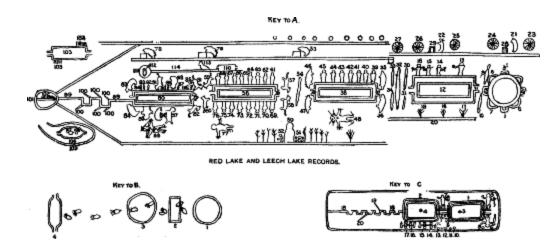


PLATE III. RED LAKE AND LEECH LAKE RECORDS (KEY).

Complete Plate

During the year 1887, while at Red Lake, Minnesota, I had the good fortune to discover the existence of an old birchbark chart, which, according to the assurances of the chief and assistant Midē´ priests, had never before been exhibited to a white man, nor even to an Indian unless he had become a regular candidate. This chart measures 7 feet 1½ inches in length and 18 inches in width, and is made of five pieces of birch bark neatly and securely stitched together by means of thin, flat strands of bass wood. At each end are two thin strips of wood, secured transversely by wrapping and stitching with thin strands of bark, so as to prevent splitting and fraying of the ends of the record. Pl. III A, is a reproduction of the design referred to.

It had been in the keeping of Skwēkŏ´mĭk, to whom it was intrusted at the death of his father-in-law, the latter, in turn,

having received it in 1825 from Badâ´san, the Grand Shaman and chief of the Winnibē´goshish Ojibwa.

It is affirmed that Badâ´san had received the original from the Grand Midē´ priest at La Pointe, Wisconsin, where, it is said, the Midē´wiwin was at that time held annually and the ceremonies conducted in strict accordance with ancient and traditional usage.

The present owner of this record has for many years used it in the preliminary instruction of candidates. Its value in this respect is very great, as it presents to the Indian a pictorial résumé of the traditional history of the origin of the Midē ´wiwin, the positions occupied by the various guardian man ´idos in the several degrees, and the order of procedure in study and progress of the candidate. On account of the isolation of the Red Lake Indians and their long continued, independent ceremonial observances, changes have gradually occurred so that there is considerable variation, both in the pictorial representation and the initiation, as compared with the records and ceremonials preserved at other reservations. The reason of this has already been given.

A detailed description of the above mentioned record, will be presented further on in connection with two interesting variants which were subsequently obtained at White Earth, Minnesota. On account of the widely separated location of many of the different bands of the Ojibwa, and the establishment of independent Mide´ societies, portions of the ritual which have been forgotten by one set may be found to survive at some other locality, though at the expense of some other fragments of tradition or ceremonial. No satisfactory account of the tradition of the origin of the Indians has been obtained, but such information as it was possible to procure will be submitted.

In all of their traditions pertaining to the early history of the tribe these people are termed A-nish´-in-â´-bēg—original people—a term surviving also among the Ottawa, Patawatomi, and Menomoni, indicating that the tradition of their westward migration was extant prior to the final separation of these tribes, which is supposed to have occurred at Sault Ste. Marie.

Mi'nabō'zho (Great Rabbit), whose name occurs in connection with most of the sacred rites, was the servant of Dzhe Man'idō, the Good Spirit, and acted in the capacity of intercessor and mediator. It is generally supposed that it was to his good offices that the Indian owes life and the good things necessary to his health and subsistence.

The tradition of Mi'nabō'zho and the origin of the Midē 'wiwin, as given in connection with the birch-bark record obtained at Red Lake (Pl. || A), is as follows:

When Mi'nabō'zho, the servant of Dzhe Man'idō, looked down upon the earth he beheld human beings, the Ani 'shinâ'bēg, the ancestors of the Ojibwa. They occupied the four quarters of the earth—the northeast, the southeast, the southwest, and the northwest. He saw how helpless they were, and desiring to give them the means of warding off the diseases with which they were constantly afflicted, and to provide them with animals and plants to serve as food and with other comforts, Mi'nabo'zho remained thoughtfully hovering over the center of the earth, endeavoring to devise some means of communicating with them, when he heard something laugh, and perceived a dark object appear upon the surface of the water to the west (No. 2). He could not recognize its form, and while watching it closely it slowly disappeared from view. It next appeared in the north (No. 3), and after a short lapse of time again disappeared. Mi'nabō'zho hoped it would again show itself upon the surface of the water, which it did in the east

(No. 4). Then Mi´nabō´zho wished that it might approach him, so as to permit him to communicate with it. When it disappeared from view in the east and made its reappearance in the south (No. 1), Mi´nabō´zho asked it to come to the center of the earth that he might behold it. Again it disappeared from view, and after reappearing in the west Mi´nabō´zho observed it slowly approaching the center of the earth (i.e., the centre of the circle), when he descended and saw it was the Otter, now one of the sacred man´idōs of the Midē´wiwin. Then Mi´nabō´zho instructed the Otter in the mysteries of the Midē´wiwin, and gave him at the same time the sacred rattle to be used at the side of the sick; the sacred Midē´ drum to be used during the ceremonial of initiation and at sacred feasts, and tobacco, to be employed in invocations and in making peace.

The place where Mi´nabō´zho descended was an island in the middle of a large body of water, and the Midē´ who is feared by all the others is called Mini´sino´shkwe (He-who-lives-on-the-island). Then Mi´nabō´zho built a Midē´wigân (sacred Midē´ lodge), and taking his drum he beat upon it and sang a Midē´ song, telling the Otter that Dzhe Man´idō had decided to help the Aníshinâ´bōg, that they might always have life and an abundance of food and other things necessary for their comfort. Mi´nabō´zho then took the Otter into the Midē´wigân and conferred upon him the secrets of the Midē´wiwin, and with his Midē´ bag shot the sacred mī´gis into his body that he might have immortality and be able to confer these secrets to his kinsmen, the Aníshinâ´bēg.

The mī'gis is considered the sacred symbol of the Midē 'wigân, and may consist of any small white shell, though the one believed to be similar to the one mentioned in the above tradition resembles the cowrie, and the ceremonies of initiation as carried out in the Midē'wiwin at this day are believed to be similar to those enacted by Mi'nabō'zho and

the Otter. It is admitted by all the Mide´ priests whom I have consulted that much of the information has been lost through the death of their aged predecessors, and they feel convinced that ultimately all of the sacred character of the work will be forgotten or lost through the adoption of new religions by the young people and the death of the Mide´ priests, who, by the way, decline to accept Christian teachings, and are in consequence termed "pagans."

My instructor and interpreter of the Red Lake chart added other information in explanation of the various characters represented thereon, which I present herewith. The large circle at the right side of the chart denotes the earth as beheld by Mi'nabō'zho, while the Otter appeared at the square projections at Nos. 1, 2, 3, and 4; the semicircular appendages between these are the four quarters of the earth, which are inhabited by the Ani'shinâ'bēg, Nos. 5, 6, 7, and 8. Nos. 9 and 10 represent two of the numerous malignant man'idōs, who endeavor to prevent entrance into the sacred structure and mysteries of the Mide wiwin. The oblong squares, Nos. 11 and 12, represent the outline of the first degree of the society, the inner corresponding lines being the course traversed during initiation. The entrance to the lodge is directed toward the east, the western exit indicating the course toward the next higher degree. The four human forms at Nos. 13, 14, 15, and 16 are the four officiating Mide priests whose services are always demanded at an initiation. Each is represented as having a rattle. Nos. 17, 18, and 19 indicate the cedar trees, one of each of this species being planted near the outer angles of a Mide lodge. No. 20 represents the ground. The outline of the bear at No. 21 represents the Makwa' Man'idō, or Bear Spirit, one of the sacred Mide man idos, to which the candidate must pray and make offerings of tobacco, that he may compel the malevolent spirits to draw away from the entrance to the Mide wigan, which is shown in No. 28. Nos

23 and 24 represent the sacred drum which the candidate must use when chanting the prayers, and two offerings must be made, as indicated by the number two.

After the candidate has been admitted to one degree, and is prepared to advance to the second, he offers three feasts, and chants three prayers to the Makwa´ Man´idō, or Bear Spirit (No. 22), that the entrance (No. 29) to that degree may be opened to him. The feasts and chants are indicated by the three drums shown at Nos. 25, 26, and 27.

Nos. 30, 31, 32, 33, and 34 are five Serpent Spirits, evil man 'idōs who oppose a Midē''s progress, though after the feasting and prayers directed to the Makwa' Man'idō have by him been deemed sufficient the four smaller Serpent Spirits move to either side of the path between the two degrees, while the larger serpent (No. 32) raises its body in the middle so as to form an arch, beneath which passes the candidate on his way to the second degree.

Nos. 35, 36, 46, and 47 are four malignant Bear Spirits, who guard the entrance and exit to the second degree, the doors of which are at Nos. 37 and 49. The form of this lodge (No. 38) is like the preceding; but while the seven Midē´ priests at Nos. 39, 40, 41, 42, 43, 44, and 45 simply indicate that the number of Midē´ assisting at this second initiation are of a higher and more sacred class of personages than in the first degree, the number designated having reference to quality and intensity rather than to the actual number of assistants, as specifically shown at the top of the first degree structure.

When the Midē´ is of the second degree, he receives from Dzhe Man´idō supernatural powers as shown in No. 48. The lines extending upward from the eyes signify that he can look into futurity; from the ears, that he can hear what is transpiring at a great distance; from the hands, that he can touch for good or for evil friends and enemies at a distance,

however remote; while the lines extending from the feet denote his ability to traverse all space in the accomplishment of his desires or duties. The small disk upon the breast of the figure denotes that a Midē´ of this degree has several times had the mī´gis—life—"shot into his body," the increased size of the spot signifying amount or quantity of influence obtained thereby.

No. 50 represents a Mi´tsha Midē´ or Bad Midē´, one who employs his powers for evil purposes. He has the power of assuming the form of any animal, in which guise he may destroy the life of his victim, immediately after which he resumes his human form and appears innocent of any crime. His services are sought by people who wish to encompass the destruction of enemies or rivals, at however remote a locality the intended victim may be at the time. An illustration representing the modus operandi of his performance is reproduced and explained in Fig. 24, page 238.

Persons possessed of this power are sometimes termed witches, special reference to whom is made elsewhere. The illustration, No. 50, represents such an individual in his disguise of a bear, the characters at Nos. 51 and 52 denoting footprints of a bear made by him, impressions of which are sometimes found in the vicinity of lodges occupied by his intended victims. The trees shown upon either side of No. 50 signify a forest, the location usually sought by bad Midē´ and witches.

If a second degree Midē´ succeeds in his desire to become a member of the third degree, he proceeds in a manner similar to that before described; he gives feasts to the instructing and four officiating Midē´, and offers prayers to Dzhe Man´idō for favor and success. No. 53 denotes that the candidate now personates the bear—not one of the malignant man´idōs, but one of the sacred man´idōs who

are believed to be present during the ceremonials of initiation of the second degree. He is seated before his sacred drum, and when the proper time arrives the Serpent Man´idō (No. 54)—who has until this opposed his advancement—now arches its body, and beneath it he crawls and advances toward the door (No. 55) of the third degree (No. 56) of the Midē´wiwin, where he encounters two (Nos. 57 and 58) of the four Panther Spirits, the guardians of this degree.

Nos. 61 to 76 indicate midē´ spirits who inhabit the structure of this degree, and the number of human forms in excess of those shown in connection with the second degree indicates a correspondingly higher and more sacred character. When an Indian has passed this, initiation he becomes very skillful in his profession of a Midē´. The powers which he possessed in the second degree may become augmented. He is represented in No. 77 with arms extended, and with lines crossing his body and arms denoting darkness and obscurity, which signifies his ability to grasp from the invisible world the knowledge and means to accomplish extraordinary deeds. He feels more confident of prompt response and assistance from the sacred man 'idōs and his knowledge of them becomes more widely extended.

Nos. 59 and 60 are two of the four Panther Spirits who are the special guardians of the third degree lodge.

To enter the fourth and highest degree of the society requires a greater number of feasts than before, and the candidate, who continues to personate the Bear Spirit, again uses his sacred drum, as he is shown sitting before it in No. 78, and chants more prayers to Dzhe Man´idō for his favor. This degree is guarded by the greatest number and the most powerful of malevolent spirits, who make a last effort to prevent a candidate's entrance at the door (No. 79) of the

fourth degree structure (No. 80). The chief opponents to be overcome, through the assistance of Dzhe Man´idō, are two Panther Spirits (Nos. 81 and 82) at the eastern entrance, and two Bear Spirits (Nos. 83 and 84) at the western exit. Other bad spirits are about the structure, who frequently gain possession and are then enabled to make strong and prolonged resistance to the candidate's entrance. The chiefs of this group of malevolent beings are Bears (Nos. 88 and 96), the Panther (No. 91), the Lynx (No. 97), and many others whose names they have forgotten, their positions being indicated at Nos. 85, 86, 87, 89, 90, 92, 93, 94, and 95, all but the last resembling characters ordinarily employed to designate serpents.

The power with which it is possible to become endowed after passing through the fourth degree is expressed by the outline of a human figure (No. 98), upon which are a number of spots indicating that the body is covered with the mī´gis or sacred shells, symbolical of the Midē´wiwin. These spots designate the places where the Midē´ priests, during the initiation, shot into his body the mī´gis and the lines connecting them in order that all the functions of the several corresponding parts or organs of the body may be exercised.

The ideal fourth degree Midē´ is presumed to be in a position to accomplish the greatest feats in necromancy and magic. He is not only endowed with the power of reading the thoughts and intentions of others, as is pictorially indicated by the mī´gis spot upon the top of the head, but to call forth the shadow (soul) and retain it within his grasp at pleasure. At this stage of his pretensions, he is encroaching upon the prerogatives of the Jěs´sakkīd´, and is then recognized as one, as he usually performs within the Jěs´sakkân or Jěs´sakkīd´ lodge, commonly designated "the Jugglery."

The ten small circular objects upon the upper part of the record may have been some personal marks of the original owner; their import was not known to my informants and they do not refer to any portion of the history or ceremonies or the Midē´wiwin.

Extending toward the left from the end of the fourth degree inclosure is an angular pathway (No. 99), which represents the course to be followed by the Mide after he has attained this high distinction. On account of his position his path is often beset with dangers, as indicated by the right angles, and temptations which may lead him astray; the points at which he may possibly deviate from the true course of propriety are designated by projections branching off obliquely toward the right and left (No. 100). The ovoid figure (No. 101) at the end of this path is termed Wai-ĕk'ma-yŏk'—End of the road—and is alluded to in the ritual, as will be observed hereafter, as the end of the world, i.e., the end of the individual's existence. The number of vertical strokes (No. 102) within the ovoid figure signify the original owner to have been a fourth degree Mide for a period of 14 years.

The outline of the Mide´wigân (No. 103) not only denotes that the same individual was a member of the Mide´wiwin, but the thirteen vertical strokes shown in Nos. 104 and 105 indicate that he was chief Mide´ priest of the society for that number of years.

The outline of a Mide´wigân as shown at No. 106, with the place upon the interior designating the location of the sacred post (No. 107) and the stone (No. 108) against which the sick are placed during the time of treatment, signifies the owner to have practiced his calling of the exorcism of demons. But that he also visited the sick beyond the acknowledged jurisdiction of the society in which he resided,

is indicated by the path (No. 109) leading around the sacred inclosure.

Upon that portion of the chart immediately above the fourth degree lodge is shown the outline of a Midē´wiwin (No. 110), with a path (No. 114), leading toward the west to a circle (No. 111), within which is another similar structure (No. 112) whose longest diameter is at right angles to the path, signifying that it is built so that its entrance is at the north. This is the Dzhibai´ Midē´wigân or Ghost Lodge.

Around the interior of the circle are small V-shaped characters denoting the places occupied by the spirits of the departed, who are presided over by the Dzhibai´ Midē´, literally Shadow Midē´.

No. 113 represents the Kŏ´-kó-kŏ-ō´ (Owl) passing from the Midē´wigân to the Land of the Setting Sun, the place of the dead, upon the road of the dead, indicated by the pathway at No. 114. This man´idō is personated by a candidate for the first degree of the Midē´wiwin when giving a feast to the dead in honor of the shadow of him who had been dedicated to the Midē´wiwin and whose place is now to be taken by the giver of the feast.

Upon the back of the Midē´ record, above described, is the personal record of the original owner, as shown in Pl. III B. Nos. 1, 2, 3, and 4 represent the four degrees of the society into which he has been initiated, or, to use the phraseology of an Ojibwa, "through which he has gone." This "passing through" is further illustrated by the bear tracks, he having personated the Makwa´ Man´idō or Bear Spirit, considered to be the highest and most powerful of the guardian spirits of the fourth degree wigwam.

The illustration presented in Pl. III C represents the outlines of a birch-bark record (reduced to one-third) found among the effects of a lately deceased Midē´ from Leech Lake,

Minnesota. This record, together with a number of other curious articles, composed the outfit of the Midē´, but the Rev. James A. Gilfillan of White Earth, through whose courtesy I was permitted to examine the objects, could give me no information concerning their use. Since that time, however, I have had an opportunity of consulting with one of the chief priests of the Leech Lake Society, through whom I have obtained some interesting data concerning them.

The chart represents the owner to have been a Mide of the second degree, as indicated by the two outlines of the respective structures at Nos. 1 and 2, the place of the sacred posts being marked at Nos. 3 and 4. Nos. 5, 6, 7, and 8 are Mide priests holding their Mide bags as in the ceremony of initiation. The disks represented at Nos. 9, 10, 11, 12, and 13 denote the sacred drum, which may be used by him during his initiation, while Nos. 14, 15, 16, and 17 denote that he was one of the four officiating priests of the Mide wigan at his place of residence. Each of these figures is represented as holding their sacred bags as during the ceremonies. No. 18 denotes the path he has been pursuing since he became a Mide, while at Nos. 19 and 20 diverging lines signify that his course is beset with temptations and enemies, as referred to in the description of the Red Lake chart, Pl. III A.

The remaining objects found among the effects of the Mide´ referred to will be described and figured hereafter.

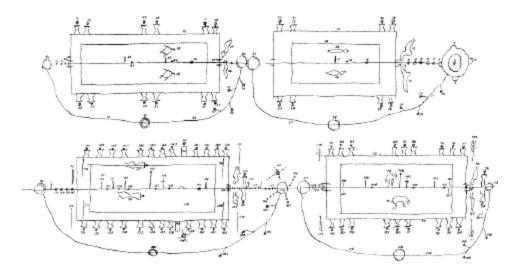


PLATE IV. SIKAS'SIGE'S RECORD.

Larger Plate

The diagram represented on Pl. IV is a reduced copy of a record made by Sikas´sigĕ, a Mille Lacs Ojibwa Midē´ of the second degree, now resident at White Earth.

The chart illustrating pictorially the general plan of the several degrees is a copy of a record in the possession of the chief Midē´ at Mille Lacs in 1830, at which time Sikas ´sigĕ, at the age of 10 years, received his first degree. For a number of years thereafter Sikas´sigĕ received continued instruction from his father Baiē´dzhĕk, and although he never publicly received advancement beyond the second degree of the society, his wife became a fourth degree priestess, at whose initiation he was permitted to be present.

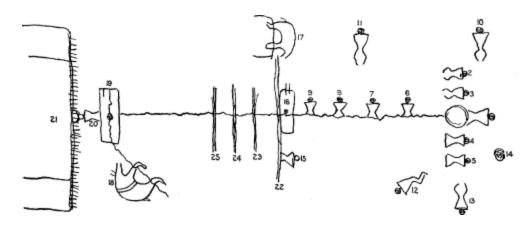


PLATE V. ORIGIN OF ÂNI'SHINÂ'BĒG.

Larger Plate

Since his residence at White Earth Sikas´sigĕ has become one of the officiating priests of the society at that place. One version given by him of the origin of the Indians is presented in the following tradition, a pictorial representation having also been prepared of which Pl. v is a reduced copy:

In the beginning, Dzhe Man´idō (No. 1), made the Midē´ Man´idōs. He first created two men (Nos. 2 and 3), and two women (Nos. 4 and 5); but they had no power of thought or reason. Then Dzhe Man´idō (No. 1) made them rational beings. He took them in his hands so that they should multiply; he paired them, and from this sprung the Indians. When there were people he placed them upon the earth, but he soon observed that they were subject to sickness, misery, and death, and that unless he provided them with the Sacred Medicine they would soon become extinct.

Between the position occupied by Dzhe Man´idō and the earth were four lesser spirits (Nos. 6, 7, 8, and 9) with whom Dzhe Man´idō decided to commune, and to impart to them the mysteries by which the Indians could be benefited. So he first spoke to a spirit at No. 6, and told him all he had to say, who in turn communicated

the same information to No. 7, and he in turn to No. 8, who also communed with No. 9. They all met in council, and determined to call in the four wind gods at Nos. 10, 11, 12, and 13. After consulting as to what would be best for the comfort and welfare of the Indians, these spirits agreed to ask Dzhe Man´idō to communicate the Mystery of the Sacred Medicine to the people.

Dzhe Man'idō then went to the Sun Spirit (No. 14) and asked him to go to the earth and instruct the people as had been decided upon by the council. The Sun Spirit, in the form of a little boy, went to the earth and lived with a woman (No. 15) who had a little boy of her own.

This family went away in the autum to hunt, and during the winter this woman's son died. The parents were so much distressed that they decided to return to the village and bury the body there; so they made preparations to return, and as they traveled along, they would each evening erect several poles upon which the body was placed to prevent the wild beasts from devouring it. When the dead boy was thus hanging upon the poles, the adopted child—who was the Sun Spirit—would play about the camp and amuse himself, and finally told his adopted father he pitied him, and his mother, for their sorrow. The adopted son said he could bring his dead brother to life, whereupon the parents expressed great surprise and desired to know how that could be accomplished.

The adopted boy then had the party hasten to the village, when he said, "Get the women to make a wig 'iwam of bark (No. 16), put the dead boy in a covering of birch bark and place the body on the ground in the middle of the wig 'iwam." On the next morning after this had been done, the family and friends went into this lodge and seated themselves around the corpse.

When they had all been sitting quietly for some time, they saw through the doorway the approach of a bear (No. 17) which gradually came towards the wig´iwam, entered it, and placed itself before the dead body and said hǔ, hǔ, hǔ, hǔ, when he passed around it towards the left side, with a trembling motion, and as he did so, the body began quivering, and the quivering increased as the bear continued until he had passed around four times, when the body came to life again and stood up. Then the bear called to the father, who was sitting in the distant right-hand corner of the wig´iwam, and addressed to him the following words:

my fellow

spirit

that he scarcely lives;

mí-a-zhĭ´-gwa tshí-gĭ-wĕ´-ân.

now

now I shall go

home.

The little bear boy (No. 17) was the one who did this. He then remained among the Indians (No. 18) and taught them the mysteries of the Grand Medicine (No. 19); and, after he had finished, he told his adopted father that as his mission had been fulfilled he was to return to his kindred spirits, for the Indians would have no need to fear sickness as they now possessed the Grand Medicine which would enable them to live. He also said that his spirit could bring a body to life but once, and he would now return to the sun from which they would feel his influence.

This is called Kwí-wĭ-sĕns´ wĕ-dī´-shĭ-tshī gē-wī-nĭp—"Little-boy-his-work."

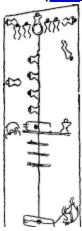
From subsequent information it was learned that the line No. 22 denotes the earth, and that, being considered as one step in the course of initiation into the Mide´wiwin, three others must be taken before a candidate can be admitted. These steps, or rests, as they are denominated (Nos. 23, 24, and 25), are typified by four distinct gifts of goods, which must be remitted to the Mide´ priests before the ceremony can take place.

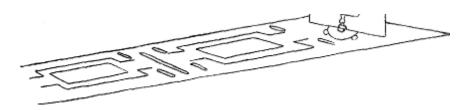
Nos. 18 and 19 are repetitions of the figures alluded to in the tradition (Nos. 16 and 17) to signify that the candidate must personate the Makwa´ Man´idō—Bear Spirit—when entering the Midē´wiwin (No. 19). No. 20 is the Midē´ Man´idō as Ki´tshi Man´idō is termed by the Midē´ priests. The presence of horns attached to the head is a common symbol of superior power found in connection with the figures of human and divine forms in many Midē´ songs and other mnemonic records. No. 21 represents the earth's surface, similar to that designated at No. 22.

Upon comparing the preceding tradition of the creation of the Indians with the following, which pertains to the descent to earth of Mi´nabō´zho, there appears to be some discrepancy, which could not be explained by Sikas´sigĕ, because he had forgotten the exact sequence of events; but from information derived from other Midē´ it is evident that there have been joined together two myths, the intervening circumstances being part of the tradition given below in connection with the narrative relating to the chart on Pl. III A.

This chart, which was in possession of the Mille Lacs chief Baiē´dzhěk, was copied by him from that belonging to his preceptor at La Pointe about the year 1800, and although the traditions given by Sikas´sigĕ is similar to the one surviving at Red Lake, the diagram is an interesting variant for the reason that there is a greater amount of detail in the delineation of objects mentioned in the tradition.

By referring to Pl. IV it will be noted that the circle, No. 1, resembles the corresponding circle at the beginning of the record on Pl. III, A, with this difference, that the four quarters of the globe inhabited by the Ani´shinâ´bēg are not designated between the cardinal points at which the Otter appeared, and also that the central island, only alluded to there (Pl. III A), is here inserted.





The correct manner of arranging the two pictorial records, Pls. III A and IV, is by placing the outline of the earth's surface (Pl. V, No. 21) upon the island indicated in Pl. IV, No. 6, so that the former stands vertically and at right angles to the latter; for the reason that the first half of the tradition pertains to the consultation held between Ki´tshi Man´idō and the four lesser spirits which is believed to have occurred above the earth's surface. According to Sikas´sigĕ the two charts should be joined as suggested in the accompanying illustration, Fig. 2.

Fig. 2.—Sikas´sigĕ's combined charts, showing descent of Min´abō´zho. complete figure

Sikas sige's explanation of the Mille Lacs chart (Pl. IV) is substantially as follows:

When Mi'nabo'zho descended to the earth to give to the Ani'shinâ'bēg the Midē'wiwin, he left with them this chart, Midē'wigwas'. Ki'tshi Man'idō saw that his people on earth were without the means of protecting themselves against disease and death, so he sent Mi 'nabo'zho to give to them the sacred gift. Mi'nabo'zho appeared over the waters and while reflecting in what manner he should be able to communicate with the people, he heard something laugh, just as an otter sometimes cries out. He saw something black appear upon the waters in the west (No. 2) which immediately disappeared beneath the surface again. Then it came up at the northern horizon (No. 3), which pleased Mi'nabō zho, as he thought he now had some one through whom he might convey the information with which he had been charged by Ki'tshi Man'idō. When the black

object disappeared beneath the waters at the north to reappear in the east (No. 4), Mi'nabō'zho desired it would come to him in the middle of the waters, but it disappeared to make its reappearance in the south (No. 5), where it again sank out of sight to reappear in the west (No. 2), when Mi'nabō'zho asked it to approach the center where there was an island (No. 6), which it did. This did Ni'gĭk, the Otter, and for this reason he is given charge of the first degree of the Midē'wiwin (Nos. 35 and 36) where his spirit always abides during initiation and when healing the sick.

Then Ni´gĭk asked Mi´nabō´zho, "Why do you come to this place?" When the latter said, "I have pity on the Ani´shinâ´bēg and wish to give them life; Ki´tshi Man´idō gave me the power to confer upon them the means of protecting themselves against sickness and death, and through you I will give them the Midē´wiwin, and teach them the sacred rites."

Then Mi'nabō'zho built a Midē'wigân in which he instructed the Otter in all the mysteries of the Mide 'wiwin. The Otter sat before the door of the Mide'wigan four days (Nos. 7, 8, 9, and 10), sunning himself, after which time he approached the entrance (No. 14), where his progress was arrested (No. 11) by seeing two bad spirits (Nos. 12 and 13) guarding it. Through the powers possessed by Mi'nabō'zho he was enabled to pass these; when he entered the sacred lodge (No. 15), the first object he beheld being the sacred stone (No. 16) against which those who were sick were to be seated, or laid, when undergoing the ceremonial of restoring them to health. He next saw a post (No. 17) painted red with a green band around the top. A sick man would also have to pray to the stone and to the post, when he is within the Mide wigan, because within them would be the Mide ´spirits whose help he invoked. The Otter was then

taken to the middle of the Midē´wigân where he picked up the mī´gis (No. 18) from among a heap of sacred objects which form part of the gifts given by Ki´tshi Man´idō. The eight man´idōs around the midē´wigân (Nos. 19, 20, 21, 22, 23, 24, 25, and 26) were also sent by Ki´tshi Man´idō to guard the lodge against the entrance of bad spirits.

A life is represented by the line No. 27, the signification of the short lines (Nos. 28, 29, 30, and 31) denoting that the course of human progress is beset by temptations and trials which may be the cause of one's departure from such course of conduct as is deemed proper, and the beliefs taught by the Mide. When one arrives at middle age (No. 32) his course for the remaining period of life is usually without any special events, as indicated by the plain line No. 27, extending from middle age (No. 32) to the end of one's existence (No. 33). The short lines at Nos. 28, 29, 30, and 31, indicating departure from the path of propriety, terminate in rounded spots and signify, literally, "lecture places," because when a Mide feels himself failing in duty or vacillating in faith he must renew professions by giving a feast and lecturing to his confreres, thus regaining his strength to resist evil doing—such as making use of his powers in harming his kinsmen, teaching that which was not given him by Ki'tshi Man'idō through Mi'nabō'zho, etc. His heart must be cleansed and his tongue guarded.

To resume the tradition of the course pursued by the Otter, Sikas´sigĕ said:

The Otter then went round the interior of the Midē ´wigân (No. 34), and finally seated himself in the west, where Mi´nabō´zho shot into his body the sacred mī´gis, which was in his Midē´ bag. Then Mi´nabō´zho said, "This is your lodge and you shall own it always (Nos. 35

and 36), and eight Mide´ Man´idos (Nos. 19-26) shall guard it during the night."

The Otter was taken to the entrance (No. 37) of the second degree structure (No. 38), which he saw was guarded by two evil man idos (Nos. 39 and 40), who opposed his progress, but who were driven away by Mi 'nabō'zho. When the Otter entered at the door he beheld the sacred stone (No. 41) and two posts (Nos. 42, 43), the one nearest to him being painted red with a green band around the top, and another at the middle, with a bunch of little feathers upon the top. The other post (No. 43) was painted red, with only a band of green at the top, similar to the first degree post. Nos. 44 and 45 are the places where sacred objects and gifts are placed. This degree of the Mide wiwin is guarded at night by twelve Mide Man idos (Nos. 46 to 57) placed there by Ki'tshi Man'idō, and the degree is owned by the Thunder Bird as shown in Nos. 58, 59.

The circles (Nos. 60, 61, and 62) at either end of the outline of the structure denoting the degree and beneath it are connected by a line (No. 63) as in the preceding degree, and are a mere repetition to denote the course of conduct to be pursued by the Midē´. The points (Nos. 64, 65, 66, and 67), at the termini of the shorter lines, also refer to the feasts and lectures to be given in case of need.

To continue the informant's tradition:

When the Otter had passed around the interior of the Midē'wigân four times, he seated himself in the west and faced the degree post, when Mi'nabō'zho again shot into his body the mī'gis, which gave him renewed life. Then the Otter was told to take a "sweat bath" once each day for four successive days, so as to prepare for the next degree. (This number is indicated at the rounded spots at Nos. 68, 69, 70, and 71.)

The third degree of the Mide wiwin (No. 72) is guarded during the day by two Mide' spirits (Nos. 73, 74) near the eastern entrance, and by the Makwa' Man'idō within the inclosure (Nos. 75 and 76), and at night by eighteen Mide Man idos (Nos. 77 to 94), placed there by Ki'tshi Man'idō. When the Otter approached the entrance (No. 95) he was again arrested in his progress by two evil man'idos (Nos. 96 and 97), who opposed his admission, but Mi'nibo'zho overcame them and the Otter entered. Just inside of the door, and on each side, the Otter saw a post (Nos. 98 and 99), and at the western door or exit two corresponding posts (Nos. 100 and 101). These symbolized the four legs of the Makwa' Man'idō, or Bear Spirit, who is the guardian by day and the owner of the third degree. The Otter then observed the sacred stone (No. 102) and the two heaps of sacred objects (Nos. 103 and 104) which Mi'nabō'zho had deposited, and three degree posts (Nos. 105, 106, and 107), the first of which (No. 105) was a plain cedar post with the bark upon it, but sharpened at the top; the second (No. 106), a red post with a green band round the top and one about the middle, as in the second degree; and the third a cross (No. 107) painted red, each of the tips painted green. [The vertical line No. 108 was said to have no relation to anything connected with the tradition. 1 After the Otter had observed the interior of the Mide wigan he again made four circuits, after which he took his station in the west, where he seated himself, facing the sacred degree posts. Then Mi'nabō 'zho, for the third time, shot into his body the mī'gis, thus adding to the powers which he already possessed, after which he was to prepare for the fourth degree of the Mide wiwin.

Other objects appearing upon the chart were subsequently explained as follows:

The four trees (Nos. 109, 110, 111, and 112), one of which is planted at each of the four corners of the Midē ´wigân, are usually cedar, though pine may be taken as a substitute when the former can not be had. The repetition of the circles Nos. 113, 114, and 115 and connecting line No. 116, with the short lines at Nos. 117, 118, 119, and 120, have the same signification as in the preceding two degrees.

After the Otter had received the third degree he prepared himself for the fourth, and highest, by taking a steam bath once a day for four successive days (Nos. 121, 122, 123, and 124). Then, as he proceeded toward the Midē´wigân he came to a wig´iwam made of brush (No. 179), which was the nest of Makwa´ Man´idō, the Bear Spirit, who guarded the four doors of the sacred structure.

The four rows of spots have reference to the four entrances of the Midē´wigân of the fourth degree. The signification of the spots near the larger circle, just beneath the "Bear's nest" could not be explained by Sikas´sigĕ, but the row of spots (No. 117) along the horizontal line leading to the entrance of the inclosure were denominated steps, or stages of progress, equal to as many days—one spot denoting one day—which must elapse before the Otter was permitted to view the entrance.

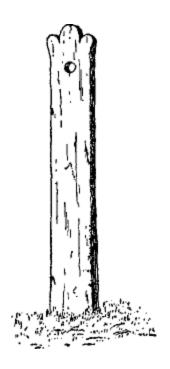


Fig. 4.—Peep-hole post.

When the Otter approached the fourth degree (No. 118) he came to a short post (No. 119) in which there was a small aperture. The post was painted green on the side from which he approached and red upon the side toward the Mide wigan [see Fig. 4.] But before he was permitted to look through it he rested and invoked the favor of Ki´tshi Man´idō, that the evil man´idōs might be expelled from his path. Then, when the Otter looked through the post, he saw that the interior of the inclosure was filled with Mide Man idos, ready to receive him and to attend during his initiation. The two Mide Man idos at the outside of the eastern entrance (Nos. 120 and 121) compelled the evil man'idōs (Nos. 122 and 123) to depart and permit the Otter to enter at the door (No. 124). Then the Otter beheld the sacred stone (No. 125) and the five heaps of sacred objects which Minabo zho had deposited (Nos. 126, 127, 128, 129, and 130) near the four degree posts (Nos. 131, 132, 133, and 134). According to their importance, the first was painted red, with a green band about the top;

the second was painted red, with two green bands, one at the top and another at the middle; the third consisted of a cross painted red, with the tips of the arms and the top of the post painted green; while the fourth was a square post, the side toward the east being painted white, that toward the south green, that toward the west red, and that toward the north black.

The two sets of sticks (Nos. 135 and 136) near the eastern and western doors represent the legs of Makwa' Man'idō, the Bear Spirit. When the Otter had observed all these things he passed round the interior of the Midē 'wigân four times, after which he seated himself in the west, facing the degree posts, when Mi'nabō'zho approached him and for the fourth time shot into his body the sacred mī'gis, which gave him life that will endure always. Then Mi'nabo'zho said to the Otter, "This degree belongs to Ki´tshi Man´ido, the Great Spirit (Nos. 137 and 138), who will always be present when you give the sacred rite to any of your people." At night the Mide Man'idos (Nos. 139 to 162) will guard the Midē'wigân, as they are sent by Ki'tshi Man'ido to do so. The Bear's nest (Nos. 163 and 164) just beyond the northern and southern doors (Nos. 165 and 166) of the Midē'wigân are the places where Makwa' Man'idō takes his station when guarding the doors.

Then the Otter made a wig'iwam and offered four prayers (Nos. 167, 168, 169, and 170) for the rites of the Midē'wiwin, which Ki'tshi Man'idō had given him.

The following supplemental explanations were added by Sikas sige, viz: The four vertical lines at the outer angles of the lodge structure (Nos. 171, 172, 173, and 174), and four similar ones on the inner corners (Nos. 175, 176, 177, and 178), represent eight cedar trees planted there by the Mide at the time of preparing the Mide wigan for the reception of

candidates. The circles Nos. 179, 180, and 181, and the connecting line, are a reproduction of similar ones shown in the three preceding degrees, and signify the course of a Mide's life—that it should be without fault and in strict accordance with the teachings of the Mide wiwin. The short lines, terminating in circles Nos. 182, 183, 184, and 185, allude to temptations which beset the Mide's path, and he shall, when so tempted, offer at these points feasts and lectures, or, in other words, "professions of faith." The three lines Nos. 186, 187, and 188, consisting of four spots each, which radiate from the larger circle at No. 179 and that before mentioned at No. 116, symbolize the four bear nests and their respective approaches, which are supposed to be placed opposite the four doors of the fourth degree; and it is obligatory, therefore, for a candidate to enter these four doors on hands and knees when appearing for his initiation and before he finally waits to receive the concluding portion of the ceremony.

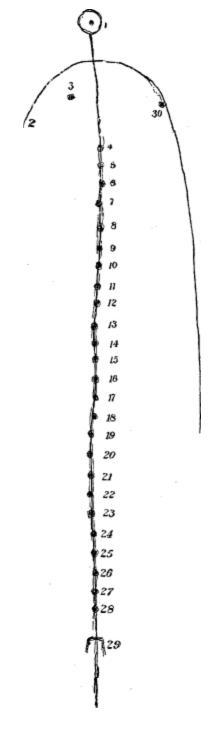


Fig. 5.— Migration of Âníshinâ´beg.

The illustration presented in <u>Fig. 5</u> is a reduced copy of a drawing made by Sikas´sigĕ to represent the migration of the Otter toward the west after he had received the rite of

the Mide wiwin. No. 1 refers to the circle upon the large chart on Pl. III in A, No. 1, and signifies the earth's surface as before described. No. 2 in Fig. 5 is a line separating the history of the Mide wiwin from that of the migration as follows: When the Otter had offered four prayers, as above mentioned, which fact is referred to by the spot No. 3, he disappeared beneath the surface of the water and went toward the west, whither the Ani'shinâ'bēg followed him, and located at Ottawa Island (No. 4). Here they erected the Mide wigan and lived for many years. Then the Otter again disappeared beneath the water, and in a short time reappeared at A'wiat'ang (No. 5), when the Mide'wigan was again erected and the sacred rites conducted in accordance with the teachings of Mi'nabō'zho. Thus was an interrupted migration continued, the several resting places being given below in their proper order, at each of which the rites of the Mide wiwin were conducted in all their purity. The next place to locate at was Mi'shenama'kinagung—Mackinaw (No. 6); then Ne'mikung (No. 7); Kiwe'winang' (No. 8); Bâwating—Sault Ste. Marie (No. 9); Tshiwi 'towi '(No. 10); Nega'wadzhĕ'ŭ—Sand Mountain (No. 11), northern shore of Lake Superior; Mi'nisa'wik [Mi'nisa'bikkang]—Island of rocks (No. 12); Kawa sitshiŭwongk—Foaming rapids (No. 13); Mush'kisi'wi [Mash'kisi'bi]—Bad River (No. 14); Shagawâmikongk—Long-sand-bar-beneath-the-surface (No. 15); Wikwe 'dânwonggân—Sandy Bay (No. 16); Neâ 'shiwikongk—Cliff Point (No. 17); Netân'wayan'sink—Little point-of-sand-bar (No. 18); An'nibins—Little elm tree (No. 19); Wikup´biⁿmiⁿsh-literally, Little-island-basswood (No. 20); Makubiⁿ miⁿsh—Bear Island (No. 21); Sha geski ke 'dawan'ga (No. 22); Ni'wigwas'sikongk—The place where bark is peeled (No. 23); Ta'pakwe'ĭkak [Sa'apakwe 'shkwaokongk]—The-place-where-lodge-bark-is-obtained (No. 24); Ne'uwesak'kudeze'bi [Ne'wisaku'desi'biⁿ]—Pointdeadwood-timber river (No. 25); Aⁿnibi kanzi bi [modern

name, Âsh´kiba´gisi´bi], given respectively as Fish spawn River and Green leaf River (No. 26).

This last-named locality is said to be Sandy Lake, Minnesota, where the Otter appeared for the last time, and where the Midē´wigân was finally located. From La Pointe, as well as from Sandy Lake, the Ojibwa claim to have dispersed in bands over various portions of the territory, as well as into Wisconsin, which final separation into distinct bodies has been the chief cause of the gradual changes found to exist in the ceremonies of the Midē´wiwin.



PLATE VI. OJIBWA FACIAL DECORATION.

According to Sikas´sigĕ, the above account of the initiation of the Otter, by Mi´nabo´zho, was adopted as the course of initiation by the Midē´ priests of the Mille Lacs Society, when he himself received the first degree, 1830. At that

time a specific method of facial decoration was pursued by the priests of the respective degrees (<u>Pl. vi</u>), each adopting that pertaining to the highest degree to which he was entitled, viz:

First degree.—A broad band of green across the forehead and a narrow stripe of vermilion across the face, just below the eyes.

Second degree.—A narrow stripe of vermilion across the temples, the eyelids, and the root of the nose, a short distance above which is a similar stripe of green, then another of vermilion, and above this again one of green.

Third degree.—Red and white spots are daubed all over the face, the spots being as large as can be made by the finger tips in applying the colors.

Fourth degree.—Two forms of decoration were admissible; for the first, the face was painted with vermilion, with a stripe of green extending diagonally across it from the upper part of the left temporal region to the lower part of the right cheek; for the second, the face was painted red with two short, horizontal parallel bars of green across the forehead. Either of these was also employed as a sign of mourning by one whose son has been intended for the priesthood of the Midē´wiwin, but special reference to this will be given in connection with the ceremony of the Dzhibai´ Midē´wigân, or Ghost Society.

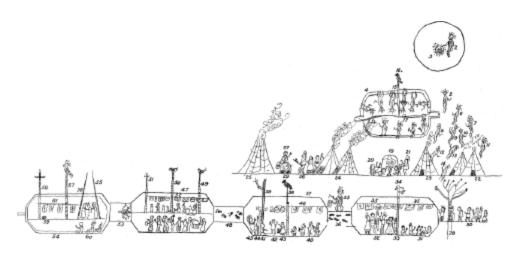


PLATE VIII. OIIBWA'S RECORD.

Larger Plate

On Pl. viii is presented a reduced copy of the Midē´ chart made by Ojibwa, a Midē´ priest of the fourth degree and formerly a member of the society of the Sandy Lake band of the Mississippi Ojibwa. The illustration is copied from his own chart which he received in 1833 in imitation of that owned by his father, Me´toshi´kōnsh; and this last had been received from Lake Superior, presumably La Pointe, many years before.

The illustration of the four degrees are here represented in profile, and shows higher artistic skill than the preceding copies from Red Lake, and Mille Lacs.

The information given by Ojibwa, regarding the characters is as follows:

When Ki´tshi Man´idō had decided to give to the Ani ´shinâ´bēg the rites of the Midē´wiwin, he took his Midē ´drum and sang, calling upon the other Man´idōs to join him and to hear what he was going to do. No. 1 represents the abode in the sky of Ki´tshi Man´idō, No. 2, indicating the god as he sits drumming, No. 3. the small spots surrounding the drum denoting the mī´gis with which everything about him is covered. The Midē´

Man´idōs came to him in his Midē´wigân (No. 4), eleven of which appear upon the inside of that structure, while the ten—all but himself—upon the outside (Nos. 5 to 14) are represented as descending to the earth, charged with the means of conferring upon the Ani´shinâbē´g the sacred rite. In the Midē´wigân (No. 4) is shown also the sacred post (No. 15) upon which is perched Kŏ-ko´kŏ-ō—the Owl (No. 16). The line traversing the structure, from side to side, represents the trail leading through it, while the two rings (Nos. 17 and 18) upon the right side of the post indicate respectively the spot where the presents are deposited and the sacred stone—this according to modern practices.

When an Indian is prepared to receive the rights of initiation he prepares a wig´iwam (No. 19) in which he takes a steam bath once each day for four successive days. The four baths and four days are indicated by the number of spots at the floor of the lodge, representing stones. The instructors, employed by him, and the officiating priests of the society are present, one of which (No. 20) may be observed upon the left of the wig 'iwam in the act of making an offering of smoke, while the one to the right (No. 21) is drumming and singing. The four officiating priests are visible to either side of the candidate within the structure. The wig´iwams (Nos. 22, 23, 24, and 25) designate the village habitations.

In the evening of the day preceding the initiation, the candidate (No. 26) visits his instructor (No. 27) to receive from him final directions as to the part to be enacted upon the following day. The candidate is shown in the act of carrying with him his pipe, the offering of tobacco being the most acceptable of all gifts. His relatives follow and carry the goods and other presents, some of which are suspended from the branches of the Midē´ tree (No. 28) near the entrance of the first degree

structure. The instructor's wig'iwam is shown at No. 29, the two dark circular spots upon the floor showing two of the seats, occupied by instructor and pupil. The figure No. 27 has his left arm elevated, denoting that his conversation pertains to Ki'tshi Man'idō, while in his right hand he holds his Mide drum. Upon the following morning the Mide priests, with the candidate in advance (No. 30), approach and enter the Mide wigan and the initiation begins. No. 31 is the place of the sacred drum and those who are detailed to employ the drum and rattles, while No. 32 indicates the officiating priests; No. 33 is the degree post, surmounted by Kŏ-ko '-kŏ-ō', the Owl (No. 34). The post is painted with vermilion, with small white spots all over its surface, emblematic of the mī'gis shell. The line (No. 35) extending along the upper portion of the inclosure represents the pole from which are suspended the robes, blankets, kettles, etc., which constitute the fee paid to the society for admission.

This degree is presided over and guarded by the Panther Man´idō.

When the candidate has been able to procure enough gifts to present to the society for the second degree, he takes his drum and offers chants (No. 35) to Ki´tshi Man ´idō for success. Ki´tshi Man ´idō himself is the guardian of the second degree and his footprints are shown in No. 36. No. 37 represents the second degree inclosure, and contains two sacred posts (Nos. 38 and 39), the first of which is the same as that of the first degree, the second being painted with white clay, bearing two bands of vermilion, one about the top and one near the middle. A small branch near the top is used, after the ceremony is over, to hang the tobacco pouch on. No. 40 represents the musicians and attendants; No. 41 the candidate upon his knees; while Nos. 42, 43, 44, and 45 pictures

the officiating priests who surround him. The horizontal pole (No. 46) has presents of robes, blankets, and kettles suspended from it.

When a candidate is prepared to advance to the third degree (No. 47) he personates Makwa' Man'idō, who is the guardian of this degree, and whose tracks (No. 48) are visible. The assistants are visible upon the interior, drumming and dancing. There are three sacred posts, the first (No. 49) is black, and upon this is placed Kŏ-ko '-kŏ-ō'—the Owl; the second (No. 50) is painted with white clay and has upon the top the effigy of an owl; while the third (No. 51) is painted with vermilion, bearing upon the summit the effigy of an Indian. Small wooden effigies of the human figure are used by the Mide in their tests of the proof of the genuineness and sacredness of their religion, which tests will be alluded to under another caption. The horizontal rod (No. 52), extending from one end of the structure to the other, has suspended from it the blankets and other gifts.

The guardian of the fourth degree is Maka'no—the Turtle—as he appears (No. 53) facing the entrance of the fourth degree (No. 54). Four sacred posts are planted in the fourth degree; the first (No. 55), being painted white upon the upper half and green upon the lower; the second (No. 56) similar; the third (No. 57) painted red, with a black spiral line extending from the top to the bottom, and upon which is placed Kŏ-ko´-kŏ-ō '—the Owl; and the fourth (No. 58), a cross, the arms and part of the trunk of which is white, with red spots to designate the sacred mī'gis—the lower half of the trunk cut square, the face toward the east painted red, the south green, the west white, and the north black. The spot (No. 59) at the base of the cross signifies the place of the sacred stone, while the human figures (No. 60) designate the participants, some of whom are

seated near the wall of the inclosure, whilst others are represented as beating the drum. Upon the horizontal pole (No. 61) are shown the blankets constituting gifts to the society.



The several specific methods of facial decoration employed (Pl. VII), according to Ojibwa's statement, are as follows:

First degree.—One stripe of vermilion across the face, from near the ears across the tip of the nose.

Second degree.—One stripe as above, and another across the eyelids, temples, and the root of the nose.

Third degree.—The upper half of the face is painted green and the lower half red.

Fourth degree.—The forehead and left side of the face, from the outer canthus of the eye downward, is painted green; four spots of vermilion are made with the tip of the finger upon the forehead and four upon the green surface of the left cheek. In addition to this, the plumes of the golden eagle, painted red, are worn upon the head and down the back. This form of decoration is not absolutely necessary, as the expense of the "war bonnet" places it beyond the reach of the greater number of persons.

Before proceeding further with the explanation of the Mide´ records it may be of interest to quote the traditions relative to the migration of the Ani´shinâ´bēg, as obtained by Mr. Warren previous to 1853. In his reference to observing the rites of initiation he heard one of the officiating priests deliver "a loud and spirited harangue," of which the following words¹² caught his attention:

"Our forefathers were living on the great salt water toward the rising sun, the great Megis (seashell) showed itself above the surface of the great water and the rays of the sun for a long time period were reflected from its glossy back. It gave warmth and light to the An-ish-in-aub-ag (red race). All at once it sank into the deep, and for a time our ancestors were not blessed with its light. It rose to the surface and appeared again on the great

river which drains the waters of the Great Lakes, and again for a long time it gave life to our forefathers and reflected back the rays of the sun. Again it disappeared from sight and it rose not till it appeared to the eyes of the An-ish-in-aub-ag on the shores of the first great lake. Again it sank from sight, and death daily visited the wigiwams of our forefathers till it showed its back and reflected the rays of the sun once more at Bow-e-ting (Sault Ste. Marie). Here it remained for a long time, but once more, and for the last time, it disappeared, and the An-ish-in-aub-ag was left in darkness and misery, till it floated and once more showed its bright back at Moning-wun-a-kaun-ing (La Pointe Island), where it has ever since reflected back the rays of the sun and blessed our ancestors with life, light, and wisdom. Its rays reach the remotest village of the widespread Ojibways." As the old man delivered this talk he continued to display the shell, which he represented as an emblem of the great megis of which he was speaking.

A few days after, anxious to learn the true meaning of this allegory, * * * I requested him to explain to me the meaning of his Me-da-we harangue.

After filling his pipe and smoking of the tobacco I had presented he proceeded to give me the desired information, as follows:

"My grandson," said he, "the megis I spoke of means the Me-da-we religion. Our forefathers, many string of lives ago, lived on the shores of the great salt water in the east. Here, while they were suffering the ravages of sickness and death, the Great Spirit, at the intercession of Man-a-bo-sho, the great common uncle of the An-ishin-aub-ag, granted them this rite, wherewith life is restored and prolonged. Our forefathers moved from the shores of the great water and proceeded westward.

"The Me-da-we lodge was pulled down, and it was not again erected till our forefathers again took a stand on the shores of the great river where Mo-ne-aung (Montreal) now stands.

"In the course of time this town was again deserted, and our forefathers, still proceeding westward, lit not their fires till they reached the shores of Lake Huron, where again the rites of the Me-da-we were practiced.

"Again these rites were forgotten, and the Me-da-we lodge was not built till the Ojibways found themselves congregated at Bow-e-ting (outlet of Lake Superior), where it remained for many winters. Still the Ojibways moved westward, and for the last time the Me-da-we lodge was erected on the island of La Pointe, and here, long before the pale face appeared among them, it was practiced in its purest and most original form. Many of our fathers lived the full term of life granted to mankind by the Great Spirit, and the forms of many old people were mingled with each rising generation. This, my grandson, is the meaning of the words you did not understand; they have been repeated to us by our fathers for many generations."

In the explanation of the chart obtained at Red Lake, together with the tradition, reference to the otter, as being the most sacred emblem of society, is also verified in a brief notice of a tradition by Mr. Warren, 13 as follows:

There is another tradition told by the old men of the Ojibway village of Fond du Lac, Lake Superior, which tells of their former residence on the shores of the great salt water. It is, however, so similar in character to the one I have related that its introduction here would only

occupy unnecessary space. The only difference between the two traditions is that the otter, which is emblematical of one of the four Medicine Spirits who are believed to preside over the Midawe rites, is used in one in the same figurative manner as the seashell is used in the other, first appearing to the ancient An-ish-in-aub-ag from the depths of the great salt water, again on the river St. Lawrence, then on Lake Huron at Sault Ste. Marie, again at La Pointe, but lastly at Fond du Lac, or end of Lake Superior, where it is said to have forced the sand bank at the mouth of the St. Louis River. The place is still pointed out by the Indians where they believe the great otter broke through.

It is affirmed by the Indians that at Sault Ste. Marie some of the Ojibwa separated from the main body of that tribe and traversed the country along the northern shore of Lake Superior toward the west. These have since been known of as the "Bois Forts" (hardwood people or timber people), other bands being located at Pigeon River, Rainy Lake, etc. Another separation occurred at La Pointe, one party going toward Fond du Lac and westward to Red Lake, where they claim to have resided for more than three hundred years, while the remainder scattered from La Pointe westward and southwestward, locating at favorable places throughout the timbered country. This early dismemberment and longcontinued separation of the Ojibwa nation accounts, to a considerable extent, for the several versions of the migration and the sacred emblems connected with the Mide wiwin, the northern bands generally maintaining their faith in favor of the Otter as the guide, while the southern bodies are almost entirely supporters of the belief in the great mī ′gis.

On account of the independent operations of the Midē´ priests in the various settlements of the Ojibwa, and especially because of the slight intercourse between those of the northern and southern divisions of the nation, there has arisen a difference in the pictographic representation of the same general ideas, variants which are frequently not recognized by Midē´ priests who are not members of the Midē´wiwin in which these mnemonic charts had their origin. As there are variants in the pictographic delineation of originally similar ideas, there are also corresponding variations in the traditions pertaining to them.

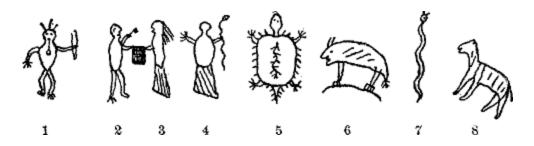


Fig. 6.—Birch-bark record, from White Earth.

The tradition relating to Mi'nabō'zho and the sacred objects received from Ki´tshi Man´idō for the Ani´shinâ´bēg is illustrated in Fig. 6, which is a reproduction of a chart preserved at White Earth. The record is read from left to right. No. 1 represents Mi'nabō'zho, who says of the adjoining characters representing the members of the Midē 'wiwin: "They are the ones, they are the ones, who put into my heart the life." Mi'nabō'zho holds in his left hand the sacred Mide' sack, or pin-ji'-qu-san'. Nos. 2 and 3 represent the drummers. At the sound of the drum all the Mide rise and become inspired, because Ki'tshi Man'idō is then present in the wig'iwam. No. 4 denotes that women also have the privilege of becoming members of the Mide wiwin. The figure holds in the left hand the Mide' sack, made of a snake skin. No. 5 represents the Tortoise, the guardian spirit who was the giver of some of the sacred objects used in the rite. No. 6, the Bear, also a benevolent Man'idō, but not held in so great veneration as the Tortoise. His tracks are visible in the Mide wiwin. No. 7, the sacred Mide sack or pin-ji'-qu-sân', which contains life, and can be used by the Mide to prolong the life of a sick person. No. 8 represents a Dog, given by the Mide Man idos to Mi nabo zho as a companion.

Such was the interpretation given by the owner of the chart, but the informant was unconsciously in error, as has been ascertained not only from other Midē´ priests consulted with regard to the true meaning, but also in the light of later

information and research in the exemplification of the ritual of the Mide´wiwin.

Mi'nabō'zho did not receive the rite from any Midē' priests (Nos. 2 and 5), but from Ki'tshi Man'idō. Women are not mentioned in any of the earlier traditions of the origin of the society, neither was the dog given to Mi'nabō'zho, but Mi'nabō'zho gave it to the Ani'shinâ'bēg.

The chart, therefore, turns out to be a mnemonic song similar to others to be noted hereafter, and the owner probably copied it from a chart in the possession of a stranger Mide´, and failed to learn its true signification, simply desiring it to add to his collection of sacred objects and to gain additional respect from his confrères and admirers.



Fig. 7.—Birch-bark record, from Red Lake.

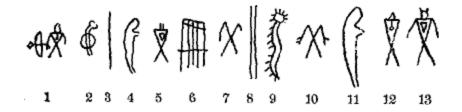


Fig. 8.—Birch-bark record, from Red Lake.

Two similar and extremely old birch-bark mnemonic songs were found in the possession of a Midē´ at Red Lake. The characters upon these are almost identical, one appearing to be a copy of the other. These are reproduced in Figs. 7 and 8. By some of the Midē´ Esh´gibō´ga takes the place of

Mi'nabō'zho as having originally received the Midē'wiwin from Ki'tshi Man'idō, but it is believed that the word is a synonym or a substitute based upon some reason to them inexplicable. These figures were obtained in 1887, and a brief explanation of them given in the American Anthropologist. 14 At that time I could obtain but little direct information from the owners of the records, but it has since been ascertained that both are mnemonic songs pertaining to Mi'nabō'zho, or rather Eshgibō'ga, and do not form a part of the sacred records of the Mide wiwin, but simply the pictographic representation of the possibilities and powers of the alleged religion. The following explanation of Figs. 7 and 8 is reproduced from the work just cited. A few annotations and corrections are added. The numbers apply equally to both illustrations: No. 1, represents Esh'gibō'ga, the great uncle of the Ani'shinâ'bēg, and receiver of the Midē'wiwin.

- No. 2, the drum and drumsticks used by Esh'gibō'ga.
- No. 3, a bar or rest, denoting an interval of time before the song is resumed.
- No. 4, the pin-ji´-gu-sân´ or sacred Midē´ sack. It consists of an otter skin, and is the mī´gis or sacred symbol of the Midē´wigân.
- No. 5. a Midē´ priest, the one who holds the mī´gis while chanting the Midē´ song in the Midē´wigân. He is inspired, as indicated by the line extending from the heart to the mouth.
- No. 6, denotes that No. 5 is a member of the Midē´wiwin. This character, with the slight addition of lines extending upward from the straight top line, is usually employed by the more southern Ojibwa to denote the wig´iwam of a Jěss´akkīd´, or jugglery.

- No. 7, is a woman, and signifies that women may also be admitted to the Mide wiwin.
- No. 8, a pause or rest.
- No. 9, a snake-skin pin-ji´-gu-sân´ possessing the power of giving life. This power is indicated by the lines radiating from the head, and the back of the skin.
- No. 10, represents a woman.
- No. 11, is another illustration of the mī'gis, or otter.
- No. 12, denotes a priestess who is inspired, as shown by the line extending from the heart to the mouth in Fig. 7, and simply showing the heart in Fig. 6. In the latter she is also empowered to cure with magic plants.
- No. 13, in <u>Fig. 7</u>, although representing a Midē´ priest, no explanation was given.



Fig. 9.— Esh´gibō´ga.

Fig. 9 is presented as a variant of the characters shown in No. 1 of Figs. 7 and 8. The fact that this denotes the power of curing by the use of magic plants would appear to indicate an older and more appropriate form than the delineation of the bow and arrows, as well as being more in keeping with the general rendering of the tradition.

MIDĒ'WIGÂN.

Initiation into the Midē´wiwin or Midē´ Society is, at this time, performed during the latter part of summer. The ceremonies are performed in public, as the structure in

which they are conducted is often loosely constructed of poles with intertwined branches and leaves, leaving the top almost entirely exposed, so that there is no difficulty in observing what may transpire within. Furthermore, the ritual is unintelligible to the uninitiated, and the important part of the necessary information is given to the candidate in a preceptor's wig'iwam.

To present intelligibly a description of the ceremonial of initiation as it occurred at White Earth, Minnesota, it will be necessary to first describe the structure in which it occurs, as well as the sweat lodge with which the candidate has also to do.

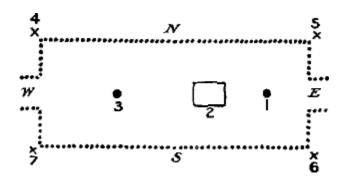


Fig. 10.— Diagram of Midē´wigân of the first degree.

The Midē´wigân, i.e., Midē´wig´iwam, or, as it is generally designated "Grand Medicine Lodge," is usually built in an open grove or clearing; it is a structure measuring about 80 feet in length by 20 in width, extending east and west with the main entrance toward that point of the compass at which the sun rises. The walls consist of poles and saplings from 8 to 10 feet high, firmly planted in the ground, wattled with short branches and twigs with leaves. In the east and west walls are left open spaces, each about 4 feet wide, used as entrances to the inclosure. From each side of the opening the wall-like structure extends at right angles to the end wall, appearing like a short hallway leading to the

inclosure, and resembles double doors opened outward. Fig. 10 represents a ground plan of the Mide wigan, while Fig. 11 shows an interior view. Saplings thrown across the top of the structure serve as rafters, upon which are laid branches with leaves, and pieces of bark, to sufficiently shade the occupants from the rays of the sun. Several saplings extend across the inclosure near the top, while a few are attached to these so as to extend longitudinally, from either side of which presents of blankets, etc., may be suspended. About 10 feet from the main entrance a large flattened stone, measuring more than a foot in diameter, is placed upon the ground. This is used when subjecting to treatment a patient; and at a corresponding distance from the western door is planted the sacred Mide post of cedar, that for the first degree being about 7 feet in height and 6 or 8 inches in diameter. It is painted red, with a band of green 4 inches wide around the top. Upon the post is fixed the stuffed body of an owl. Upon that part of the floor midway between the stone and the Mide post is spread a blanket, upon which the gifts and presents to the society are afterward deposited. A short distance from each of the outer angles of the structure are planted cedar or pine trees, each about 10 feet in height.

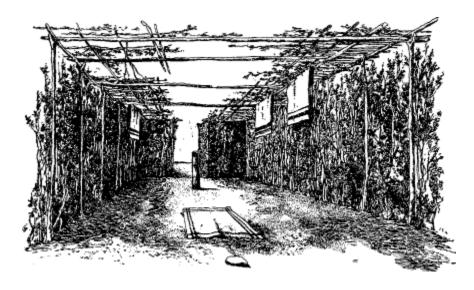


Fig. 11.—Interior of Midē´wigân.

About a hundred yards east of the main entrance is constructed a wig'iwam or sweat lodge, to be used by the candidate, both to take his vapor baths and to receive final instructions from his preceptor.

This wig´iwam is dome-shaped measures about 10 feet in diameter and 6 feet high in the middle, with an opening at the top which can be readily covered with a piece of bark. The framework of the structure consists of saplings stuck into the ground, the tops being bent over to meet others from the opposite side. Other thin saplings are then lashed horizontally to the upright ones so as to appear like hoops, decreasing in size as the summit is reached. They are secured by using strands of basswood bark. The whole is then covered with pieces of birchbark—frequently the bark of the pine is used—leaving a narrow opening on the side facing the Midē´wigân, which may be closed with an adjustable flap of bark or blankets.

The space between the Midē´wigân and the sweat lodge must be kept clear of other temporary shelters, which might be placed there by some of the numerous visitors attending the ceremonies.

FIRST DEGREE.

PREPARATORY INSTRUCTION.

When the candidate's application for reception into the Midē ´wiwin has been received by one of the officiating priests, he calls upon the three assisting Midē´, inviting them to visit him at his own wig´iwam at a specified time. When the conference takes place, tobacco, which has been previously furnished by the candidate, is distributed and a smoke offering made to Ki´tshi Man´idō, to propitiate his favor in the deliberations about to be undertaken. The host then

explains the object of the meeting, and presents to his auditors an account of the candidate's previous life; he recounts the circumstances of his fast and dreams, and if the candidate is to take the place of a lately deceased son who had been prepared to receive the degree, the fact is mentioned, as under such circumstances the forms would be different from the ordinary method of reception into the society. The subject of presents and gifts to the individual members of the society, as well as those intended to be given as a fee to the officiating priests, is also discussed; and lastly, if all things are favorable to the applicant, the selection of an instructor or preceptor is made, this person being usually appointed from among these four priests.

When the conference is ended the favorable decision is announced to the applicant, who acknowledges his pleasure by remitting to each of the four priests gifts of tobacco. He is told what instructor would be most acceptable to them, when he repairs to the wig´iwam of the person designated and informs him of his wish and the decision of the Midē´ council.

The designated preceptor arranges with his pupil to have certain days upon which the latter is to call and receive instruction and acquire information. The question of remuneration being settled, tobacco is furnished at each sitting, as the Midē´ never begins his lecture until after having made a smoke-offering, which is done by taking a whiff and pointing the stem to the east; then a whiff, directing the stem to the south; another whiff, directing the stem to the west; then a whiff and a similar gesture with the stem to the north; another whiff is taken slowly and with an expression of reverence, when the stem is pointed forward and upward as an offering to Ki´tshi Man´idō; and finally, after taking a similar whiff, the stem is pointed forward and downward toward the earth as an offering to Nokō´mis, the grandmother of the universe, and to those who have passed

before. After these preliminaries, the candidate receives at each meeting only a small amount of information, because the longer the instruction is continued daring the season before the meeting at which it is hoped the candidate may be admitted the greater will be the fees; and also, in order that the instruction may be looked upon with awe and reverence, most of the information imparted is frequently a mere repetition, the ideas being clothed in ambiguous phraseology. The Mide drum (Fig. 12 a) differs from the drum commonly used in dances (Fig. 12 b) in the fact that it is cylindrical, consisting of an elongated kettle or wooden vessel, or perhaps a section of the hollow trunk of a tree about 10 inches in diameter and from 18 to 20 inches in length, over both ends of which rawhide is stretched while wet, so that upon drying the membrane becomes hard and tense, producing, when beaten, a very hard, loud tone, which may be heard at a great distance.

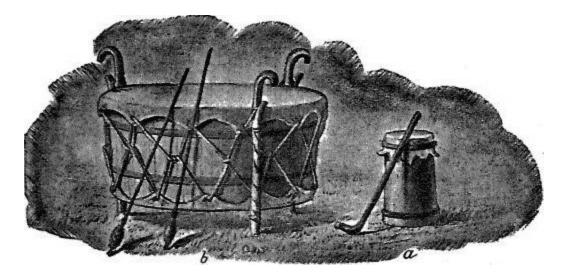


Fig. 12.—Ojibwa drums.

Frequently, however, water is put into the bottom of the drum and the drum-head stretched across the top in a wet state, which appears to intensify the sound very considerably.

The peculiar and special properties of the drum are described to the applicant; that it was at first the gift of Ki ´tshi Man´idō, who gave it through the intercession of Mi ´nabō´zho; that it is used to invoke the presence of the Midē´ Man´idōs, or sacred spirits, when seeking direction as to information desired, success, etc.; that it is to be employed at the side of the sick to assist in the expulsion or exorcism of evil man´idōs who may possess the body of the sufferer; and that it is to be used in the. Midē´wigân during the initiation of new members or the advancement of a Midē´ from a degree to a higher one.

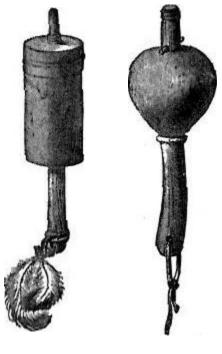


Fig. 13.— Midē´ rattle.

Fig. 14.— Midē´ rattle.

The properties of the rattle are next enumerated and recounted, its origin is related, and its uses explained. It is used at the side of a patient and has even more power in the expulsion of evil demons than the drum. The rattle is also employed in some of the sacred songs as an accompaniment, to accentuate certain notes and words. There are two forms used, one consisting of a cylindrical tin

box filled with grains of corn or other seeds (<u>Fig. 13</u>), the other being a hollow gourd also filled with seed (<u>Fig. 14</u>). In both of these the handle passes entirely through the rattle case.

In a similar manner the remaining gifts of Mi´nabō´zho are instanced and their properties extolled.

The mī'gis, a small white shell (Cypræa moneta L.) is next extracted from the Midē' sack, or pinji'gusân'. This is explained as being the sacred emblem of the Midē'wiwin, the reason therefor being given in the account of the several traditions presented in connection with Pls. III, IV, and VIII. This information is submitted in parts, so that the narrative of the history connected with either of the records is extended over a period of time to suit the preceptor's plans and purposes. The ceremony of shooting the mī'gis (see Fig. 15) is explained on page 215.



Fig. 15.—Shooting the mī'gis.

As time progresses the preceptor instructs his pupil in Midē´ songs, i.e., he sings to him songs which form a part of his

stock in trade, and which are alleged to be of service on special occasions, as when searching for medicinal plants, hunting, etc. The pupil thus acquires a comprehension of the method of preparing and reciting songs, which information is by him subsequently put to practical use in the composition and preparation of his own songs, the mnemonic characters employed being often rude copies of those observed upon the charts of his preceptor, but the arrangement thereof being original.

It is for this reason that a Midē´ is seldom, if ever, able to recite correctly any songs but his own, although he may be fully aware of the character of the record and the particular class of service in which it may be employed. In support of this assertion several songs obtained at Red Lake and imperfectly explained by "Little Frenchman" and "Leading Feather," are reproduced in Pl. XXII, A B, page 292.

From among the various songs given by my preceptor are selected and presented herewith those recognized by him as being part of the ritual. The greater number of songs are mere repetitions of short phrases, and frequently but single words, to which are added meaningless sounds or syllables to aid in prolonging the musical tones, and repeated ad libitum in direct proportion to the degree of inspiration in which the singer imagines himself to have attained. These frequent outbursts of singing are not based upon connected mnemonic songs preserved upon birch bark, but they consist of fragments or selections of songs which have been memorized, the selections relating to the subject upon which the preceptor has been discoursing, and which undoubtedly prompts a rythmic vocal equivalent. These songs are reproduced on Pl. IX, A, B, C. The initial mnemonic characters pertaining to each word or phrase of the original text are repeated below in regular order with translations in English, together with supplemental notes explanatory of the characters employed. The musical notation is not

presented, as the singing consists of a monotonous repetition of four or five notes in a minor key; furthermore, a sufficiently clear idea of this may be formed by comparing some of the Mide´ songs presented in connection with the ritual of initiation and preparation of medicines. The first of the songs given herewith (Pl. IX, A) pertains to a request to Ki´tshi Man´idō that clear weather may be had for the day of ceremonial, and also an affirmation to the candidate that the singer's words are a faithful rendering of his creed.

Each of the phrases is repeated before advancing to the next, as often as the singer desires and in proportion to the amount of reverence and awe with which he wishes to impress his hearer. There is usually a brief interval between each of the phrases, and a longer one at the appearance of a vertical line, denoting a rest, or pause. One song may occupy, therefore, from fifteen minutes to half an hour.



PLATE IX.A. Mnemonic Song.



Ki-ne´-na-wi´-´in mani´-i-dō´-ye-win. I rock you, you that are a spirit.

[A mide's head, the lines denoting voice or speech—i.e., singing of sacred things, as the loops or circles at the ends of each line indicate.]



Kí-zhĭk-ki-wĭn´-da-mūn´.

The sky I tell you.

[The otter skin medicine sack, and arm reaching to procure something therefrom.]



O-we-nen'; hwīn'.

Who is it, who?

The mī'gis shell; the sacred emblem of the Midē wiwin.



Wi'-dzhĭ-i-nan'.

The man helping me.

A man walking, the Mide´ Man´idō or Sacred Spirit.



Nu-waⁿ´-ni-ma´na nin-guĭs´?

Have I told the truth to my son?

The bear going to the Midē'wigan and takes with him life to the Ani'shinâ'bēg.



Rest.



Ni´-nīn-dē´, ĕ´, ō´, ya´.

My heart, I am there (in the fullness of my heart).

My heart; knows all Midē´ secrets, sensible one.



A'-ni-na'-nĕsh-mi'-ĭ-an ni'-na'-wĭ-tō'.

I follow with my arms.

Arms extended to take up "medicine" or Midē´ secrets.



Man´-i-dō´-wi-an´ nĭ-me´-shine´-mi´-an.

Knowledge comes from the heart, the heart reaches to sources of "medicine" in the earth.

[A Midē´ whose heart's desires and knowledge extend to the secrets of the earth. The lines diverging toward the earth denote direction.]

We´-gi-kwō´ Kĕ-mī´-nĭ-nan´?



From whence comes the rain?

The power of making a clear sky, i.e., weather.



Mi-shŏk´ kwōt´, dzhe-man´-i-dō´-yan.

The sky, nevertheless, may be clear, Good Spirit.

Giving life to the sick; Dzhe Man´idō handing it to the Midē´.



Wi´-ka-ka-nŭn´-ĕ-nan.

Very seldom I make this request of you.

The Good Spirit filling the body of the supplicant with knowledge of secrets of the earth.

In the following song (Pl. IX, B), the singer relates to the candidate the gratitude which he experiences for the favors derived from the Good Spirit; he has been blessed with knowledge of plants and other sacred objects taken from the ground, which knowledge has been derived by his having himself become a member of the Mide´wiwin, and hence urges upon the candidate the great need of his also continuing in the course which he has thus far pursued.



PLATE IX.B. Mnemonic Song.



Na-witsh'-tshi na-kŭm'-i-en a-na'-pi-an'?
When I am out of hearing, where am I?

The lines extending from the ears denote hearing; the arms directed toward the right and left, being the gesture of negation, usually

made by throwing the hands outward and away from the front of the body.



We'-nen-ne' en'-da-yan.

In my house, I see.

Sight is indicated by the lines extending from the eyes; the horns denote superiority of the singer.



Mo-kī'-yan-na'-a-witsh'-i-gūm'-mi.

When I rise it gives me life, and I take it.

The arm reaches into the sky to receive the gifts which are handed down by the Good Spirit. The short transverse line across the forearm indicates the arch of the sky, this line being an abbreviation of the curve usually employed to designate the same idea.



Wen'-dzhi-ba'-pi-an'.

The reason why I am happy.

Asking the Spirit for life, which is granted. The singer's body is filled with the heart enlarged, i.e., fullness of heart, the lines from the mouth denoting abundance of voice or grateful utterances—singing.

Rest.



Zha´-zha-bui´-ki-bi-nan´ wig´-ĕ-wâm´.

The Spirit says there is plenty of "medicine" in the $Mid\bar{e}^{'}$ wig 'iwam.

[Two superior spirits, Ki´tshi Man´idō and Dzhe Man´idō, whose bodies are surrounded by "lines of sacredness," tell the Midē´ where the mysterious remedies are to be found. The

vertical waving lines are the lines indicating these communications; the horizontal line, at the bottom, is the earth's surface.]



Ya-hō´-hon-ni´-yŏ.

The Spirit placed medicine in the ground, let us take it.

The arm of Ki´tshi Man´idō put into the ground sacred plants, etc., indicated by the spots at different horizons in the earth. The short vertical and waving lines denote sacredness of the objects.



Ní-wo´-we-nī´-nan ki´-bi-do-nan´.

I am holding this that I bring to you.

The singer sits in the Mide wiwin, and offers the privilege of entrance, by initiation, to the hearer.



Midē' nǐ-ka'-năk kish'-o-wĕ'-ni-mǐ-ko'.

I have found favor in the eyes of my mide friends.

The Good Spirit has put life into the body of the singer, as indicated by the two mysterious arms reaching towards his body, i.e., the heart, the seat of life.

In the following song (Pl. IX, C), the preceptor appears to feel satisfied that the candidate is prepared to receive the initiation, and therefore tells him that the Midē´ Man´idō announces to him the assurance. The preceptor therefore encourages his pupil with promises of the fulfillment of his highest desires.

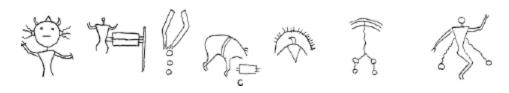
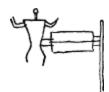


PLATE IX.c. Mnemonic Song.



Ba´-dzhĭ-ke´-o gi´-mand ma-bis´-in-dâ´-ă. I hear the spirit speaking to us.

The Mide singer is of superior power, as designated by the horns and apex upon his head. The lines from the ears indicate hearing.



Kwa-yăk´-in dī´-sha in-dâ´-yaⁿ.

I am going into the medicine lodge.

The Mide wigan is shown with a line through it to signify that he is going through it, as in the initiation.



Kwe´-tshĭ-ko-wa´-ya ti´-na-man.

I am taking (gathering) medicine to make me live.

The discs indicate sacred objects within reach of the speaker.



O'-wi-yo'-in en'-do-ma mâk'-kwin-ĕn'-do-ma'.
I give you medicine, and a lodge, also.

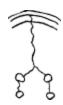
The Mide, as the personator of Makwa Man ido, is empowered to offer this privilege to the candidate.



O-wē´-nĕn bĕ-mī´-sĕt.

I am flying into my lodge.

Represents the Thunder-Bird, a deity flying into the arch of the sky. The short lines denote the (so-called spirit lines) abode of spirits or Man 'idōs.



Na-nī-ne kwe-wē´-an.

The Spirit has dropped medicine from the sky where we can get it.

The line from the sky, diverging to various points, indicates that the sacred objects occur in scattered places.



Hē'-wōg, ē', ē'.

I have the medicine in my heart.

The singer's body—i.e., heart—is filled with knowledge relating to sacred medicines from the earth.

MIDE' THERAPEUTICS.

During the period of time in which the candidate is instructed in the foregoing traditions, myths, and songs the subject of Midē´ plants is also discussed. The information pertaining to the identification and preparation of the various vegetable substances is not imparted in regular order, only one plant or preparation, or perhaps two, being enlarged upon at a specified consultation. It may be that the candidate is taken into the woods where it is known that a specified plant or tree may be found, when a smoke offering is made before the object is pulled out of the soil, and a small pinch of tobacco put into the hole in the ground from which it was taken. This is an offering to Noko´mis—the earth, the grandmother of mankind—for the benefits which are derived from her body where they were placed by Ki ´tshi Man´idō.

In the following list are presented, as far as practicable, the botanical and common names of these, there being a few instances in which the plants were not to be had, as they were foreign to that portion of Minnesota in which the investigations were made; a few of them, also, were not identified by the preceptors, as they were out of season.

It is interesting to note in this list the number of infusions and decoctions which are, from a medical and scientific standpoint, specific remedies for the complaints for which they are recommended. It is probable that the long continued intercourse between the Ojibwa and the Catholic Fathers, who were tolerably well versed in the ruder forms of medication, had much to do with improving an older and purely aboriginal form of practicing medical magic. In some of the remedies mentioned below there may appear to be philosophic reasons for their administration, but upon closer investigation it has been learned that the cure is not attributed to a regulation or restoration of functional derangement, but to the removal or even expulsion of malevolent beings—commonly designated as bad Man'idōs —supposed to have taken possession of that part of the body in which such derangement appears most conspicuous. Further reference to the mythic properties of some of the plants employed will be made at the proper time.

Although the word Mashki kiwa bun—medicine broth—signifies liquid medical preparations, the term is usually employed in a general sense to pertain to the entire materia medica; and in addition to the alleged medicinal virtues extolled by the preceptors, certain parts of the trees and plants enumerated are eaten on account of some mythic reason, or employed in the construction or manufacture of habitations, utensils, and weapons, because of some supposed supernatural origin or property, an explanation of which they have forgotten.

Pinus strobus, L. White Pine. Zhingwâk'.

1. The leaves are crushed and applied to relieve headache; also boiled; after which they are put into a small hole in the ground and hot stones placed

- therein to cause a vapor to ascend, which is inhaled to cure backache.
- The fumes of the leaves heated upon a stone or a hot iron pan are inhaled to cure headache.
- 2. Gum; chiefly used to cover seams of birch-bark canoes. The gum is obtained by cutting a circular band of bark from the trunk, upon which it is then scraped and boiled down to proper consistence. The boiling was formerly done in clay vessels.
- Pinus resinosa, Ait. Red Pine; usually, though erroneously, termed Norway Pine. Pŏkgwĕ´nagē´mŏk.

Used as the preceding.

Abies balsamea, Marshall. Balsam Fir. Ini'nandŏk.

- 1. The bark is scraped from the trunk and a decoction thereof is used to induce diaphoresis.
- 2. The gum, which is obtained from the vesicles upon the bark, and also by skimming it from the surface of the water in which the crushed bark is boiled, is carried in small vessels and taken internally as a remedy for gonorrhoea and for soreness of the chest resulting from colds.
- 3. Applied externally to sores and cuts.
- Abies alba, Michx. White Spruce. Se´ssegân´dŏk. The split roots—wadŏb´-are used for sewing; the wood for the inside timbers of canoes.

Abies nigra, Poir. Black Spruce. A'mikwan'dŏk.

- 1. The leaves and crushed bark are used to make a decoction, and sometimes taken as a substitute in the absence of pines.
- 2. Wood used in manufacture of spear handles.

- Abies Canadensis, Michx. Hemlock. Saga´īⁿwuⁿsh—"Raven Tree."
 - Outer bark powdered and crushed and taken internally for the cure of diarrhea. Usually mixed with other plants not named.

Larix Americana, Michx. Tamarack. Mŏsh´kīkiwa´dik.

- 1. Crushed leaves and bark used as Pinus strobus.
- 2. Gum used in mending boats.
- 3. Bark used for covering wig'iwams.

Cupressus thyoides, L. White Cedar. Gi'zhĭk—"Day."

- 1. Leaves crushed and used as Pinus strobus. The greater the variety of leaves of coniferæ the better. The spines of the leaves exert their prickly influence through the vapor upon the demons possessing the patient's body.
- 2. The timber in various forms is used in the construction of canoe and lodge frames, the bark being frequently employed in roofing habitations.
- Juniperus Virginiana, L. Red Cedar. Muskwa'wâ'ak.
 - Bruised leaves and berries are used internally to remove headache.

Quercus alba, L. White Oak. Mītigʻōmishʻ.

- 1. The bark of the root and the inner bark scraped from the trunk is boiled and the decoction used internally for diarrhea.
- 2. Acorns eaten raw by children, and boiled or dried by adults.
- Quercus rubra, L. Red Oak. Wisug´emītig´omish´—"Bitter Acorn Tree."

Has been used as a substitute for Q. alba.

Acer saccharinum, Wang. Sugar Maple. Innīnâ´tik.

- 1. Decoction of the inner bark is used for diarrhea.
- 2. The sap boiled in making sirup and sugar.
- 3. The wood valued for making arrow shafts.
- Acer nigrum, Michx. Black Sugar Maple. Ishig omeaush "Sap-flows-fast."
 - Arbor liquore abundans, ex quo liquor tanquam urina vehementer projicitur.

Sometimes used as the preceding.

Betula excelsa, Ait. Yellow Birch. Wi'umis'sik.

The inner bark is scraped off, mixed with that of the Acer saccharinum, and the decoction taken as a diuretic.

Betula papyracea, Ait. White Birch. Mīgwas´.

Highly esteemed, and employed for making records, canoes, syrup-pans, mōkoks´—or sugar boxes—etc.

The record of the Midē´wiwin, given by Minabō´zho, was drawn upon this kind of bark.

Populus monilifera, Ait. Cottonwood. Mâ'nâsâ'ti.

The cotton down is applied to open sores as an absorbent.

Populus balsamifera, L. Balsam Poplar. Asa'dĭ.

- 1. The bark is peeled from the branches and the gum collected and eaten.
- 2. Poles are used in building ordinary shelter lodges, and particularly for the Mide´wigân.

Juglans nigra, L. Black Walnut. Paga 'nŏk—"Nut wood."

Walnuts are highly prized; the green rind of the unripe fruit is sometimes employed in staining or dyeing.

- Smilacina racemosa, Desf. False Spikenard. Kinē´wigwŏshk —"Snake weed or Snake Vine."
 - 1. Warm decoction of leaves used by lying-in women.
 - 2. The roots are placed upon a red-hot stone, the patient, with a blanket thrown over his head, inhaling the fumes, to relieve headache.
 - 3. Fresh leaves are crushed and applied to cuts to stop bleeding.
- Helianthus occidentalis, Riddell. Sunflower. Pŭkite ´wŭkbŏkuⁿs´.

The crushed root is applied to bruises and contusions.

- Polygala senega, L. Seneca Snakeroot. Winis´sikēns´.
 - 1. A decoction of the roots is used for colds and cough.
 - 2. An infusion of the leaves is given for sore throat; also to destroy water-bugs that have been swallowed.
- Rubus occidentalis, L. Black Raspberry. Makadē´wĭskwi ´minŏk—"Black Blood Berry."
 - A decoction made of the crushed roots is taken to relieve pains in the stomach.
- Rubus strigosus, Michx. Wild Red Raspberry. Miskwi´minŏk ´—"Blood Berry."
 - The roots are sometimes used as a substitute for the preceding.
- Gaylussacia resinosa, Torr. and Gr. Huckleberry. Mī´nŭn.
 - Forms one of the chief articles of trade during the summer. The berry occupies a conspicuous place in the myth of the "Road of the Dead," referred to in connection with the "Ghost Society."
- *Prunus Virginiana*, L. Choke Cherry. Sisaⁿ 'wewi 'nakâⁿsh'.

- 1. The branchlets are used for making an ordinary drink; used also during gestation.
- 2. The fruit is eaten.
- Prunus serotina, Ehrhart. Wild Black Cherry. Okwē´wĭsh—"Scabby Bark."
 - 1. The inner bark is applied to external sores, either by first boiling, bruising, or chewing it.
 - 2. An infusion of the inner bark is sometimes given to relieve pains and soreness of the chest.
- Prunus Pennsylvanica, L. Wild Red Cherry. Kusigwa´kumi´nŏk.
 - 1. A decoction of the crushed root is given for pains and other stomach disorders.
 - 2. Fruit is eaten and highly prized.
 - 3. This, believed to be synonymous with the June Cherry of Minnesota, is referred to in the myths and ceremonies of the "Ghost Society."
- Prunus Americana, Marsh. Wild Plum. Bogē´sanŏk.
 - The small rootlets, and the bark of the larger ones, are crushed and boiled together with the roots of the following named plants, as a remedy for diarrhea. The remaining plants were not in bloom at the time during which the investigations were made, and therefore were not identified by the preceptors, they being enabled to furnish only the names and an imperfect description. They are as follows, viz: Minēn 'sŏk, two species, one with red berries, the other with yellow ones; Wabō 'saminī 'sŏk—"Rabbit berries"; Shi 'gwanau 'isŏk, having small red berries; and Cratægus coccinea, L. Scarlet-fruited Thorn. O 'ginīk.

- Typha latifolia, L. Common Cat-tail. Napŏgŭshk—"Flat grass."
 - The roots are crushed by pounding or chewing, and applied as a poultice to sores.
- Sporobolus heterolepis Gr. Napŏ´gŭshkūⁿs´—"Little Flat Grass."
 - 1. Used sometimes as a substitute for the preceding.
 - 2. Roots are boiled and the decoction taken to induce emesis, "to remove bile."
- Fragaria vesca, L. Wild Strawberry. Odē īmĭn´nĕ—Heart Berry.
 - Referred to in the ceremony of the "Ghost Society." The fruit is highly valued as a luxury.
- Acer Pennsylvanicum, L. Striped Maple. Mon'zomish '—"Moose Wood." The inner bark scraped from four sticks or branches, each two feet long, is put into a cloth and boiled, the liquid which can subsequently be pressed out of the bag is swallowed, to act as an emetic.
- Fraxinus sambucifolia, Lam. Black or Water Ash. A'gimak'.
 - 1. The inner bark is soaked in warm water, and the liquid applied to sore eyes.
 - 2. The wood is employed in making the rims for frames of snow-shoes.
- Veronica Virginica, L. Culver's Root. Wi´sŏgedzhi´wik —"Bitter Root."

A decoction of the crushed root is taken as a purgative.

Salix Candida, Willd. Hoary Willow. Sisi 'gewe' mish.

- The thick inner bark of the roots is scraped off, boiled, and the decoction taken for cough.
- Symphoricarpus vulgaris, Michx. Indian Currant. Gus ´sigwaka´mĭsh.
 - The inner bark of the root boiled and the decoction, when cold, applied to sore eyes.
- Geum strictum, Ait. Aven. Ne 'bone 'ankwe 'âk—" Hair on one side."
 - The roots are boiled and a weak decoction taken internally for soreness in the chest, and cough.
- Rumex crispus, L. Curled Dock. O'zabetshi'wik.
 - The roots are bruised or crushed and applied to abrasions, sores, etc.
- Amorpha canescens, Nutt. Lead Plant. We'abŏnag'kak —"That which turns white."
 - A decoction, made of the roots, is used for pains in the stomach. *Rosa blanda*, Ait. Early Wild Rose. O'ginīk.
 - A piece of root placed in lukewarm water, after which the liquid is applied to inflamed eyes.
- Anemone (sp.?) Anemone. Wisŏg´ibŏk´; also called Hartshorn plant by the mixed-bloods of Minnesota.
 - The dry leaves are powdered and used as an errhine, for the cure of headache.
- (*Gen. et sp. ?*) Termed Kine´bĭk waⁿsh´koⁿs and "Snake weed."
 - This plant was unfortunately so injured in transportation that identification was impossible. Ball-players and hunters use it to give them endurance and speed; the root is chewed when necessary to possess these qualities. The root is likened to a snake, which is

- supposed to be swift in motion and possessed of extraordinary muscular strength.
- Rhus (aromatica, Ait. ?) "White Sumac." Bökkwan 'ībök.
 - Roots are boiled, with those of the following named plant, and the decoction taken to cure diarrhea.
- (Gen. et sp. ?) Ki´tshiodēiminibŏk—"Big Heart Leaf."
 - Roots boiled, with preceding, and decoction taken for diarrhea.
- Monarda fistulosa, L. Wild Bergamot. Moshkōs´waⁿowiⁿs´—"Little Flk's Tail."
 - The root is used by making a decoction and drinking several swallows, at intervals, for pain in the stomach and intestines.
- Hydrophyllum Virginicum, L. Waterleaf. Huⁿkite´wagūŭs´.
 - The roots are boiled, the liquor then taken for pains in the chest, back, etc.
- Anemone Pennsylvanicum, L. Pennsylvania Anemone. Pesī ´kwadzhi´bwiko´kŏk.
 - A decoction of the roots is used for pains in the lumbar region.
- Viola (Canadensis, L.?). Canada Violet. Maskwī´widzhī´wiko ´kŏk.
 - The decoction made of the roots is used for pains in the region of the bladder.
- Phryma leptostachya, L. Lopseed. Waia 'bishkĕno 'kŏk.
 - The roots are boiled and the decoction taken for rheumatic pains in the legs.
- Viola pubescens, Ait. Downy Yellow Violet, Ogite´waguns.

- A decoction is made of the roots, of which small doses are taken at intervals for sore throat.
- Rosa (lucida, Ehrhart?). Dwarf Wild Rose. Oginī´minagaⁿ ´mŏs.
 - The roots of young plants are steeped in hot water and the liquid applied to sore eyes.
- (Gen. et sp. ?) Mŏ´zânâ´tĭk.
 - This plant could not be identified at the locality and time at which investigations were conducted. The root is boiled and the decoction taken as a diuretic for difficult micturition.
- Actæa rubra, Michx. Red Baneberry. Odzī bĭkĕⁿs "Little Root."
 - A decoction of the root, which has a sweet taste, is used for stomachic pains caused by having swallowed hair (mythic). Used also in conjunction with Ginseng.
 - This plant, according to some peculiarities, is considered the male plant at certain seasons of the year, and is given only to men and boys, while the same plant at other seasons, because of size, color of fruit, or something else, is termed the female, and is prepared for women and girls in the following manner, viz: The roots are rolled in basswood leaves and baked, when they become black; an infusion is then prepared, and used in a similar manner as above.

The latter is called Wash'kubĭdzhi'bikakŏk'.

Botrychium Virginicum, Swartz. Moonwort. Ozaga 'tigum.

The root is bruised and applied to cuts.

Aralia trifolia, Gr. Dwarf Ginseng. Nesō´wakŏk—"Three Leafed."

The roots are chewed and the mass applied to cuts to arrest hemorrhage.

Echinospermum lappula, Lehm. Stickweed. Ozaga´tĭgomĕⁿs —"Burr Bush."

The roots are placed in a hole in the ground upon hot stones, to cause the fumes to rise, when the patient puts down his face and has a cloth or blanket thrown over his head. The fumes are inhaled for headache. The raw roots are also sniffed at for the same purpose.

It is affirmed by various members of the Mide Society that in former times much of the information relating to some of these plants was not imparted to a candidate for initiation into the first degree, but was reserved for succeeding degrees, to induce a Mide of the first degree to endeavor to attain higher distinction and further advancement in the mysteries of the order. As much knowledge is believed to have been lost through the reticence and obstinacy of former chief priests, the so-called higher secrets are now imparted at the first and second degree preparatory instructions. The third and fourth degrees are very rarely conferred, chiefly because the necessary presents and fees are beyond the reach of those who so desire advancement, and partly also because the missionaries, and in many instances the Indian agents, have done their utmost to suppress the ceremonies, because they were a direct opposition and hindrance to progress in Christianizing influences.

When the preparatory instruction has come to an end and the day of the ceremony of initiation is at hand, the preceptor sings to his pupil a song, expatiating upon his own efforts and the high virtue of the knowledge imparted. The pipe is brought forward and an offering of tobacco smoke made by both preceptor and pupil, after which the former sings a song (Pl. x, A.), the time of its utterance being tediously prolonged. The mnemonic characters were drawn by Sikas´sigĕ, and are a copy of an old birch-bark scroll which has for many years been in his possession, and which was made in imitation of one in the possession of his father, Baiē´dzĭk, one of the leading Midē´ at Mille Lacs, Minnesota.



PLATE X.A. MNEMONIC SONG.



Wī-ka-no´-shi-aⁿ-ŏ.

My arm is almost pulled out from digging medicine. It is full of medicine.

The short <u>zigzag</u> lines signifying magic influence, erroneously designated "medicine."



We-wī´-ka-ni´-an.

Almost crying because the medicine is lost.

The lines extending downward from the eye signifies weeping; the circle beneath the figure is the place where the "medicine" is supposed to exist. The idea of "lost" signifies that some information has been forgotton through death of those who possessed it.



Me-shi´-âk-kĭnk mi-sui´-a-kĭnk.

Yes, there is much medicine you may cry for.

Refers to that which is yet to be learned of.



Pe-i´-e-mĭ-ko-ya´-na-kĭnk´.

Yes, I see there is plenty of it.

The Mide has knowledge of more than he has imparted, but reserves that knowledge for a

future time. The lines of "sight" run to various medicines which he perceives or knows of.



Rest.



We´-a-kwĕ´-nĭnk pe-ĭ-e´-mi-wĭt´-o-wan´.

When I come out the sky becomes clear.

When the otter-skin Midē´ sack is produced the sky becomes clear, so that the ceremonies may proceed.



We'-kwĕ-nĭnk' ke'-tŏ-nĭnk' e'-to-wa'.

The spirit has given me power to see.

The Mide sits on a mountain the better to commune with the Good Spirit.



Mi´-sha-kwat´-ni-yō´.

I brought the medicine to bring life.

The Mide´ Man´idō, the Thunderer, after bringing some of the plants—by causing the rains to fall—returns to the sky. The short line represents part of the circular line usually employed to designate the imaginary vault of the sky.



Me´-ka-ye´-nĭnk te´-a-yĕ-am´-ban.

I, too, see how much there is.

His power elevates the Mide to the rank of a man ido, from which point he perceives many secrets hidden in the earth.



In-de´-be-mĭ´-ko.

I am going to the medicine lodge.

The vertical left-hand figure denotes a leg going toward the Mide wigan.



In-de´-bi-bi´-toⁿ.

I take life from the sky.

The Midē´ is enabled to reach into the sky and to obtain from Ki´tshi Man´idō the means of prolonging life. The circle at the top denotes the sacred mī´gis, or shell.



No-a´-wi´-mi-kō´.

Let us talk to one another.

The circles denote the places of the speaker (Midē ´) and the hearer (Ki´tshi Man´idō), the short lines signifying magic influences, the Midē´ occupying the left hand and smaller seat.



Man´-i-dō-ye-na´-ni ni-kan´.

The spirit is in my body, my friend.

The mī'gis, given by Ki'tshi Man'idō, is in contact with the Midē's body, and he is possessed of life and power.

From ten days to two weeks before the day of initiation, the chief Midē´ priest sends out to all the members invitations, which consist of sticks one-fourth of an inch thick and 6 or 7 inches long. The courier is charged with giving to the person invited explicit information as to the day of the ceremony and the locality where it is to be held. Sometimes these sticks have bands of color painted around one end, usually green, sometimes red, though both colors may be employed, the two ends being thus tinted. The person invited is obliged to bring with him his invitation stick, and upon entering the Midē´wigân he lays it upon the ground near the sacred stone, on the side toward the degree post.

In case a Midē´ is unable to attend he sends his invitation with a statement of the reason of his inability to come. The number of sticks upon the floor are counted, on the morning of the day of initiation, and the number of those present to attend the ceremonies is known before the initiation begins.

About five or six days preceding the day set for the ceremony of initiation, the candidate removes to the neighborhood of the locality of the Mide wigan. On the evening of the fifth day he repairs to the sudatory or sweatlodge, which has, in the meantime, been built east of the sacred inclosure, and when seated within he is supplied with water which he keeps for making vapor by pouring it upon heated stones introduced for the purpose by assistants upon the outside. This act of purification is absolutely necessary and must be performed once each day for four days, though the process may be shortened by taking two vapor baths in one day, thus limiting the process to two days. This, however, is permitted, or desired only under extraordinary circumstances. During the process of purgation, the candidates thoughts must dwell upon the seriousness of the course he is pursuing and the sacred character of the new life he is about to assume.

When the fumigation has ceased he is visited by the preceptor and the other officiating Midē´ priests, when the conversation is confined chiefly to the candidate's progress. He then gives to each of them presents of tobacco, and after an offering to Ki´tshi Man´idō, with the pipe, they expose the articles contained in their Midē´ sacks and explain and expatiate upon the merits and properties of each of the magic objects. The candidate for the first time learns of the manner of preparing effigies, etc., with which to present to the incredulous ocular demonstration of the genuineness and divine origin of the Midē´wiwin, or, as it is in this connection termed, religion.

Several methods are employed for the purpose, and the greater the power of the Mide the greater will appear the mystery connected with the exhibition. This may be performed whenever circumstances demand such proof, but the tests are made before the candidate with a twofold purpose: first, to impress him with the supernatural powers of the Mide themselves; and second, in an oracular manner, to ascertain if Ki tshi Ma nido is pleased with the contemplated ceremony and the initiation of the candidate.

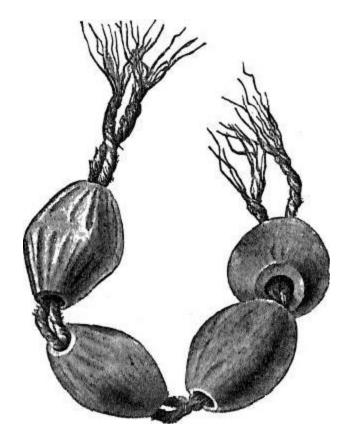


Fig. 16.

The first test is made by laying upon the floor of the wig ´iwam a string of four wooden beads each measuring about 1 inch in diameter. See Fig. 16. After the owner of this object has chanted for a few moments in an almost inaudible manner the beads begin to roll from side to side as if animated. The string is then quickly restored to its place in the Midē´ sack. Another Midē´ produces a small wooden effigy of a man (Fig. 17), measuring about 5 inches in height. The body has a small orifice running through it from between the shoulders to the buttocks, the head and neck forming a separate piece which may be attached to the body like a glass stopper to a bottle.

A hole is made in the ground deep enough to reach to the hips of the effigy, when the latter is put into it and the loose earth loosely restored so as to hold it in an upright position. Some magic powder of herbs is sprinkled around the body, and into the vertical orifice in it, when the head is put in place. A series of inarticulate utterances are chanted, when, if everything be favorable, the figure will perceptibly move up and down as if possessed of life. Fig. 18 represents another figure used in a similar manner. It consists of one piece, however, and is decorated with narrow bands of dark blue flannel about the ankles and knees, a patch of red cloth upon the breast and bands about the wrists, each of the eyes being indicated by three white porcelain beads.



Fig. 17. Fig. 18.

One of the most astonishing tests, however, and one that can be produced only by Mide of the highest power,

consists in causing a Mide sack to move upon the ground as if it were alive. This, it is confidently alleged, has been done repeatedly, though it is evident that the deception is more easily produced than in the above-mentioned instances, as the temporary retention within a bag of a small mammal could readily be made to account for the movements.

In most of these private exhibitions the light is so obscured as to prevent the deception being observed and exposed; and when public demonstrations of skill are made the auditors invariably consist of the most credulous of the uninitiated, or the confréres of the performer, from whom no antagonism or doubt would be expected.

The preceptor then consults with the Midē´ priests respecting the presents to be delivered by the candidate, and repeats the following words, viz:

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Mis-shai´-ĕ- tshi-dĕ-bŏg-in-de- gi´-she-gŏ-dung´ gwa mung´.

Now is the time that we shall fix the price of everything pertaining to the sky,
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ka-mi´- nŏngk gi´-she-goy- di´-bi-ga-dōnk´ gai-

nĕ- dŭng´ yé´.

that has given to from the day [and] the night also.
been us
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A-pē´-gĕ-dá´wŭnk i´-wa-pī ge-bin´-de-ga-yŏngk´, When it shall come to pass and at the time that we shall enter,

ă-au´-wa-mi-dē´-wĭd. he who wishes to become a Midē´.

When the four vapor baths have been taken by the candidate, and the eve of the ceremony has arrived, he

remains in the sudatory longer than usual so as not to come in contact with the large crowd of visitors who have arrived upon the scene. The woods resound with the noises incident to a large camp, while in various directions may be heard the monotonous beating of the drum indicating the presence of a number of dancers, or the hard, sharp taps of the midē´ drum, caused by a priest propitiating and invoking the presence and favor of Ki´tshi Ma´nidō in the service now so near at hand.

When the night is far advanced and all becomes hushed, the candidate, with only the preceptor accompanying, retires to his own wig'iwam, while the assistant Midē' priests and intimate friends or members of his family collect the numerous presents and suspend them from the transverse and longitudinal poles in the upper part of the Midē'wigân. Watchers remain to see that nothing is removed during the night.

At the approach of day, the candidate breakfasts and again returns to the sweat-lodge to await the coming of his preceptor, and, later, of the officiating priests. The candidate puts on his best clothing and such articles of beaded ornaments as he may possess. The preceptor and Midē´ priests are also clad in their finest apparel, each wearing one or two beaded dancing bags at his side, secured by a band of beaded cloth crossing the opposite shoulder. The members of the Midē´wiwin who are not directly concerned in the preliminaries resort to the Midē´ wigân and take seats around the interior, near the wall, where they may continue to smoke, or may occasionally drum and sing. The drummer, with his assistants, takes a place near upon the floor of the sacred inclosure to the left of the eastern entrance, i.e., the southeast corner.

IMPLORATION FOR CLEAR WEATHER.

Should the day open up with a threatening sky, one of the $Mid\bar{e}'$ priests accompanying the candidate sings the following song ($\underline{Pl. x. B}$) to dispel the clouds. Each of the lines is repeated an indefinite number of times, and after being repeated once or twice is sung also by the others as an accompaniment.

It will be observed that the words as spoken vary to some extent when chanted or sung.

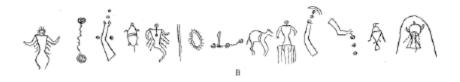
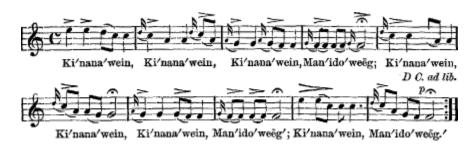


PLATE X.B. MNEMONIC SONG.



Hi-na-nē', hē', ki'-ne-na-wē' man'-i-dō. I swing the spirit like a child.

The Mide´ Spirit, showing magic lines radiating from his body. The Mide´ claims to be able to receive special favor.



Ki´nana´wein, Ki´nana´wein, Ki´nana´wein, Man´ido ´weēg;

Ki´nana´wein, Ki´nana´wein, Ki´nana´wein, Man´ido ´weēg´;

Ki'nana'wein, Man'ido'weēg'.

MIDI files: drum, flute, piano (default)

@~~~@

Gi-zhik´-ē´ ka-hwē´ da-mū´-ně.

The sky is what I am telling you about.

The sky and the earth united by a pathway of possible rain.



Ki´zhiga´widâ´ mu´nedē´, Ki´zhiga´widâ´ mu´nedē´, Ki´zhiga´widâ´ Ki´zhi-ga´wi-dâ´,

Ki´zhi-ga´wi-dâ mu´nedē´, Ki´zhiga´widâ mu´nedē´.

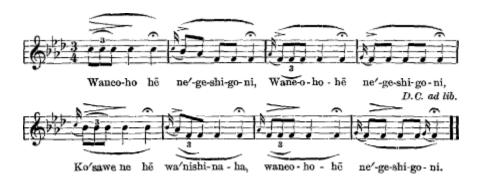
MIDI files: drum, flute, piano (default)



Wa-ne-o-ho ne´-ge-shi´-go-ni Ko-sa´-we, hē´, wa-ni´-sha´-na´.

We have lost the sky [it becomes dark].

[Clouds obscure the sky, and the arm of the Midē´ is reaching up into it for its favor of clear weather.]



Waneo-ho hē ne´-ge-shi-go-ni, Wane-o-ho-hē ne´-ge-shi-go-ni,

Ko´sawe ne hē wa´nishi-na-ha, waneo-ho-hē ne´-geshi-go-ni.

MIDI files: drum, flute, piano (default)



Wi-tshi´-hi-na´-ne-he, nē´, kō´, hō. ne´-ni-wi-tshi-nan´.

I am helping you.

[The Otter-skin Mide sack is held up to influence the Otter Spirit to aid them.]



Wi´tshihinanehe nē´ kō hō´, ne´niwi´tshinan, wi ´tshihinanehe

nē´ kō´ hō´. U-a-ni-ma wē u-a-ni-ma wē henigwish.

MIDI files: drum, flute, piano (default)



U-a´-ni-ma´, wē´, he´-ni-gwĭsh.

I have made an error [in sending].

The Otter-skin Mide´ sack has failed to produce the desired effect.



Rest.

The Mide women who have gathered without the lodge now begin to dance as the song is renewed.



Na-nin-dē´, hē´, he-yo-ya, nē´.

I am using my heart.

Refers to sincerity of motives in practice of Midē´ ceremony.



Yo'-na-hĭsh'-i-me'-a'-ne', hē'. yá-na-hĭsh-a-me'-a-ne', hē'. What are you saying to me, and I am "in my senses"?



Man´-i-dō, hē´ nē´, mē´-de-wē´, ē´. The spirit wolf.

One of the malevolent spirits who is opposed to having the ceremony is assisting the evil man'idōs in causing the sky to be overcast.



Wen´-tshi-o-ne-se hē´, nē´, wen´-tshi-o-ne-se hē´. I do not know where I am going.

The Mide is in doubt whether to proceed or not in the performance of initiation.



Mi´-shok-kwo´-ti-ne be-wa´-ne, ni-bin´-zhi man´-i-dō i-ya´-nē. I depend on the clear sky.

[To have the ceremony go on. Arm reaching toward the sky for help.]



Ke-me´-ni-na-ne´ a-nō´-ē´ a´-sho-wē´ me-nō´-de ki-man´-i-dō. I give you the other village, spirit that you are. [That rain should fall anywhere but upon the assemblage and Midē´wigân.]



Tshing-gwe´-o-de |: ge´.

The thunder is heavy.

The Thunder Bird, who causes the rain.

page image



We'-ka-ka-nō', hō' shi'-a-dē'. We are talking to one another. The Midē´ communes with Ki´tshi Man´idō; he is shown near the sky; his horns denoting superior wisdom and power, while the lines from the mouth signify speech.

In case the appearance of the sky becomes sufficiently favorable the initiation begins, but if it should continue to be more unfavorable or to rain, then the song termed the "Rain Song" is resorted to and sung within the inclosure of the Midē´wigân, to which they all march in solemn procession. Those Midē´ priests who have with them their Midē´ drums use them as an accompaniment to the singing and to propitiate the good will of Ki´tshi Man´idō. Each line of the entire song appears as an independent song, the intervals of rest varying in time according to the feelings of the officiating priest.

The words of the song are known to most of the Midē´ priests; but, as there is no method of retaining a set form of musicial notation, the result is entirely individual and may vary with each singer, if sung independently and out of hearing of others; so that, under ordinary circumstances, the priest who leads off sings through one stanza of the song, after which the others will readily catch the notes and accompany him. It will be observed, also, that the words as spoken vary to some extent when chanted or sung.

If this song does not appear to bring about a favorable change the priests return to their respective wig'iwams and the crowd of visitors disperses to return upon the first clear day.

INITIATION OF CANDIDATE.

If, however, the day be clear and promising the candidate goes early to the sweat-lodge, where he is joined by his preceptor, and later by the officiating priest. After all preliminaries have been arranged and the proper time for regular proceedings has arrived, the preceptor sings the following song ($\underline{Pl. x, C}$), the musical notation of which varies according to his feelings, clearly showing that there is no recognized method of vocal delivery, as is the case with the music of dancing songs:



PLATE X.C. MNEMONIC SONG.



Kan-do´-e-a-nē´, to´-e-a-nē´ kan-do´-e-a-nē´, in-nin´-nĭ man´-e-dō´-ē´.

The spirit man is crying out.

[The head of the Midē´, a synonym of Ki´tshi Man ´idō. The voice lines show spots denoting intensity of accentuation, and that Ki´tshi Man´idō is pleased to look with favor upon the proceedings.]



Ya-ni-nē´, na´, tshi-mo-tē´, hē´, Talking around in various sections.

The voice lines, as in the preceding figure, extending downward from the mouth to either side, have spots upon them to indicate "talks" in various directions addressed to the Midē'.



Man'-e-dō, wē', hē', pe-me'-so-wa'.
The spirit is flying.

The Thunder Bird, who causes the rain, is away at some remote place.

Mi-de´-we-tē-we´ me´-wa-gwi´-shak-wa´,



mi-de´-we-ta´.

The day is clear; let us have the grand medicine.

[The Mide's hand reaches to the sky, and rain falls at places other than upon the Mide wigan, as shown by rain lines from the end of the curved lines denoting the sky.]



Me-shak´-kwot dung´-ke-hē´, ne-mē´-gĭs-sĭm´.

I am the sign that the day will be clear.

[The Mide´'s hand reaches to the sky, as indicated by the short transverse line, and the sun's rays diverge in all directions.]



Sun´-gis-ni de´-wit-ka-nē´, hē´, wi-no´-wo-he´-she-wat´ man´-i-do-wi-tshik.

I am the strongest medicine, is what is said of me.

[The speaker compares himself to Makwa´ Man´idō, the Bear Spirit.]



Hwo´-ba-mī´-de, hwo´-ba-mī-de, man-ĕ-dō na´-wa-gī-zhĭk.

The spirit in the middle of the sky sees me.

[The upper spot denotes the abode of Ki´tshi Man ´idō, the "line of vision" extending to the speaker, shown at a corresponding spot below.]



Ni-wĭ-we´-wai-a-de´ hi´-me nai´-o-nā´.

I take my sack and touch him.

The Mide will use his sacred Otter-skin sack to touch the candidate.



Man´-i-dō wi-kan-ē´, mi-de´-yo.

My medicine is the sacred spirit.

The Midē´ professes to have received the divine gift from Ki´tshi Man´idō; the gifts are seen descending to the hand held up to receive them.



Ha-ni-ne´ ku-mē´ ni´-kan-nē´?
How do you answer me, my Midē´ friends?

This is addressed to the Mide´ priests (Nika´ni) present, and is an inquiry as to their willingness to proceed. The Mide´ wigân is shown, the line running horizontally through it the path of the candidate (or one who has gone through), the two spots within the place of the sacred stone and the post, while the spot to the right of the outside of the inclosure denotes the beginning, or the sweat-lodge, symbolizing the circle of the earth upon the Mide´ chart (Pl. III), those upon the left denoting the three possible degrees of advancement in the future.

Upon the conclusion of the song there is a brief interval, during which all partake of a smoke in perfect silence, making the usual offerings to the four points of the compass, to Ki´tshi Man´idō´, and toward the earth.

The preceptor then says:

After this monologue he continues, and addresses to the candidate the mide´ gagĭ´kwewĭn´, or Mide´ sermon, in the following language, viz:

An-be´-bi-sĭn´-di-wi´-shĭn, wa´-i-ni´-nan; now listen to me what I am about to say to you;

kēsh´-pin-pe´-sin-da´- da-ma´-dzhi ke´-bi-mâ´-di-sinin-wĭn shka´ wĭn´.

If you take heed of that which I shall continue always your life.
say to you

Uⁿ, nun´- ke-za´-ki-gi-zi- ki´-tshi man ō´-dik-kid´-dogūm, toⁿ mŏn ´-i-dō wĭn´; Now, to-day I make known to you the great spirit That which he says;

o´-wi-dŏsh kid´-di- ki-ī´-kid-dō´kī´- man´-i- gi´-sa-gi-ĭg nĭn´ tshi dō ´. and now this I say to you. This is what says the great spirit you.

to-wa´-bish-ga gi-shtig-wa a-pī- sa´-gi-sit´-to-wad we
It shall be white the sacred at the object time known

o-sa´-in-di-kid´-do-wīn ĕ´-kid-dōdt ki´-tshi man´-i-dō and this is what I say That which he says the great spirit

ŏ´-gi-din´-nĭn mis-sâ´-wa ke´-a-ked´-de-wó now this I impart to you even if they say

wa´-ba-ma-tshin´ni-bŭdt mi´-â-ma´ tshī´-ō- nish-gâd´, That they saw him dead in this place he shall be Raised again

ini-â-má a-pe´-ni-nut´ nin-dē´ kid´-do-wĭn in this place he puts his trust In my heart in this "saying"

min-nik´ kid-da kĭ-o-wink Ka-wī´-ka-da-an´-na-we´-was-si-

'- '. nan,
the time of the Of the duration world.

me-ē´-kid-dodt´ man´-i-dō. Nin´-ne-dzha´-nis That is what he says, the spirit. My child,

ke-un´-dzhi be-mâ´-dis si´-an. this shall give you life.

The Mide priests then leave the sweat-lodge and stand upon the outside, while the candidate gathers up in his arms a number of small presents, such as tobacco, handkerchiefs, etc., and goes out of the wig'iwam to join the Mide' priests. The order of marching to the main entrance of the Mide wigan is then taken up in the following order: First the candidate, next the preceptor, who in turn is followed by the officiating priests, and such others, and members of his family and relatives as desire. At the door of the Mide wigan all but one of the priests continue forward and take their stations within the inclosure, the preceptor remaining on one side of the candidate, the Mide priest upon the other, then all march four times around the outside of the inclosure, toward the left or south, during which time drumming is continued within. Upon the completion of the fourth circuit the candidate is placed so as to face the main entrance of the Mide wigan. When he is prompted to say:

"Man- un´-ga-bīn´-di- o-bŏg´-ga-dĭ-nan o-dai´-ye-din gĕ ´, ´."

Let me come in and these I put down my things [gifts].

The presents are then laid upon the ground. The preceptor goes inside, taking with him the gifts deposited by the candidate, and remains standing just within the door and faces the degree post toward the west. Then the chief

officiating priest, who has remained at the side of the candidate, turns toward the latter and in a clear, distinct, and exceedingly impressive manner sings the following chant, addressed to Ki´tshi Man´idō whose invisible form is supposed to abide within the Midē´wigan during such ceremonies, stating that the candidate is presented to receive life (the mī´gis) for which he is suffering, and invoking the divine favor.

```
Hai ya ha man'- hō ti-bish'-ko-gish'-i-
                                              hē we-zá-ba-mid
                               gŭng,
      i-dō.
                                                        ´-mi
  There is a spirit
                        just as the one above,
                                              he, now sits with me
                   ho,
             esh-ĭ-gan´-
                              hē´,
                                       mé-a-tshi-bin´-de-gan´-
ni<sup>n</sup>-dzhá-
                              hwē',
                do-we.
                                                 ni-nan,
   nis.
               and now I
  my child
                              he, hwe,
                                            that I enter you here
                proclaim,
                                                        hē', hwē
        dzhi-man´-i-
                                     sha-wé-nĭ-mi-
 nōs.
                        hō
                            hwō
                                          shin'.
             dō,
          good spirit,
                                      have pity on me,
  my
                         ho,
                              hwo.
                                                          he. hwe
 father
 a-shig´-wa-bin´-de-gan- gé-gwa-da-gí-
                                                 wi-bĭ-mâ´-di-
            nŏk
                                     sid
                                                        sĭd.
                               he that is suffering
   now that I enter him here.
                                                      for life.
dé-bwe-daú-wi-shĭn dzhí-bi-mâ´-di-sĭd´.
                                               nōs.
      believe me
                          that he shall live.
                                             my father,
wē'-o-sĭm'-in-nan', hē', hē'.
   whose child I am.
                         he. he.
```

The following is the musical notation:



he-he-he yo.

MIDI files: drum, flute, piano (default)

The candidate is then led within the inclosure when all the members of the society arise while he is slowly led around toward the southern side to the extreme end in the west, thence toward the right and back along the western side to the point of beginning. This is done four times. As he starts upon his march, the member nearest the door falls in the line of procession, each member continuing to drop in, at the rear, until the entire assembly is in motion. During this movement there is a monotonous drumming upon the Midē´ drums and the chief officiating priest sings:

Ni´-sha-bōn´-da wig´-i- ke-nōn´-dēg, shkan wam I go through [the] "house" the long, i.e., through the Midē ´wigân.

At the fourth circuit, members begin to stop at the places previously occupied by them, the candidate going and remaining with his preceptor to a point just inside the

eastern entrance, while the four officiating priests continue around toward the opposite end of the inclosure and station themselves in a semicircle just beyond the degree post, and facing the western door. Upon the ground before them are spread blankets and similar goods, which have been removed from the beams above, and upon which the candidate is to kneel. He is then led to the western extremity of the inclosure where he stands upon the blankets spread upon the ground and faces the four Mide' priests. The preceptor takes his position behind and a little to one side of the candidate, another assistant being called upon by the preceptor to occupy a corresponding position upon the other side. During this procedure there is gentle drumming which ceases after all have been properly stationed, when the preceptor steps to a point to the side and front of the candidate and nearer the officiating priests, and says:

```
Mĭ-i´-shi-gwa´ bŏ´-gi-ta-mo<sup>n</sup>´-nan,

The time has arrived that I yield it to you.

mi´-na-nan´-kĕ-ân-dzhi bi-mâ´-dĭ-si´-an.

[the midē´migis] that will give you life.
```

The preceptor then returns to his position back of and a little to one side of the candidate, when the chief officiating priest sings the following song, accompanying himself upon a small cylindrical mide drum. The words are: Kit -ta-noⁿ - do-we man -i-do -wid—you shall hear me, spirit that you are

—, and the music is rendered as follows:



Kit´ta-no´do-we man´i-dō´wid-hō dō, wē, hē, Kit´ta-no´do-we man´i-dō-wid-hō, hē, hwē, hē, Kit´-ta-no´-do-we man´-i-dō´-wid, kit´ta-no´do-wē, kit´ta-no´do-wid, man´i-do´-wid, man´i-do´wid-hō, wē, hwē, hē, Kit´ta-no´dowē´ man´idō´wid, hō, hē, hwē, hē, hē, hwē, hē.

MIDI files: drum, flute, piano (default)

After this song is ended the drum is handed to one of the members sitting near by, when the fourth and last of the officiating priests says to the candidate, who is now placed upon his knees:

Mĭs-sa´-a-shi´-gwa ki-bo´-gĭs-sē-na-min tshi´-ma-mâd

bi-mâ´-di-sĭ-wĭn, mĭ-nē´-sĭd. take life the bead [mi´gis shell.]

Then the next Mide´, the third of the quartette, goes through a similar series of forward movements and thrusts with his Mide´ sack, uttering similar sounds and shooting the sacred mī´gis—life—into the right breast of the candidate, who is agitated still more strongly than before. When the third Mide´, the second in order of precedence, goes through similar gestures and pretends to shoot the mī´gis into the candidate's heart, the preceptors assist him to be violently agitated.

 Then the four Mide priests, the preceptor and the assistant, lay their Mide' sacks upon his back and after a few moments a mī'gis shell drops from his mouth—where he had been instructed to retain it. The chief Mide picks up the mī'gis and, holding it between the thumb and index finger of the right hand, extending his arm toward the candidate's mouth says "wâ! wâ! hĕ hĕ hĕ hĕ," the last syllable being uttered in a high key and rapidly dropped to a low note; then the same words are uttered while the mī'gis is held toward the east, and in regular succession to the south, to the west, to the north, then toward the sky. During this time the candidate has begun to partially revive and endeavor to get upon his knees, but when the Mide finally places the mi gis into his mouth again, he instantly falls upon the ground, as before. The Mide then take up the sacks, each grasping his own as before, and as they pass around the inanimate body they touch it at various points, which causes the candidate to "return to life." The chief priest then says to him, "O'mishga'n"A—"get up"—which he does; then indicating to the holder of the Mide drum to bring that to him, he begins tapping and presently sings the following



Mi´-si-ni-en´-di-an Mi´si-ni-en´-di-an Mi´-si-ni-en´-dian,

Mi´-si-ni-en´-di-an, Mi´-si-ni-en´-di-an Mi´-si-ni-en´-di-an, Mi´-si-ni-en´-di-an, Mi´-si-ni-en´-di-an, Ni-kan. Hĭū, Hĭū.

MIDI files: drum, flute, piano (default)

The words of the text signify, "This is what I am, my fellow Mide'; I fear all my fellow Mide'." The last syllables, hiū', are meaningless.

At the conclusion of the song the preceptor prompts the candidate to ask the chief Mide:

Ni-kan´ k´kĕ´-nō´-mo´, maⁿ-dzhi´-an na´-ka-mō´-in. Colleague instruct me, give me a song.

In response to which the Mide´ teaches him the following, which is uttered as a monotonous chant, viz:

We'-go- ge-gwed'-dzhi- mi-dē'-wi- ke-kwed'-dzhinĕn' me-an', wĭn me-an'?

What are you asking, grand are you asking?

medicine

Ki´-ka-mi´-nin en-da-wĕn´-da ma-wi´-nĕn mi-dē´-wi-wĭn I will give you you want me to give you "grand medicine"

tshi-da-si-nē´-ga´-na-win´-da-ki-ĭn´-tshun-di´-nĕ-ma´-somōn; wĭn, always take care of; you have received it yourself,

tsho´-a-wa´-nin di´-sĕ-wan. never forget.

To this the candidate, who is now a member, replies, \bar{e}^n , yes, i.e., assent, fully agreeing with the statement made by the Mide´, and adds:

Then the priests begin to look around in search of spaces in which to seat themselves, saying:

and all go to such places as are made, or reserved, for them.

The new member then goes to the pile of blankets, robes, and other gifts and divides them among the four officiating priests, reserving some of less value for the preceptor and his assistant; whereas tobacco is carried around to each person present. All then make an offering of smoke, to the east, south, west, north, toward the center and top of the Midē´wigân—where Ki´tshi Man´idō presides—and to the earth. Then each person blows smoke upon his or her Midē´ sack as an offering to the sacred mī´gis within.

The chief Midē´ advances to the new member and presents him with a new Midē´ sack, made of an otter skin, or possibly of the skin of the mink or weasel, after which he returns to his place. The new member rises, approaches the chief Midē´, who inclines his head to the front, and, while passing both flat hands down over either side,

```
Mi-gwĕtsh', ni-ka'-ni, ni-ka'-ni, ni-ka'-ni, na-ka'.

Thanks, my colleagues, my colleagues, my colleagues.
```

Then, approaching the next in rank, he repeats the ceremony and continues to do so until he has made the entire circuit of the Midē´wigân.

At the conclusion of this ceremony of rendering thanks to the members of the society for their presence, the newly elected Mide returns to his place and, after placing within his Mide sack his migis, starts out anew to test his own powers. He approaches the person seated nearest the eastern entrance, on the south side, and, grasping his sack in a manner similar to that of the officiating priests, makes threatening motions toward the Mide as if to shoot him, saying, "yâ, hŏ´, hŏ´, hŏ´, hŏ´, hŏ´," gradually raising his voice to a higher key. At the fourth movement he makes a quick thrust toward his victim, whereupon the latter falls forward upon the ground. He then proceeds to the next, who is menaced in a similar manner and who likewise becomes apparently unconscious from the powerful effects of the mī gis. This is continued until all persons present have been subjected to the influence of the mī'gis in the possession of the new member. At the third or fourth experiment the first subject revives and sits up, the others recovering in regular order a short time after having been "shot at," as this procedure is termed.

When all of the Midē´ have recovered a very curious ceremony takes place. Each one places his mī´gis shell upon the right palm and, grasping the Midē´ sack with the left hand, moves around the inclosure and exhibits his mī´gis to everyone present, constantly uttering the word "hŏ´, hŏ´, hŏ´, hŏ´, 'in a quick, low tone. During this period there is a mingling of all the persons present, each endeavoring to attract the attention of the others. Each Midē´ then pretends to swallow his mī´gis, when suddenly there are sounds of violent coughing, as if the actors were strangling, and soon thereafter they gag and spit out upon the ground the mī´gis, upon which each one falls apparently dead. In a few moments, however, they recover, take up the little shells again and pretend to swallow them. As the Midē´

return to their respective places the mī'gis is restored to its receptacle in the Midē' sack.

Food is then brought into the Mide wigan and all partake of it at the expense of the new member.

After the feast, the older Mide of high order, and possibly the officiating priests, recount the tradition of the Ani´shinâ 'beg and the origin of the Mide'wiwin, together with speeches relating to the benefits to be derived through a knowledge thereof, and sometimes, tales of individual success and exploits. When the inspired ones have given utterance to their thoughts and feelings, their memories and their boastings, and the time of adjournment has almost arrived, the new member gives an evidence of his skill as a singer and a Mide. Having acted upon the suggestion of his preceptor, he has prepared some songs and learned them, and now for the first time the opportunity presents itself for him to gain admirers and influential friends, a sufficient number of whom he will require to speak well of him, and to counteract the evil which will be spoken of him by enemies —for enemies are numerous and may be found chiefly among those who are not fitted for the society of the Mide, or who have failed to attain the desired distinction.

The new member, in the absence of a Midē´ drum of his own, borrows one from a fellow Midē´ and begins to beat it gently, increasing the strokes in intensity as he feels more and more inspired, then sings a song ($\underline{Pl. x. D}$), of which the following are the words, each line being repeated ad libitum, viz:

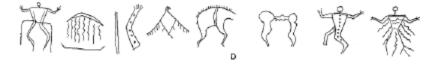


PLATE X.D. MNEMONIC SONG.



We'-nen-wi'-wik ka'-ni-an.

The spirit has made sacred the place in which I live.

The singer is shown partly within, and partly above his wigwam, the latter being represented by the lines upon either side, and crossing his body.



En´-da-yan´ pi-ma´-ti-su´-i-ŭn en´-da-yan´.

The spirit gave the "medicine" which we receive.

The upper inverted crescent is the arch of the sky, the magic influence descending, like rain upon the earth, the latter being shown by the horizontal line at the bottom.



Rest.



Nin'-nik-ka'-ni man'-i-dō.

I too have taken the medicine he gave us.

The speaker's arm, covered with mī'gis, or magic influence, reaches toward the sky to receive from Ki'tshi Man'idō the divine favor of a Midē's power.



Ke-kĕk´-ō-ĭ-yan´.

I brought life to the people.

The Thunderer, the one who causes the rains, and consequently life to vegetation, by which the Indian may sustain life.



Be-mo´-se ma-kō-yan.

I have come to the medicine lodge also.

The Bear Spirit, one of the guardians of the Midē wiwin, was also present, and did not oppose the

singer's entrance.



Ka´-ka-mi´-ni-ni´-ta.

We spirits are talking together.

The singer compares himself and his colleagues to spirits, i.e., those possessing supernatural powers, and communes with them as an equal.



O-ni´-ni-shĭnk-ni´-yo.

The mī'gis is on my body.

The magic power has been put into his body by the Midē priests.



Ni man´-i-dō ni´-yăn.

The spirit has put away all my sickness.

He has received new life, and is, henceforth, free from the disturbing influences of evil man idos.

As the sun approaches the western horizon, the Midē´ priests emerge from the western door of the Midē´wigân and go to their respective wig´iwams, where they partake of their regular evening repast, after which the remainder of the evening is spent in paying calls upon other members of the society, smoking, etc.

The preceptor and his assistant return to the Midē´wigân at nightfall, remove the degree post and plant it at the head of the wig´iwam—that part directly opposite the entrance—occupied by the new member. Two stones are placed at the base of the post, to represent the two forefeet of the bear Man´idō through whom life was also given to the Ani´shinâ´bēg.

If there should be more than one candidate to receive a degree the entire number, if not too great, is taken into the Midē´wigân for initiation at the same time; and if one day

suffices to transact the business for which the meeting was called the Indians return to their respective homes upon the following morning. If, however, arrangements have been made to advance a member to a higher degree, the necessary changes and appropriate arrangement of the interior of the Midē´wigân are begun immediately after the society has adjourned.

DESCRIPTIVE NOTES.

The mī´gis referred to in this description of the initiation consists of a small white shell, of almost any species, but the one believed to resemble the form of the mythical mī´gis is similar to the cowrie, Cypræa moneta, L., and is figured at No. 1 on Pl. xi. Nearly all of the shells employed for this purpose are foreign species, and have no doubt been obtained from the traders. The shells found in the country of the Ojibwa are of rather delicate structure, and it is probable that the salt water shells are employed as a substitute chiefly because of their less frangible character. The mī´gis of the other degrees are presented on the same plate, but special reference to them will be made. No. 2 represents the mī´gis in the possession of the chief Midē priest of the society at Leech Lake, Minnesota, and consists of a pearl-white Helix (sp?).

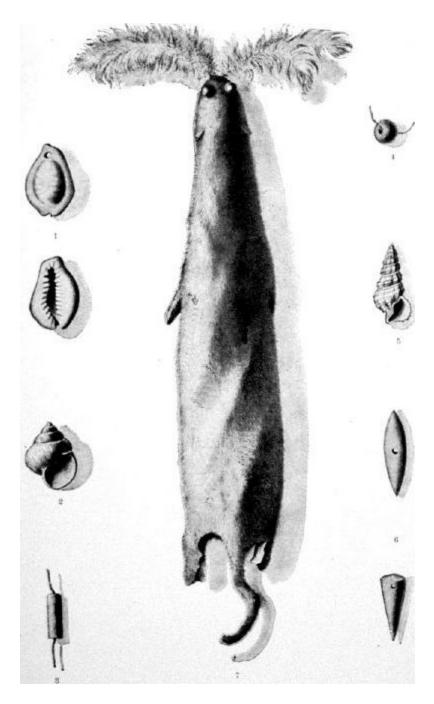


PLATE XI. SACRED OBJECTS.

The Mide´ sack represented in No. 7 (Pl. xi.) is made of the skin of a mink—Putorius vison, Gapp. White, downy feathers are secured to the nose, as an additional ornament. In this sack are carried the sacred objects belonging to its owner, such as colors for facial ornamentation, and the magic red powder employed in the preparation of hunters´ songs;

effigies and other contrivances to prove to the incredulous the genuineness of the Mide´ pretensions, sacred songs, amulets, and other small man´idōs—abnormal productions to which they attach supernatural properties—invitation sticks, etc.



Fig. 19.—Hawk-leg fetish.

In <u>Fig. 19</u> is reproduced a curious abnormal growth which was in the possession of a Midē´ near Red Lake, Minnesota. It consists of the leg of a Goshawk—Astur atricapillus, Wilson—from the outer inferior condyle of the right tibia of which had projected a supernumerary leg that terminated in two toes, the whole abnormality being about one-half the size and length of the natural leg and toes.

This fetish was highly prized by its former owner, and was believed to be a medium whereby the favor of the Great Thunderer, or Thunder God, might be invoked and his anger appeased. This deity is represented in pictography by the eagle, or frequently by one of the Falconidæ; hence it is but natural that the superstitious should look with awe and reverence upon such an abnormality on one of the terrestrial representatives of this deity.

A Mide of the first degree, who may not be enabled to advance further in the mysteries of the Mide wiwin, owing to his inability to procure the necessary quantity of presents and gifts which he is required to pay to new preceptors and to the officiating priests—the latter demanding goods of double the value of those given as an entrance to the first degree—may, however, accomplish the acquisition of additional knowledge by purchasing it from individual Mide'. It is customary with Mide priests to exact payment for every individual remedy or secret that may be imparted to another who may desire such information. This practice is not entirely based upon mercenary motives, but it is firmly believed that when a secret or remedy has been paid, for it can not be imparted for nothing, as then its virtue would be impaired, if not entirely destroyed, by the man'idō or guardian spirit under whose special protection it may be supposed to be held or controlled.

Under such circumstances certain first degree Midē´ may become possessed of alleged magic powers which are in reality part of the accomplishments of the Midē´ of the higher degrees; but, for the mutual protection of the members of the society, they generally hesitate to impart anything that may be considered of high value. The usual kind of knowledge sought consists of the magic properties and use of plants, to the chief varieties of which reference will be made in connection with the next degree.

There is one subject, however, which first-degree Midē´ seek enlightment upon, and that is the preparation of the "hunter's medicine" and the pictographic drawings employed in connection therewith. The compound is made of several plants, the leaves and roots of which are ground into powder. A little of this is put into the gun barrel, with the bullet, and sometimes a small pinch is dropped upon the track of the animal to compel it to halt at whatever place it may be when the powder is so sprinkled upon the ground.

The method generally employed to give to the hunter success is as follows: When anyone contemplates making a hunting trip, he first visits the Mide, giving him a present of tobacco before announcing the object of his visit and afterwards promising to give him such and such portions of the animal which he may procure. The Mide, if satisfied with the gift, produces his pipe and after making an offering to Ki'tshi Man'idō for aid in the preparation of his "medicine," and to appease the anger of the man'idō who controls the class of animals desired, sings a song, one of his own composition, after which he will draw with a sharppointed bone or nail, upon a small piece of birch bark, the outline of the animal desired by the applicant. The place of the heart of the animal is indicated by a puncture upon which a small quantity of vermilion is carefully rubbed, this color being very efficacious toward effecting the capture of the animal and the punctured heart insuring its death.



Fig. 20.—Hunter's medicine.

Frequently the heart is indicated by a round or triangular figure, from which a line extends toward the mouth, generally designated the life line, i.e., that magic power may reach its heart and influence the life of the subject

designated. Fig. 20 is a reproduction of the character drawn upon a small oval piece of birch bark, which had been made by a Mide to insure the death of two bears. Another example is presented in Fig. 21, a variety of animals being figured and a small quantity of vermilion being rubbed upon the heart of each. In some instances the representation of animal forms is drawn by the Mide´ not upon birch bark, but directly upon sandy earth or a bed of ashes, either of which affords a smooth surface. For this purpose he uses a sharply pointed piece of wood, thrusts it into the region of the heart, and afterwards sprinkles upon this a small quantity of powder consisting of magic plants and vermilion. These performances are not conducted in public, but after the regular mystic ceremony has been conducted by the Mide' the information is delivered with certain injunctions as to the course of procedure, direction, etc. In the latter method of drawing the outline upon the sand or upon ashes, the result is made known with such directions as may be deemed necessary to insure success.

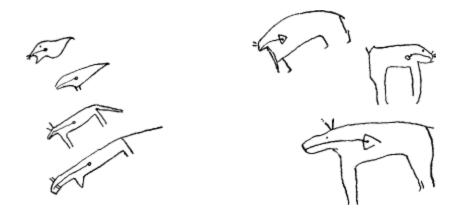


Fig. 21.—Hunter's medicine.

For the purpose of gaining instruction and success in the disposition of his alleged medicines, the Midē´ familiarizes himself with the topography and characteristics of the country extending over a wide area, to ascertain the best feeding grounds of the various animals and their haunts at

various seasons. He keeps himself informed by also skillfully conducting inquiries of returning hunters, and thus becomes possessed of a large amount of valuable information respecting the natural history of the surrounding country, by which means he can, with a tolerable amount of certainty, direct a hunter to the best localities for such varieties of game as may be particularly desired by him.

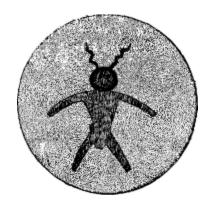


Fig. 22.—Wâbĕnō′ drum.

In his incantations a Wâběnō´ uses a drum resembling a tambourine. A hoop made of ash wood is covered with a piece of rawhide, tightly stretched while wet. Upon the upper surface is painted a mythic figure, usually that of his tutelaly daimon. An example of this kind is from Red Lake, Minnesota, presented in Fig. 22. The human figure is painted red, while the outline of the head is black, as are also the waving lines extending from the head. These lines denote superior power. When drumming upon this figure, the Wâběnō´ chants and is thus more easily enabled to invoke the assistance of his man´idō.

Women, as before remarked, may take the degrees of the Mide wiwin, but, so far as could be ascertained, their professions pertain chiefly to the treatment of women and children and to tattooing for the cure of headache and chronic neuralgia.

Tattooing is accomplished by the use of finely powdered charcoal, soot or gunpowder, the pricking instrument being made by tying together a small number of needles; though formerly, it is said, fish spines or sharp splinters of bone were used for the purpose. The marks consist of round spots of one-half to three-fourths of an inch in diameter immediately over the afflicted part, the intention being to drive out the demon. Such spots are usually found upon the temples, though an occasional one may be found on the forehead or over the nasal eminence.

When the pain extends over considerable space the tattoo marks are smaller, and are arranged in rows or continuous lines. Such marks may be found upon some individuals to run outward over either or both cheeks from the alæ of the nose to a point near the lobe of the ear, clearly indicating that the tattooing was done for toothache or neuralgia.

The female Midē´ is usually present at the initiation of new members, but her duties are mainly to assist in the singing and to make herself generally useful in connection with the preparation of the medicine feast.

SECOND DEGREE.

The inclosure within which the second degree of the Midē ´wiwin is conferred, resembles in almost every respect that of the first, the only important difference being that there are two degree posts instead of one. A diagram is presented in Fig. 23. The first post is planted a short distance beyond the middle of the floor—toward the western door—and is similar to the post of the first degree, i.e., red, with a band of green around the top, upon which is perched the stuffed body of an owl; the kŏ-ko´-kŏ-ō´. The second post, of similar size, is painted red, and over the entire surface of it are spots of white made by applying clay with the finger tips.

(<u>Pl. xv</u>, No. 2.) These spots are symbolical of the sacred mī 'gis, the great number of them denoting increased power of the magic influence which fills the Midē 'wigân. A small cedar tree is also planted at each of the outer angles of the inclosure.

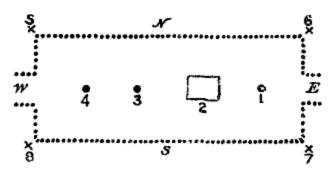


Fig. 23.—Diagram of Midē´wigân of the second degree.

The sweat-lodge, as before, is erected at some distance east of the main entrance of the Mide wigan, but a larger structure is arranged upon a similar plan; more ample accommodations must be provided to permit a larger gathering of Mide priests during the period of preparation and instruction of the candidate.

PREPARATION OF CANDIDATE.

A Midē´ of the first degree is aware of the course to be pursued by him when he contemplates advancement into the next higher grade. Before making known to the other members his determination, he is compelled to procure, either by purchase or otherwise, such a quantity of blankets, robes, peltries, and other articles of apparel or ornament as will amount in value to twice the sum at which were estimated the gifts presented at his first initiation. A year or more usually elapses before this can be accomplished, as but one hunting season intervenes before the next annual meeting of the society, when furs are in their prime; and fruits and maple sugar can be gathered but once during the

season, and these may be converted into money with which to purchase presents not always found at the Indian traders ´ stores. Friends may be called upon to advance goods to effect the accomplishment of his desire, but such loans must be returned in kind later on, unless otherwise agreed. When a candidate feels convinced that he has gathered sufficient material to pay for his advancement, he announces to those members of the society who are of a higher grade than the first degree that he wishes to present himself at the proper time for initiation. This communication is made to eight of the highest or officiating priests, in his own wig'iwam, to which they have been specially invited. A feast is prepared and partaken of, after which he presents to each some tobacco, and smoking is indulged in for the purpose of making proper offerings, as already described. The candidate then informs his auditors of his desire and enumerates the various goods and presents which he has procured to offer at the proper time. The Mide priests sit in silence and meditate; but as they have already been informally aware of the applicant's wish, they are prepared as to the answer they will give, and are governed according to the estimated value of the gifts. Should the decision of the Midē´ priests be favorable, the candidate procures the services of one of those present to assume the office of instructor or preceptor, to whom, as well as to the officiating priests, he displays his ability in his adopted specialties in medical magic, etc. He seeks, furthermore, to acquire additional information upon the preparation of certain secret remedies, and to this end he selects a preceptor who has the reputation of possessing it.

For acting in the capacity of instructor, a Midē´ priest receives blankets, horses, and whatever may be mutually agreed upon between himself and his pupil. The meetings take place at the instructor's wig´iwam at intervals of a week or two; and sometimes during the autumn months,

preceding the summer in which the initiation is to be conferred, the candidate is compelled to resort to a sudatory and take a vapor bath, as a means of purgation preparatory to his serious consideration of the sacred rites and teachings with which his mind "and heart" must henceforth be occupied, to the exclusion of everything that might tend to divert his thoughts.

What the special peculiarities and ceremonials of initiation into the second degree may have been in former times, it is impossible to ascertain at this late day. The only special claims for benefits to be derived through this advancement, as well as into the third and fourth degrees, are, that a Midē upon his admission into a new degree receives the protection of that Man'idō alleged and believed to be the special guardian of such degree, and that the repetition of initiation adds to the magic powers previously received by the initiate. In the first degree the sacred mīgis was "shot" into the two sides, the heart, and head of the candidate, whereas in the second degree this sacred, or magic, influence, is directed by the priests toward the candidate's joints, in accordance with a belief entertained by some priests and referred to in connection with the Red Lake chart presented on Pl. III. The second, third, and fourth degrees are practically mere repetitions of the first, and the slight differences between them are noted under their respective captions.

In addition to a recapitulation of the secrets pertaining to the therapeutics of the Mide, a few additional magic remedies are taught the candidate in his preparatory instruction. The chief of these are described below.

- Ma-kwa´ wī´-i-sŏp, "Bear's Gall," and Pi´-zhi-ki wī´-i-sŏp, "Ox Gall," are both taken from the freshly killed animal and hung up to dry. It is powdered as required, and a small pinch of it is dissolved in water, a few drops of which are dropped into the ear of a patient suffering from earache.
- Gō´-gi-mish (gen. et sp.?).—A plant, described by the preceptor as being about 2 feet in height, having black bark and clusters of small red flowers.

- 1. The bark is scraped from the stalk, crushed and dried. When it is to be used the powder is put into a small bag of cloth and soaked in hot water to extract the virtue. It is used to expel evil man idos which cause obstinate coughs, and is also administered to consumptives. The quantity of bark derived from eight stems, each 10 inches long, makes a large dose. When a Mide gives this medicine to a patient, he fills his pipe and smokes, and before the tobacco is all consumed the patient vomits.
- 2. The root of this plant mixed with the following is used to produce paralysis of the mouth. In consequence of the power it possesses it is believed to be under the special protection of the Mide Man ido, i.e., Ki tshi Man ido.
- The compound is employed also to counteract the evil intentions, conjurations, or other charms of so-called bad Mide´, Wâběnō´, and Jěs´sakkīd´.
- Tzhi-bē´-gŏp—"Ghost Leaf."
 - After the cuticle is removed from the roots the thick under-bark is crushed into a powder. It is mixed with Gō´gimish.
- Dzhi-bai´-ĕ-mŏk´-ke-zĭn´—"Ghost Moccasin;" "Puff-ball."
 - The spore-dust of the ball is carefully reserved to add to the above mixture.
- O-kwē´-mish—"Bitter Black Cherry."
 - The inner bark of branches dried and crushed is also added.
- Nē´-wĕ—"Rattlesnake" (Crotalus durissus, L.).
 - The reptile is crushed and the blood collected, dried, and used in a pulverulent form. After partially crushing

the body it is hung up and the drippings collected and dried. Other snakes may be employed as a substitute.

It is impossible to state the nature of the plants mentioned in the above compound, as they are not indigenous to the vicinity of White Earth, Minnesota, but are procured from Indians living in the eastern extremity of the State and in Wisconsin. Poisonous plants are of rare occurrence in this latitude, and if any actual poisonous properties exist in the mixture they may be introduced by the Indian himself, as strychnia is frequently to be purchased at almost any of the stores, to be used in the extermination of noxious animals. Admitting that crotalus venom may be present, the introduction into the human circulation of this substance would without doubt produce death and not paralysis of the facial muscles, and if taken into the stomach it quickly undergoes chemical change when brought in contact with the gastric juice, as is well known from experiments made by several well known physiologists, and particularly by Dr. Coxe (Dispensatory, 1839), who employed the contents of the venom sack, mixed with bread, for the cure of rheumatism.

I mention this because of my personal knowledge of six cases at White Earth, in which paralysis of one side of the face occurred soon after the Midē´ administered this compound. In nearly all of them the distortion disappeared after a lapse of from six weeks to three months, though one is known to have continued for several years with no signs of recovery. The Catholic missionary at White Earth, with whom conversation was held upon this subject, feels impressed that some of the so-called "bad Midē´" have a knowledge of some substance, possibly procured from the whites, which they attempt to employ in the destruction of enemies, rivals, or others. It may be possible that the instances above referred to were cases in which the dose

was not sufficient to kill the victim, but was enough to disable him temporarily. Strychnia is the only substance attainable by them that could produce such symptoms, and then only when given in an exceedingly small dose. It is also alleged by almost every one acquainted with the Ojibwa that they do possess poisons, and that they employ them when occasion demands in the removal of personal enemies or the enemies of those who amply reward the Midē´ for such service.

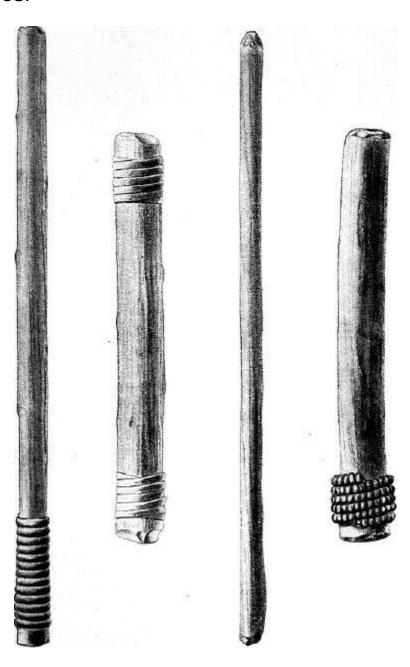


PLATE XII. INVITATION STICKS.

When the time of ceremony of initiation approaches, the chief Mide priest sends out a courier to deliver to each member an invitation to attend (Pl. XII), while the candidate removes his wig'iwam to the vicinity of the place where the Mide wigan has been erected. On the fifth day before the celebration he visits the sweat-lodge, where he takes his first vapor bath, followed on the next by another; on the following day he takes the third bath, after which his preceptor visits him. After making an offering to Ki'tshi Man iō the priest sings a song, of which the characters are reproduced in Pl. XIII, A. The Ojibwa words employed in singing are given in the first lines, and are said to be the ancient phraseology as taught for many generations. They are archaic, to a great extent, and have additional meaningless syllables inserted, and used as suffixes which are intoned to prolong notes. The second line of the Ojibwa text consists of the words as they are spoken at the present time, to each of which is added the interpretation. The radical similarity between the two is readily perceived.



PLATE XIII.A. MNEMONIC SONG.



Hi´-na-wi´-a-ni-kaⁿ. (As sung.)
We´-me-a´ ni-kan mi´-sha man´-i-dō
I am crying my colleague great spirit.
ni-wa´-ma-bi-go´ ma´-wĭ-yan´.
He sees me crying.

[The singer is represented as in close relationship or communion with Ki´tshi Man´idō, the circle denoting union; the short zigzag lines within which, in this instance, represent the tears, i.e., "eye rain," directed toward the sky.]



Ki-nŭn´-no, hē´, ki-mun´-i-dō´-we, hē´, esh´-i-ha´-ni. (As sung.)

Gi-nŭn´-dōn ni-kan´ ē-zhi-an.

I hear you, colleague, what you say to me.

[The singer addresses the Otter Spirit, whose figure is emerging from the Midē´wigân of which he is the chief guardian.]



Tē´-ti-wâ´-tshi-wi-mō´ a-ni´-me-ga´-si. (As sung.)
Tē´-ti-wâ´-tshŏ-tâg´ ni-mī´-gĭ-sĭm.

He will tell you [of] my migis.

tē´-ti-wa´-tshĭ-mo-ta´ âq.

(—inform you)

He it is who will tell you.

[The reference is to a superior spirit as indicated by the presence of horns, and the zigzag line upon the breast. The words signify that Ki´tshi Man´idō will make known to the candidate the presence within his body of the mī´gis, when the proper time arrives.]



Rest, or pause, in the song.

During this interval another smoke offering is made, in which the Mide´ priest is joined by the candidate.



Hĭu´-a-me´-da-ma´ ki´-a-wēn´-da-mag man´-i-dō ´-wĭt hĭu´-a-wen´-da-mag. (As sung.) Ki-wĭn´-da-mag´-ū-nan man´-i-dō´-wid. He tells us he is [one] of the man´idōs. [This ma'nidō is the same as that referred to in the above-named phrase. This form is different, the four spots denoting the four sacred mī'gis points upon his body, the short radiating lines referring to the abundance of magic powers with which it is filled.]



Wa´-sa-wa´-dī, hē´, wen´-da-na-ma´, mĭ-tē´-wiⁿ. (As sung.) Wa´-sa-wa´-dŭn´-da-na-ma´ I get it from afar mi-de´-wi-wĭn´. The "grand medicine."

[The character represents a leg, with a magic line drawn across the middle, to signify that the distance is accomplished only through the medium of supernatural powers. The place "from afar" refers to the abode of Ki´tshi Man´idō.]



Ki-go´-na-bi-hiⁿ ē´-ni-na mi-tē´. (As sung.) Kiⁿ-do´-na-bī-in´ mi-dē´-wi-wĭn-ni-ni´ I place you there "in the grand medicine" (among the "Midē´ people")

a-bit´-da-win´.

Half way (in the Mide wigan).

[The Mide priest informs the candidate that the second initiation will advance the candidate half way into the secrets of the Mide wigan. The candidate is then placed so that his body will have more magic influence and power as indicated by the zigzag lines radiating from it toward the sky.]



Hi'-sha-we-ne'-me-go', hē', nē'. Ni-go'-tshi-mi, hē'. (As sung.) Ni'-sha-we'-ni-mi-go' ĕ'-ne-mâ'-bi-dzhĭk. They have pity on me those who are sitting here.

[This request is made to the invisible man'idōs who congregate in the Mide'wigân during the ceremonies, and the statement implies that they

approve of the candidate's advancement.]

Another smoke offering is made upon the completion of this song, after which both individuals retire to their respective habitations. Upon the following day, that being the one

immediately preceding the day of ceremony, the candidate again repairs to the sudatory to take a last vapor bath, after the completion of which he awaits the coming of his preceptor for final conversation and communion with man 'idōs respecting the step he is prepared to take upon the morrow.

The preceptor's visit is merely for the purpose of singing to the candidate, and impressing him with the importance of the rites of the Midē´wigân. After making the usual offering of tobacco smoke the preceptor becomes inspired and sings a song, the following being a reproduction of the one employed by him at this stage of the preparatory instruction. (See Pl. XIII, B.)

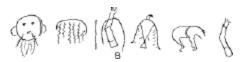


PLATE XIII.B. MNEMONIC SONG.



Man´-i-dō´, hē´, nē, man´-i-dō´, hē´, nē´.

Spirit, spirit,

Ni´-man-i-dō´ win´-da-bi-an´.

I am a spirit (is) the reason why I am here.

[The zigzag lines extending downward and outward from the mouth indicate singing. He has reached the power of a man'idō, and is therefore empowered to sit within the sacred inclosure of the Midē'wigân, to which he alludes.]



Da´-bī-wā-ni´, ha´, hē´, Aⁿ´-nĭn, e-kō´-wē-an´.
Drifting snow, why do I sing.

[The first line is sung, but no interpretation of the words could be obtained, and it was alleged that the second line contained the idea to be expressed.

The horizontal curve denotes the sky, the vertical zigzag lines indicating falling snow—though being exactly like the lines employed to denote rain. The drifting snow is likened to a shower of delicate mī 'gis shells or spots, and inquiry is made of it to account for the feeling of inspiration experienced by the singer, as this shower of mī 'gis descends from the abode of Ki 'tshi Man 'idō and is therefore, in this instance, looked upon as sacred.]



Rest, or pause.



Gi-man´-i-dō´-wē, ni´-me-ne´-ki-nan´ wan-da. Gi´-a-wĭngk, gi-man´-i-dō´-a-ni-min´, Your body, I believe it is a spirit.

Gi-a-wingk.

your body.

[The first line is sung, but the last word could not be satisfactorily explained. The first word, as now pronounced, is Ki´tshi Man´idō, and the song is addressed to him. The curved line, from which the arm protrudes, is the Midē´wigân and the arm itself is that of the speaker in the attitude of adoration: reaching upward in worship and supplication.]



Pi-nē´-si ne´-pi-mi´-a niⁿ´-ge-gē´-kwe-aⁿ

The bird as I promise the falcon

mi-we´-tshi-man´-i-dō´-wid.

the reason he is a spirit.

[The second word is of archaic form and no agreement concerning its correct signification could be reached by the Mide. The meaning of the phrase appears to be that Ki tshi Man ido promised

to create the Thunder-bird, one of the man'idōs. The falcon is here taken as a representative of that deity, the entire group of Thunderers being termed a-ni'-mi-ki'.]



Zhīn´-gwe mi´-shi-ma-kwa´ Makes a great noise the bear.

weⁿ'-dzhi-wa-ba-mok-kwēd' kŭn-nēt'.

the reason I am of flame.

[The character of the bear represents the great bear spirit of the malevolent type, a band about his body indicating his spirit form. By means of his power and influence the singer has become endowed with the ability of changing his form into that of the bear, and in this guise accomplishing good or evil. The reference to flame (fire) denotes the class of conjurers or Shamans to which this power is granted, i.e., the Wâběnō´, and in the second degree this power is reached as will be referred to further on.]



Ni´-a-wen´-din-da-sa´, ha´, sa´, man´-i-dō´-wid.
Gi´-a-wĭngk in´-do-sa man´-i-dō´-wid.
In your body I put it the spirit.

[The first line is sung, and is not of the modern style of spoken language. The second line signifies that the arm of Ki´tshi Man´idō, through the intermediary of the Midē´ priest, will put the spirit, i.e., the mī´gis, into the body of the candidate.]

The singer accompanies his song either by using a short baton of wood, termed "singing stick" or the Midē´ drum. After the song is completed another present of tobacco is given to the preceptor, and after making an offering of

smoke both persons return to their respective wig'iwams. Later in the evening the preceptor calls upon the candidate, when both, with the assistance of friends, carry the presents to the Midē'wigân, where they are suspended from the rafters, to be ready for distribution after the initiation on the following day. Several friends of the candidate, who are Midē', are stationed at the doors of the Midē'wigân to guard against the intrusion of the uninitiated, or the possible abstraction of the gifts by strangers.

INITIATION OF CANDIDATE.

The candidate proceeds early on the morning of the day of initiation to take possession of the sweat-lodge, where he awaits the coming of his preceptor and the eight officiating priests. He has an abundance of tobacco with which to supply all the active participants, so that they may appease any feeling of opposition of the man'idos toward the admission of a new candidate, and to make offerings of tobacco to the guardian spirit of the second degree of the Mide wiwin. After the usual ceremony of smoking individual songs are indulged in by the Mide priests until such time as they may deem it necessary to proceed to the Mide wigan, where the members of the society have long since gathered and around which is scattered the usual crowd of spectators. The candidate leads the procession from the sweat-lodge to the eastern entrance of the Mide wigan, carrying an ample supply of tobacco and followed by the priests who chant. When the head of the procession arrives at the door of the sacred inclosure a halt is made, the priests going forward and entering. The drummer, stationed within, begins to drum and sing, while the preceptor and chief officiating priest continue their line of march around the inclosure, going by way of the south or left hand. Eight circuits are made, the last terminating at the main or

eastern entrance. The drumming then ceases and the candidate is taken to the inner side of the door, when all the members rise and stand in their places. The officiating priests approach and stand near the middle of the inclosure, facing the candidate, when one of them says to the Mide' priest beside the latter: O-da'-pin a-sē'-ma—"Take it, the tobacco," whereupon the Mide spoken to relieves the candidate of the tobacco and carries it to the middle of the inclosure, where it is laid upon a blanket spread upon the ground. The preceptor then takes from the cross-poles some of the blankets or robes and gives them to the candidate to hold. One of the malevolent spirits which oppose the entrance of a stranger is still supposed to remain with the Mide wigan, its body being that of a serpent, like flames of fire, reaching from the earth to the sky. He is called I'-shiga-nē'-bĭ-gŏg—"Big-Snake." To appease his anger the candidate must make a present; so the preceptor says for the candidate:

Ka-wī'n-nĭ-na-ga' wa'-ba-ma'-si-ba'-shĭ-gi'-ne-gēt'?

Do you not see how he carries the goods?

This being assented to by the Midē´ priests the preceptor takes the blankets and deposits them near the tobacco upon the ground. Slight taps upon the Midē´ drum are heard and the candidate is led toward the left on his march round the interior of the Midē´wigân, the officiating priests following and being followed in succession by all others present. The march continues until the eighth passage round, when the members begin to step back into their respective places, while the officiating Midē´ finally station themselves with their backs toward the westernmost degree post, and face the door at the end of the structure. The candidate continues round to the western end, faces the Midē´ priests, and all sit down. The following song is then sung, which may be the individual production of the candidate (Pl. XIII, C). A

song is part of the ritual, though it is not necessary that the candidate should sing it, as the preceptor may do so for him. In the instance under my observation the song was an old one (which had been taught the candidate), as the archaic form of pronunciation indicates. Each of the lines is repeated as often as the singer may desire, the prolongation of the song being governed by his inspired condition. The same peculiarity governs the insertion, between words and at the end of lines, of apparently meaningless vowel sounds, to reproduce and prolong the last notes sounded. This may be done ad libitum, rythmical accentuation being maintained by gently tapping upon the Midē´ drum.

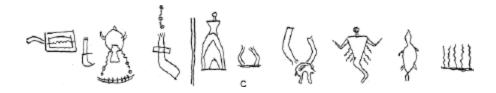


PLATE XIII.C. MNEMONIC SONG.



Hĭa´-ni-de hĕn´-da man´-i-dō, hō´, ni´-sha-bon´-de man´-i-dō´-en-dât.

Where is the spirit lodge? I go through it.

[The oblong structure represents the Midē´wigân, the arm upon the left indicating the course of the path leading through it, the latter being shown by a zigzag line.]



Nin-gō´-sa mĭ-dē´-kwe ni-ka´ na´-ska-wa´.

I am afraid of the "grand medicine" woman; I go to her.

A leg is shown to signify locomotion. The singer fears the opposition of a Midē´ priestess and will conciliate her.

Ka-ni-sa´ hi´-a-tshi´-mĭn-dē´ man´-ski-kī´, dē´, hē´, hē´.



Kinsmen who speak of me, they see the striped sky.

A person of superior power, as designated by the horns attached to the head. The lines from the mouth signify voice or speech, while the horizontal lines denote the stratus clouds, the height above the earth of which illustrates the direction of the abode of the spirit whose conversation, referring to the singer, is observed crossing them as short vertical zigzag lines; i.e., voice lines.



Ke´-na-nan´-do-mē´ ko-nō´-ne-nak ka-ne-hē´ nin-ko´-tshi nan´-no-me´.

The cloud looks to me for medicine.

[The speaker has become so endowed with the power of magic influence that he has preference with the superior Man´idōs. The magic influence is shown descending to the hand which reaches beyond the cloud indicated by the oblong square upon the forearm.]



Rest, after which dancing begins.



Wa-tshu´-a-nē´ ke´-ba-bing´-e-on´, wa-dzhū. Going into the mountains.

The singer's thoughts go to the summit to commune with Ki'tshi Man'idō. He is shown upon the summit.



Hi'-mĕ-de'-wa hen'-dĕ-a he'-na.

The grand medicine affects me.

In his condition he appeals to Ki'tshi Man'idō for aid. The arms represent the act of supplication.



Hai´-an-go ho´-ya o´-gĕ-ma, ha´.

The chief goes out.

The arms grasp a bear—the Bear Man'idō—and the singer intimates that he desires the aid of that powerful spirit, who is one of the guardians of the Midē'wigân.



Nish´-o-wē´ ni-mē´-hi-gō´, hē´, ni-gō´-tshi-mi´go-we, hē´.

Have pity on me wherever I have medicine.

The speaker is filled with magic influence, upon the strength of which he asks the Bear to pity and to aid him.



Wi´-so-mi´-ko-we´ he-a-za-we´-ne-ne-go´, ho´.
I am the beaver; have pity on me.

This is said to indicate that the original maker of the mnemonic song was of the Beaver totem or gens.



Hēn´-ta-no-wik´-ko-we´ de-wĕn´-da ĕn-da-â´-dân.

I wish to know what is the matter with me.

The singer feels peculiarly impressed by his surroundings in the Mide wigan, because the sacred man idos have filled his body with magic powers. These are shown by the zigzag or waving lines descending to the earth.

As each of the preceding lines or verses is sung in such a protracted manner as to appear like a distinct song, the dancers, during the intervals of rest, always retire to their places and sit down. The dancing is not so energetic as many of those commonly indulged in for amusement only. The steps consist of two treading movements made by each

foot in succession. Keeping time with the drum-beats, at the same time there is a shuffling movement made by the dancer forward, around and among his companions, but getting back toward his place before the verse is ended. The attitude during these movements consists in bending the body forward, while the knees are bent, giving one the appearance of searching for a lost object. Those who do not sing give utterance to short, deep grunts, in accordance with the alternate heavier strokes upon the drum.

As the dancing ceases, and all are in their proper seats, the preceptor, acting for the candidate, approaches the pile of tobacco and distributes a small quantity to each one present, when smoking is indulged in, preceded by the usual offering to the east, the south, the west, the north, the sky and the earth.

After the completion of this ceremonial an attendant carries the Mide drum to the southeast angle of the inclosure, where it is delivered to the drummer; then the officiating priests rise and approach within two or three paces of the candidate as he gets upon his knees. The preceptor and the assistant who is called upon by him take their places immediately behind and to either side of the candidate, and the Mide priest lowest in order of precedence begins to utter quick, deep tones, resembling the sound ho', ho', ho', ho', at the same time grasping his mide' sack with both hands, as if it were a gun, and moving it in a serpentine and interrupted manner toward one of the large joints of the candidate's arms or legs. At the last utterance of this sound he produces a quick puff with the breath and thrusts the bag forward as if shooting, which he pretends to do, the missile being supposed to be the invisible sacred mī 'gis. The other priests follow in order from the lowest to the highest, each selecting a different joint, during which ordeal the candidate trembles more and more violently until at last he is overcome with the magic influence and falls forward

upon the ground unconscious. The Mide priests then lay their sacks upon his back, when the candidate begins to recover and spit out the mī'gis shell which he had previously hidden within his mouth. Then the chief Mide' takes it up between the tips of the forefinger and thumb and goes through the ceremony described in connection with the initiation into the first degree, of holding it toward the east, south, west, north, and the sky, and finally to the mouth of the candidate, when the latter, who has partly recovered from his apparently insensible condition, again relapses into that state. The eight priests then place their sacks to the respective joints at which they previously directed them, which fully infuses the body with the magic influence as desired. Upon this the candidate recovers, takes up the mī'gis shell and, placing it upon his left palm, holds it forward and swings it from side to side, saying he! he! he! he! and pretends to swallow it, this time only reeling from its effects. He is now restored to a new life for the second time; and as the priests go to seek seats he is left on the southern side and seats himself. After all those who have been occupied with the initiation have hung up their mide sacks on available projections against the wall or branches, the new member goes forward to the pile of tobacco, blankets, and other gifts and divides them among those present, giving the larger portions to the officiating priests. He then passes around once more, stopping before each one to pass his hands over the sides of the priests' heads, and says:

```
Mi-gwětsh´ ga-shi-tō´-win bi-mâ´-dĭ-si-wĭn,

Thanks for giving to me life,
```

after which he retreats a step, and clasping his hands and bowing toward the priest, says:

```
Ni-ka´-ni ni-ka´ni ni-ka´-ni ka-nia´,
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to which each responds hau´, ēⁿ. The word hau´ is a term of approbation, ēⁿ signifying yes, or affirmation, the two thus used together serving to intensify the expression. Those of the Midē´ present who are of the second, or even some higher degree, then indulge in the ceremony of passing around to the eastern part of the inclosure, where they feign coughing and gagging, so as to produce from the mouth the mī´gis shell, as already narrated in connection with the first degree, p. 192.

This manner of thanking the officiating Midē´ for their services in initiating the candidate into a higher degree is extended also to those members of the Midē´wiwin who are of the first degree only, in acknowledgment of the favor of their presence at the ceremony, they being eligible to attend ceremonial rites of any degree higher than the class to which they belong, because such men are neither benefited nor influenced in any way by merely witnessing such initiation, but they must themselves take the principal part in it to receive the favor of a renewed life and to become possessed of higher power and increased magic influence.

Various members of the society indulge in short harangues, recounting personal exploits in the performance of magic and exorcism, to which the auditors respond in terms of gratification and exclamations of approval. During these recitals the ushers, appointed for the purpose, leave the inclosure by the western door to return in a short time with kettles of food prepared for the mide feast. The ushers make four circuits of the interior, giving to each person present a quantity of the contents of the several vessels, so that all receive sufficient to gratify their desires. When the last of the food has been consumed, or removed, the mide drum is heard, and soon a song is started, in which all who

desire join. After the first two or three verses of the song are recited, a short interval of rest is taken, but when it is resumed dancing begins and is continued to the end. In this manner they indulge in singing and dancing, interspersed with short speeches, until the approach of sunset, when the members retire to their own wig´iwams, leaving the Midē´-wigân by the western egress.

The ushers, assisted by the chief Mide, then remove the sacred post from the inclosure and arrange the interior for new initiations, either of a lower or higher class, if candidates have prepared and presented themselves. In case there is no further need of meeting again at once, the members of the society and visitors return upon the following day to their respective homes.

DESCRIPTIVE NOTES.

The mī´gis shell employed in the second degree initiation is of the same species as those before mentioned. At White Earth, however, some of the priests claim an additional shell as characteristic of this advanced degree, and insist that this should be as nearly round as possible, having a perforation through it by which it may be secured with a strand or sinew. In the absence of a rounded white shell a bead may be used as a substitute. On Pl. xi, No. 4, is presented an illustration of the bead (the second-degree mī´gis) presented to me on the occasion of my initiation.

With reference to the style of facial decoration resorted to in this degree nearly all of the members now paint the face according to their own individual tastes, though a few old men still adhere to the traditional method previously described (pp. 180, 181). The candidate usually adopts the style practiced by his preceptor, to which he is officially entitled; but if the preceptor employed in the preparatory

instruction for the second degree be not the same individual whose services were retained for the first time, then the candidate has the privilege of painting his face according to the style of the preceding degree. If he follow his last preceptor it is regarded as an exceptional token of respect, and the student is not expected to follow the method in his further advancement.

A Mide of the second degree is also governed by his tutelary daimon; e.g., if during the first fast and vision he saw a bear, he now prepares a necklace of bear-claws, which is worn about the neck and crosses the middle of the breast. He now has the power of changing his form into that of a bear; and during that term of his disguise he wreaks vengeance upon his detractors and upon victims for whose destruction he has been liberally rewarded. Immediately upon the accomplishment of such an act he resumes his human form and thus escapes identification and detection. Such persons are termed by many "bad medicine men," and the practice of thus debasing the sacred teachings of the Mide wiwin is discountenanced by members of the society generally. Such pretensions are firmly believed in and acknowledged by the credulous and are practiced by that class of Shamans here designated as the Wâbĕnō´.

In his history¹⁵ Rev. Mr. Jones says:

As the powwows always unite witchcraft with the application of their medicines I shall here give a short account of this curious art.

Witches and wizards are persons supposed to possess the agency of familiar spirits from whom they receive power to inflict diseases on their enemies, prevent good luck of the hunter and the success of the warrior. They are believed to fly invisibly at pleasure from place to place; to turn themselves into bears, wolves, foxes, owls, bats, and snakes. Such metamorphoses they pretend to accomplish by putting on the skins of these animals, at the same time crying and howling in imitation of the creature they wish to represent. Several of our people have informed me that they have seen and heard witches in the shape of these animals, especially the bear and the fox. They say that when a witch in the shape of a bear is being chased all at once she will run round a tree or a hill, so as to be lost sight of for a time by her pursuers, and then, instead of seeing a bear they behold an old woman walking quietly along or digging up roots, and looking as innocent as a lamb. The fox witches are known by the flame of fire which proceeds out of their mouths every time they bark.

Many receive the name of witches without making any pretensions to the art, merely because they are deformed or ill-looking. Persons esteemed witches or wizards are generally eccentric characters, remarkably wicked, of a ragged appearance and forbidding countenance. The way in which they are made is either by direct communication with the familiar spirit during the days of their fasting, or by being instructed by those skilled in the art.

A Midē´ of the second degree has the reputation of superior powers on account of having had the mī´gis placed upon all of his joints, and especially because his heart is filled with magic power, as is shown in Pl. III, No. 48. In this drawing the disk upon the breast denotes where the mī´gis has been "shot" into the figure, the enlarged size of the circle signifying "greater abundance," in contradistinction to the common designation of a mī´gis shown only by a simple spot or small point. One of this class is enabled to hear and see what is transpiring at a remote distance, the lines from the hands indicating that he is enabled to grasp objects which are beyond the reach of a common person, and the

lines extending from the feet signifying that he can traverse space and transport himself to the most distant points. Therefore he is sought after by hunters for aid in the discovery and capture of game, for success in war, and for the destruction of enemies, however remote may be their residence.

When an enemy or a rival is to be dealt with a course is pursued similar to that followed when preparing hunting charts, though more powerful magic medicines are used. In the following description of a pictograph recording such an occurrence the Mide', or rather the Wâbĕno', was of the fourth degree of the Mide wiwin. The indication of the grade of the operator is not a necessary part of the record, but in this instance appears to have been prompted from motives of vanity. The original sketch, of which Fig. 24 is a reproduction, was drawn upon birch-bark by a Mide, in 1884, and the ceremony detailed actually occurred at White Earth, Minnesota. By a strange coincidence the person against whom vengeance was aimed died of pneumonia the following spring, the disease having resulted from cold contracted during the preceding winter. The victim resided at a camp more than a hundred miles east of the locality above named, and his death was attributed to the Mide's power, a reputation naturally procuring for him many new adherents and disciples. The following is the explanation as furnished by a Mide familiar with the circumstances:

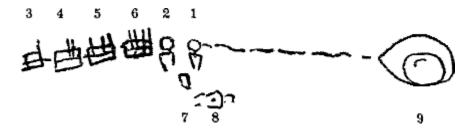


Fig. 24.—Midē´ destroying an enemy.

- No. 1 is the author of the chart, a Mide who was called upon to take the life of a man living at a distant camp. The line extending from the mide to the figure at No. 9, signifies that his influence will reach to that distance.
- No. 2, the applicant for assistance.
- Nos. 3, 4, 5, and 6, represent the four degrees of the Midē ´wiwin (of which the operator, in this instance, was a member). The degrees are furthermore specifically designated by short vertical strokes.
- No. 7 is the mide drum used during the ceremony of preparing the charm.
- No. 8 represents the body of the intended victim. The heart is indicated, and upon this spot was rubbed a small quantity of vermilion.
- No. 9 is the outline of a lake, where the subject operated upon resided.

War parties are not formed at this time, but mnemonic charts of songs used by priests to encourage war parties, are still extant, and a reproduction of one is given on Pl. xIII, D. This song was used by the Mide priest to insure success to the parties. The members who intended participating in the exhibition would meet on the evening preceding their departure, and while listening to the words, some would join in the singing while others would dance. The lines may be repeated ad libitum so as to lengthen the entire series of phrases according to the prevalent enthusiasm and the time at the disposal of the performers. The war drum was used, and there were always five or six drummers so as to produce sufficient noise to accord with the loud and animated singing of a large body of excited men. This drum is, in size, like that employed for dancing. It is made by covering with rawhide an old kettle, or wooden vessel, from

2 to 3 feet in diameter. The drum is then attached to four sticks, or short posts, so as to prevent its touching the ground, thus affording every advantage for producing full and resonant sounds, when struck. The drumsticks are strong withes, at the end of each of which is fastened a ball of buckskin thongs. The following lines are repeated ad libitum:



PLATE XIII.D. MNEMONIC SONG.



Hu´-na-wa´-na ha´-wā, un-do´-dzhe-na´ ha-we´-nĕ. I am looking [feeling] for my paint.

[The Mide's hands are at his medicine sack searching for his war paint.]



Hĭa´-dzhi-mĭn-de´ non´-da-kō´, hō´, They hear me speak of legs.

Refers to speed in the expedition. To the left of the leg is the arm of a spirit, which is supposed to infuse magic influence so as to give speed and strength.



Hu´-wa-ke´, na´, ha´, He said,

The Turtle Man´idō will lend his aid in speed. The turtle was one of the swiftest man´idōs, until through some misconduct, Min´abō´zho deprived him of his speed.



Wa´-tshe, ha´, hwē, wa´-ka-te´, hē´, wa´-tshe, ha´, hwē´.

Powder, he said.

[The modern form of Wa´-ka-te´, he´, hwā´, is ma´-ka-dē´-hwa; other archaic words occur also in other portions of this song. The phrase signifies that the Midē´ Man´idō favors good results from the use of powder. His form projects from the top of the Midē´ structure.]



Rest. A smoke is indulged in after which the song is resumed, accompanied with dancing.



Sin-go´-na wa-kī´ na-ha´-ka I made him cry.

The figure is that of a turkey buzzard which the speaker shot.



Te-wa´-tshi-me-kwe´-na, ha´, na-ke´-nan. They tell of my powers.

The people speak highly of the singer's magic powers; a charmed arrow is shown which terminates above with feather-web ornament, enlarged to signify its greater power.



He'-wĕ-ne-nis'-sa ma-he'-ka-nĕn'-na.

What have I killed, it is a wolf.

By aid of his magic influence the speaker has destroyed a bad man'idō which had assumed the form of a wolf.



Sun´-gu-we´-wa, ha´, nīn-dēn´, tshi´-man-da´-kwa ha´na-nĭn-dēn´.

I am as strong as the bear.

The Mide´ likens his powers to those of the Bear Man´idō, one of the most powerful spirits; his figure protrudes from the top of the Mide´wigân while his

spirit form is indicated by the short lines upon the back.



Wa´-ka-na´-ni, hē´, wa´-ka-na´-ni.
I wish to smoke.

The pipe used is that furnished by the promoter or originator of the war party, termed a "partisan." The Midē´ is in full accord with the work undertaken and desires to join, signifying his wish by desiring to smoke with the braves.



He'-wa-hō'-a hai'-a-nē' I even use a wooden image.

Effigies made to represent one who is to be destroyed. The heart is punctured, vermilion or other magic powder is applied, and the death of the victim is encompassed.



Pa-kwa´ ma-ko-nē´ ā´, ō´, hē´, ōsh-ke´-na-ko-nē´-a.

The bear goes round angry.

[The Bear Man´idō is angry because the braves are dilatory in going to war. The sooner they decide upon this course, the better it will be for the Midē´ as to his fee, and the chances of success are greater while the braves are infused with enthusiasm, than if they should become sluggish and their ardor become subdued.]

THIRD DEGREE.

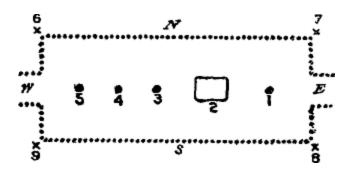


Fig. 25.—Diagram of Midē´wigân of the third degree.

The structure in which the third degree of the Mide wiwin is conferred resembles that of the two preceding, and an outline is presented in Fig. 25. In this degree three posts are erected, the first one resembling that of the first degree, being painted red with a band of green around the top. (Pl. xv, No. 1.) This is planted a short distance to the east of the middle of the floor. The second post is also painted red, but has scattered over its entire surface spots of white clay, each of about the size of a silver quarter of a dollar, symbolical of the mī'gis shell. Upon the top of this post is placed the stuffed body of an owl—Kŏ-kó-kŏ-ō´. (Pl. xv, No. 2.) This post is planted a short distance west of the first one and about midway between it and the third, which last is erected within about 6 or 8 feet from the western door, and is painted black. (Pl. xv, No. 3.) The sacred stone against which patients are placed, and which has the alleged virtue of removing or expelling the demons that cause disease, is placed upon the ground at the usual spot near the eastern entrance (Fig. 25, No. 1). The Makwá Man'idō—bear spirit is the tutelary guardian of this degree. Cedar trees are planted at each of the outer angles of the structure (Fig. 25, Nos. 6, 7, 8, 9). The sudatory is erected about 100 yards due east of the main entrance of the Mide wigan, and is of the same size and for the same purpose as that for the second degree.

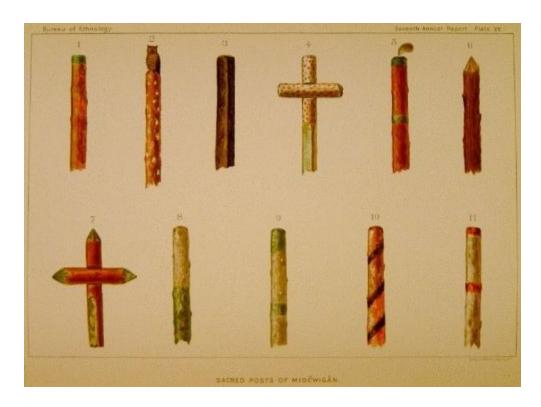


PLATE XV. SACRED POSTS OF MIDE WIGAN.

PREPARATION OF CANDIDATE.

It is customary for the period of one year to elapse before a second-degree Midē´ can be promoted, even if he be provided with enough presents for such advancement. As the exacted fee consists of goods and tobacco thrice the value of the fee for the first degree, few present themselves. This degree is not held in as high estimation, relatively, as the preceding one; but it is alleged that a Midē´'s powers are intensified by again subjecting himself to the ceremony of being "shot with the sacred mī´gis," and he is also elevated to that rank by means of which he may be enabled the better to invoke the assistance of the tutelary guardian of this degree.

A Mide´ who has in all respects complied with the preliminaries of announcing to the chief Mide´ his purpose, gaining satisfactory evidence of his resources and ability to

present the necessary presents, and of his proficiency in the practice of medical magic, etc., selects a preceptor of at least the third degree and one who is held in high repute and influence in the Mide wiwin. After procuring the services of such a person and making a satisfactory agreement with him, he may be enabled to purchase from him some special formulæ for which he is distinguished. The instruction embraces a résumé of the traditions previously given, the various uses and properties of magic plants and compounds with which the preceptor is familiar, and conversations relative to exploits performed in medication, incantation, and exorcism. Sometimes the candidate is enabled to acquire new "medicines" to add to his list, and the following is a translation of the tradition relating to the origin of ginseng (Aralia quinquefolia, Gr.), the so-called "man root," held in high estimation as of divine origin. In Fig. 3 is presented a pictorial representation of the story, made by Ojibwa, a Mide´ priest of White Earth, Minnesota. The tradition purports to be an account of a visit of the spirit of a boy to the abode of Dzhibai 'Man'idō, "the chief spirit of the place of souls," called Ne´-ba-gi´-zis, "the land of the sleeping sun."



Fig. 3.—Origin of Ginseng.

<u>Larger Figure</u>

There appears to be some similarity between this tradition and that given in connection with <u>Pl. v</u>, in which the Sun Spirit restored to life a boy, by which act he exemplified a portion of the ritual of the Midē´wiwin. It is probable therefore that the following tradition is a corruption of the former and made to account for the origin of "man root," as

ginseng is designated, this root, or certain portions of it, being so extensively employed in various painful complaints.

Once an old Midē´, with his wife and son, started out on a hunting trip, and, as the autumn was changing into winter, the three erected a substantial wig´iwam. The snow began to fall and the cold increased, so they decided to remain and eat of their stores, game having been abundant and a good supply having been procured. The son died; whereupon his mother immediately set out for the village to obtain help to restore him to life, as she believed her father, the chief priest of the Midē´-wiwin, able to accomplish this.

When the woman informed her father of the death of her son, her brother, who was present, immediately set out in advance to render assistance. The chief priest then summoned three assistant Midē´, and they accompanied his daughter to the place where the body of his dead grandson lay upon the floor of the wig´iwam, covered with robes.

The chief Midē´ placed himself at the left shoulder of the dead boy, the next in rank at the right, while the two other assistants stationed themselves at the feet. Then the youngest Midē´—he at the right foot of the deceased—began to chant a midē´ song, which he repeated a second, a third, and a fourth time.

When he had finished, the Midē´ at the left foot sang a midē´ song four times; then the Midē´ at the right shoulder of the body did the same, after which the chief Midē´ priest sang his song four times, whereupon there was a perceptible movement under the blanket, and as the limbs began to move the blanket was taken off, when the boy sat up. Being unable to speak, he made signs that he desired water, which was given to him.

The four Midē´ priests then chanted medicine songs, each preparing charmed remedies which were given to the boy to complete his recovery. The youngest Midē´, standing at the foot of the patient, gave him four pinches of powder, which he was made to swallow; the Midē´ at the left foot did the same; then the Midē´ at the right shoulder did likewise, and he, in turn, was followed by the chief priest standing at the left shoulder of the boy; whereupon the convalescent immediately recovered his speech and said that during the time that his body had been in a trance his spirit had been in the "spirit land," and had learned of the "grand medicine."

The boy then narrated what his spirit had experienced during the trance, as follows: "Gi´-gi-min´-ĕ-go´-min mi-dē´-wi-wĭn mi-dē´ man´-i-dō´ B'n-gi-gĭn´-o-a-mâk ban-dzhi´-ge´-o-we´-ân ta´-zi-ne´-zho-wak´ ni-zha´-nĕ-zak, kĭ-wi´-de-gĕt´ mi´-o-pi´-ke´-ne-bŭi´-yan ka-ki´-nĕ ka-we ´-dĕ-ge´ mi´-o-wŏk-pi´ i-kan´-o-a-mag´-ĭ-na mi-dē´ man ´i-dō wi-we´-ni-tshi mi-dē´-wi-wĭn, ki´-mi-mâ´-dĭ-si-win´-in-ân´ ki-mi´-nĭ-go-nan´ ge-on´-dĕ-na-mŏngk ki´-mi-mâ´-di-si´-wa-in-an´; ki´-ki-no´-a-mag´-wi-nan´ mash´-kĭ-ki o-gi´-mi-ni´-go-wan´ o-dzhi-bi´-gân gi-me´-ni-na-gŭk´ mash´-kĭ-ki-wa´-boⁿ shtĭk-wan´-a-ko-se´-an o-ma´-mâsh´-kĭ-ki ma´-gi-ga´-to ki´-ka-ya-tōn."

The following is a translation:

"He, the chief spirit of the Mide Society, gave us the "grand medicine," and he has taught us how to use it. I have come back from the spirit land. There will be twelve, all of whom will take wives; when the last of these is no longer without a wife, then will I die. That is the time. The Mide spirit taught us to do right. He gave us life and told us how to prolong it. These things he taught us, and gave us roots for medicine. I give to you

medicine; if your head is sick, this medicine put upon it, you will put it on."

The revelation received by the boy was in the above manner imparted to the Indians. The reference to twelve—three times the sacred number four—signifies that twelve chief priests shall succeed each other before death will come to the narrator. It is observed, also, that a number of the words are archaic, which fact appears to be an indication of some antiquity, at least, of the tradition.

The following are the principal forms in which a Mide´ will utilize Aralia quinquefolia, Gr., ginseng—Shte´-na-bi-o´-dzhi-bik:

- 1. Small quantities of powdered root are swallowed to relieve stomachic pains.
- 2. A person complaining with acute pains in any specific part of the body is given that part of the root corresponding to the part affected; e.g., for pleurisy, the side of the root is cut out, and an infusion given to relieve such pains; if one has pains in the lower extremities, the bifurcations of the root are employed; should the pains be in the thorax, the upper part of the root—corresponding to the chest—is used in a similar manner.

INITIATION OF CANDIDATE.

As the candidate for promotion has acquired from his Mide´ friends such new information as they choose to impart, and from his instructor all that was practicable, he has only to await the day of ceremony to be publicly acknowledged as a third-degree Mide´. As this time approaches the invitation sticks are sent to the various members and to such non-resident Mide´ as the officiating priests may wish to honor. On or before the fifth day previous to the meeting the

candidate moves to the vicinity of the Midē´wigân. On that day the first sweat bath is taken, and one also upon each succeeding day until four baths, as a ceremony of purification, have been indulged in. On the evening of the day before the meeting his preceptor visits him at his own wig´iwam when, with the assistance of friends, the presents are collected and carried to the Midē´-wigân and suspended from the transverse poles near the roof. The officiating priests may subsequently join him, when smoking and singing form the chief entertainment of the evening.

By this time numerous visitors have gathered together and are encamped throughout the adjacent timber, and the sound of the drum, where dancing is going on, may be heard far into the night.

Early on the morning of the day of the ceremonies the candidate goes to the sudatory where he first awaits the coming of his preceptor and later the arrival of the Mide' priests by whom he is escorted to the Mide wigan. With the assistance of the preceptor he arranges his gift of tobacco which he takes with him to the sacred inclosure, after which a smoke offering is made, and later Mide songs are chanted. These may be of his own composition as he has been a professor of magic a sufficient lapse of time to have composed them, but to give evidence of superior powers the chief, or some other of the officiating priests, will perhaps be sufficiently inspired to sing. The following was prepared and chanted by one of the Mide priests at the third-degree meeting at White Earth, Minnesota, and the illustration in Pl. xiv, A, is a reproduction of the original. The words, with translation, are as follows:



PLATE XIVA. MNEMONIC SONG.



Ni-ka´-ni-na man´-do-na-mō´-a.

My friend I am shooting into you in trying to hit the mark.

[The two arms are grasping the mī'gis, which he the Midē' is going to shoot into the body of the candidate. The last word means, literally, trying to hit the mark at random.]



Me-kwa'-me-sha-kwak', mi-tē'-wi-da'.
While it is clear let us have it, the "grand medicine."

The Mide arm, signified by the magic zigzag lines at the lower end of the picture, reaches up into the sky to keep it clear; the rain is descending elsewhere as indicated by the lines descending from the sky at the right and left.



Rest.

During this interval a smoke offering is made.



Mi-sha´-kwi-tō-nĭ mī´-gĭs-sĭm´.

As clear as the sky [is] my mī'gis.

The figure represents the sacred mī'gis, as indicated by the short lines radiating from the periphery. The mī'gis is white and the clear sky is compared to it.



Sōn´-gi-mi-dē´ wi-ka´-ne, hē´, Wi-nō´-a man´-i-dō´-wi-dzhī´-id-e´-zhi-wât.

Take the "grand medicine" strong, as they, together with the "Great Spirit," tell me.

[The candidate is enjoined to persevere in his purpose. The associate Midē´ are alluded to, as also Ki´tshi Man´idō, who urge his continuance and advancement in the sacred society. The arm

reaches down to search for the sacred mī'gis of the fourth degree—designated by four vertical lines—which is, as yet, hidden from the person addressed.]



Hwa´-ba-mi-dē´, hwa´-ba-mi-dē´, Na´-wa-kin-tē´.

He who sees me, he who sees me, stands on the middle of the earth.

[The human figure symbolizes Ki´tshi Man´idō; the magic lines cross his body, while his legs rest upon the outline of the Midē´wigân. His realm, the sky, reaches from the zenith to the earth, and he beholds the Midē´ while chanting and conducting the Midē´wiwin.]



Man´-i-dō´ wi´-ka-ni´ ni-mi-dē´. To the spirit be a friend, my Midē´.

The speaker enjoins the candidate to be faithful to his charge, and thus a friend to Ki´tshi Man´idō, who in return will always assist him. The figure holds a mī´gis in its right hand, and the Midē´ drum in its left.

The greater number of words in the preceding text are of an archaic form, and are presented as they were chanted. The several lines may be repeated ad libitum to accord with the feeling of inspiration which the singer experiences, or the amount of interest manifested by his hearers.

All the members of the society not officially inducting the candidate have ere this entered the Midē´wigân and deposited their invitation sticks near the sacred stone, or, in the event of their inability to attend, have sent them with an explanation. The candidate, at the suggestion of the Midē´ priest, then prepares to leave the sudatory, gathers up the tobacco, and as he slowly advances toward the Midē´ inclosure his attendants fall into the procession according to their office. The priests sing as they go forward, until they reach the entrance of the Midē´wigân, where the candidate and his preceptor halt, while the remainder enter and take their stations just within the door, facing the west.

The drummers, who are seated in the southwestern angle of the inclosure, begin to drum and sing, while the candidate is led slowly around the exterior, going by the south, thus following the course of the sun. Upon the completion of the fourth circuit he is halted directly opposite the main entrance, to which his attention is then directed. The drumming and singing cease; the candidate beholds two Mide near the outer entrance and either side of it. These Mide represent two malevolent man ido and guard the door against the entrance of those not duly prepared. The one upon the northern side of the entrance then addresses his companion in the following words: I'-ku-tan ka'-wi-nad'gĭ wa´-na-mâ´-sĭ ē´-zhĭ-gĭ´-nĭ-gĕd—"Do you not see how he is formed?" To which the other responds: O-da´-pĭ-nŏ´ ke´no-win-dung shkwan'-dim—"Take care of it, the door;" [i.e., guard the entrance.] The former then again speaks to his companion, and says: Ka-wīn´-nĭ-na-ga´ wâ´-ba-ma´-si-ba´-

shĭ-gi´-ne-gēt´—"Do you not see how he carries the goods?" The Mide' spoken to assents to this, when the preceptor takes several pieces of tobacco which he presents to the two guards, whereupon they permit the candidate to advance to the inner entrance, where he is again stopped by two other guardian man'idō, who turn upon him as if to inquire the reason of his intrusion. The candidate then holds out two parcels of tobacco and says to them: O-da'-pin a-sē '-ma—"Take it, the tobacco," whereupon they receive the gift and stand aside, saying: Kun´-da-dan—"Go down;" [i.e., enter and follow the path.] As the candidate is taken a few steps forward and toward the sacred stone, four of the eight officiating priests receive him, one replacing the preceptor who goes to the extreme western end there to stand and face the east, where another joins him, while the remaining two place themselves side by side so as to face the west.

It is believed that there are five powerful man'idōs who abide within the third-degree Midē'wigân, one of whom is the Midē' man'idō—Ki'tshi Man'idō—one being present at the sacred stone, the second at that part of the ground between the sacred stone and the first part where the gifts are deposited, the remaining three at the three degree posts.

As the candidate starts and continues upon his walk around the interior of the inclosure the musicians begin to sing and drum, while all those remaining are led toward the left, and when opposite the sacred stone he faces it and is turned round so that his back is not toward it in passing; the same is done at the second place where one of the spirits is supposed to abide; again at first, second, and third posts. By this time the candidate is at the western extremity of the structure, and as the second Midē´ receives him in charge, the other taking his station beside the preceptor, he continues his course toward the north and east to the point of departure, going through similar evolutions as before, as

he passes the three posts, the place of gifts and the sacred stone. This is done as an act of reverence to the man idos and to acknowledge his gratitude for their presence and encouragement. When he again arrives at the eastern extremity of the inclosure he is placed between the two officiating Mide, who have been awaiting his return, while his companion goes farther back, even to the door, from which point he addresses the other officiating Mide as follows:

```
Mĭs-sa´-a-shi´- wi-kan´-da´-we-an´, mĭs-sa´-a-shi´-gwa gwa
Now is the time [I am] telling [—advising,] now is the time

wī´-di-wa´-mŏk wi-un´-o-bē-ŏg.

to be observed [I am] ready to make him sit down.
```

Then one of the Midē´ priests standing beside the candidate leads him to the spot between the sacred stone and the first-degree post where the blankets and other goods have been deposited, and here he is seated. This priest then walks slowly around him singing in a tremulous manner wa´, hě´, hě´, hě´, hě´, hě´, hě´, hě´, returning to a position so as to face him, when he addresses him as follows: Mĭs-sa´-a-shi´-gwa pŏ´-gŭ-sě-ni´mi-nan´ au´-u-sa´ za-a´-da-win´ man ´-i-dō mī´-gis. Na´-pish-gatsh di-mâ´-gĭ-sǐ ě-ně´-nĭ-mi-an pi´-sha-gâ-an-da-i´ na´-pish-gatsh tshi-skwa´-di-na-wâd´ dzhi-ma´-dzhi-a-ka´-ma-da-mân bi-mâ´-dĭs-si´-an.

The following is a free translation:

The time has arrived for you to ask of the Great Spirit this "reverence" i.e., the sanctity of this degree. I am interceding in your behalf, but you think my powers are feeble; I am asking him to confer upon you the sacred powers. He may cause many to die, but I shall henceforth watch your course of success in life, and

learn if he will heed your prayers and recognize your magic power.

At the conclusion of these remarks three others of the officiating Mide´ advance and seat themselves, with their chief, before the candidate. The Mide´ drum is handed to the chief priest, and after a short prelude of drumming he becomes more and more inspired, and sings the following Mide´ song, represented pictorially, also on Pl. XIV, B.



PLATE XIV.B. MNEMONIC SONG.



Man´-i-dō´ we-da´, man´-i-dō´ gi-dō´ we-do´-nĭng. Let us be a spirit, let the spirit come from the mouth.

The head is said to signify that of a Mide, who is about to sing.



Nin´-de-wen´-don zha´-bon-dĕsh´-kâⁿ-mân´.
I own this lodge, through which I pass.

The speaker claims that he has been received into the degree of the Mide wiwin to which he refers. The objects on the outer side of the oblong square character represent spirits, those of the bear.



Ân´-dzhe-ho ĭ´-a-ni´ o-gēn´, hwe´-ō-ke´, hwe´-ō-ke´.

Mother is having it over again.

The reference is to the earth, as having the ceremony of the "grand medicine" again.



Ni´-ka-nan ni´-go-sân, ni´-go-sân´ ni-ka´-ni-san´, man´-i-dō´ wi-dzhig´ nin-go-sân´an-i-wa´-bi-dzhig ni-ka´.

Friends I am afraid, I am afraid, friends, of the spirits sitting around me.

[The speaker reaches his hand toward the sky, i.e., places his faith in Ki´tshi Man´idō who abides above.]



Ya´-ki-no´-sha-me´-wa, ya´-ki-no´-sha-me´-wa, ya-ki-no-si-ka-ne, ya-ki-no-si-ka-ne, hē´, ki´-no-sha´-we-wa´.

I am going, with medicine bag, to the lodge.

[The object represents an otter skin Midē´ sack, the property of the speaker.]



Ya´-be-kai´-a-bi, ya´-be-kai´-a-bi, hē´-ā´, hē´-ā´, ya´-be-kai´-a-bi, ya´-be-kai´-a-bi, hē´-ā´, hē´ā´, wa´-na-he´-ni´-o-ni´, ya´-be-kai´-o-bik´.

We are still sitting in a circle.

[A Midē´ sitting within the Midē´wigân; the circle is shown.]



A-ya´-a-bi-ta´ pa´-ke-zhĭk´, ū´, hū´, a´,

Half the sky

The hand is shown reaching toward the sky, imploring the assistance of Ki´tshi Man´idō that the candidate may receive advancement in power. He has only two degrees, one-half of the number desired.



Ba´-be-ke´ o´-gi-mân nish´-a-we, hē´, ne´-me-ke-hē´, nish´-a-we´-ni-mĭk o´-gi-mân. The spirit has pity on me now,

[The "Great Spirit" is descending upon the Midē 'wigân, to be present during the ceremony.]



Nin-dai´-a, nin-dai´-a, ha´, we´-ki-ma´, ha´, wâ-nokwe´.

In my heart, in my heart, I have the spirit.

[The hand is holding the mī'gis, to which reference is made.]



I-ke´-u-ha´-ma man-ta-na´-ki-na ni-ka´-ni I take the earth, my Midē´ friends.

The earth furnishes the resources necessary to the maintenance of life, both food and medicines.



Wi´-a-ya´-din shin-da´, hān´, man-da´-ha-ni´, o-hō´ ni-bĭ´.

Let us get him to take this water.

[The figure sees medicine in the earth, as the lines from the eyes to the horizontal strokes indicate.]



Hŭe´-shĭ-shi-kwa´-ni-an nin-ga´-ga-mūn´.
I take this rattle.

The rattle is used when administering medicine.

Wi-wa'-ba-mi'na hē'-na ko'-ni-a'-ni, ka',



ko´-ni-a´-ho-nā´, nī´, kā´. See how I shine in making medicine.

[The speaker likens himself to the Makwa´ Man ´idō, one of the most powerful Midē´ spirits. His body shines as if it were ablaze with light—due to magic power.]

This song is sung ad libitum according to the inspired condition of the person singing it. Many of the words are archaic, and differ from the modern forms.

Then the officiating priests arise and the one lowest in rank grasps his Midē´ sack and goes through the gestures, described in connection with the previous degrees, of shooting into the joints and forehead of the candidate the sacred mī´gis. At the attempt made by the chief priest the candidate falls forward apparently unconscious. The priests then touch his joints and forehead with the upper end of their Midē´ sacks whereupon he recovers and rises to a standing posture. The chief then addresses him and enjoins him to conduct himself with propriety and in accordance with the dignity of his profession. The following is the text, viz: Gi-gan´-bis-sĭn dau´-gē-in´-ni-nân´ kish-bin´-bish-in dau´-o-ân-nĭn da´-ki-ka-wa´-bi-kwe ga´-kĭ-ne ke-ke´-wi-bi´-na-mōn ki-ma´-dzhĭ-zhi we´-bi-zi-wĭn´.

The translation is as follows: "You heed to what I say to you; if you are listening and will do what is right you will live to have white hair. That is all; you will do away with all bad actions."

The Midē´ priest second in rank then says to the candidate: $Ke´-go-wi´-ka-za´-gi-to-wa´-kin ki-da´-no-ka´tshĭ-gân kai-e´-gi-gīt´ a-se´-ma, kai´-e-mī´-dzĭm, which signifies: "Never begrudge your goods, neither your tobacco, nor your provisions." To this the candidate responds <math>e^n$ —yes, by this signifying that he will never regret what he has given the

Midē´ for their services. The candidate remains standing while the members of the society take seats, after which he goes to the pile of blankets, skins, and other presents, and upon selecting appropriate ones for the officiating priests he carries them to those persons, after which he makes presents of less value to all other Midē´ present. Tobacco is then distributed, and while all are preparing to make an offering to Ki´tshi Man´idō of tobacco, the newly accepted member goes around to each, member present, passes his hands downward over the sides of the Midē's head and says:

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Mi-gwĕtsh´ ga´shi-tō´-win bi-ma´-dĭ-si-wīn´,

Thanks for giving to me life,
```

then, stepping back, he clasps his hands and bows toward the Midē´, adding: Ni-ka´-ni, ni-ka´-ni, ni-ka´-ni, ka-na´, —"My Midē´ friend, my Midē´ friend, my Midē´ friend, friend." To this the Midē´ responds in affirmation, hau´, ēⁿ´—yes.

The new member then finds a seat on the southern side of the inclosure, whereupon the ushers—Midē´ appointed to attend to outside duties—retire and bring in the vessels of food which are carried around to various persons present, four distinct times.

The feast continues for a considerable length of time, after which the kettles and dishes are again carried outside the Midē´wi-gân, when all who desire indulge in smoking. Midē´ songs are chanted by one of the priests, the accompanying, reproduced pictorially in Pl. xiv C, being an example. The lines, as usual, are repeated ad libitum, the music being limited to but few notes, and in a minor key. The following are the words with translation:

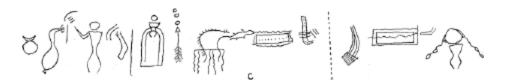


PLATE XIV.C. MNEMONIC SONG.

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He´-ne-wi´-a ni´-na mi´-si-man´-i-dē-ge´
Their bodies shine over the world

he-wa'-we-a'-ne-kan'.

unto me as unto you, my Midē´ friend.

This refers to the sun, and moon, whose bodies are united in the drawing.



Ma´-na-wi-na´ hai´-e-ne-hā´ be-wa´-bik-kun Your eyes see them both eyes made of iron, kan-din´-a-we. piercing eyes.

The figure is that of the crane, whose loud, farreaching voice is indicated by the short lines radiating from the mouth. The eyes of the crane Man´idō are equally penetrating.



Ta-be´-nĕ- he-shi-wa ma´-si-ni´-ni-he´-shiwa´ ´, hā´ wa´, hā´. Calm it leads you to guides you to your food.

Knowledge of superior powers gained through familiarity with the rites of the Midē´wiwin is here referred to. The figure points to the abode of Ki´tshi Man´idō; three short lines indicating three degrees in the Midē´wiwin, which the candidate has taken.



Ha-nin´- he-bik´-kĭn-he man´-i- ni-kan´ di ´ dō wa-ba-nŭnk´, mi-dē´-man´-i-dō wa-ba-nŭnk´. from the east, midē´ man´idō from the east.

[The hand reaches up as in making the gesture for rising sun or day, the "sky lines" leaning to the left, or east; one making signs is always presumed to face the south, and signs referring to periods of day, sun, sunrise, etc., are made from the left side of the body.]

Rest.



Wa-dzhi-wan´, wa-dzhi-wan´-na, Wa-dahi-wan´ ni-ka´-na-hē´.

There is a mountain, there is a mountain, There is a mountain, my friends.

[The upright outline represents a mountain upon which a powerful Midē´ is seated, symbolical of the distinction attainable by a Midē´.]



Wa´-bĕ-ku´ĕ-be-a´, wa´-bĕ-ku´-ĕ-be-a´, Shot it was, shot it was

na´-bĕ-ku´-ĕ-be-a´ man´-i-dō´-´a nĭn-dē´. and it hit body, your man´ido your heart.

man´-i-dō´-a nin-dē´.

man´ido your heart.

[The Mī'gis is represented in the illustration by the small rings; the arrow indicating that it was "shot" with velocity.]





Hwe´-kwo-nin´-na-ta, ki-wī´-kash´-ka-man; En-do´-ge-mā´ wesh´-in-ē´.

What am I going around? I am going around the Midē´wigân.

[The oblong structure represents the Midē´wigân. The otter-skin Midē´ sack is taken around it, as is shown by the outline of that animal and the line or course indicated. The Makwa´ Man´idō (bear spirit) is shown at the left, resting upon the horizontal line, the earth, below which are magic lines showing his power, as also the lines upon the back of the bear. The speaker compares himself to the bear spirit.]



Nen´-do-ne´-ha-mān-ni´ nī´-ŏ, What am I looking at.

The figure denotes a leg, signifying powers of transporting one's self to remote places; the magic power is indicated by the three transverse lines and the small spots, the mī 'gis, upon it.



Ba'bin-ke'-en non'-do-wa-wē', hī',
I soon heard him, the one who did not listen to them.

[The Mide, as a superior personage, is shown by having the horns attached to the head. The line of hearing has small rings, at intervals, indicating that something is heard.]



Hin´-ta-na´-wi ni-ka´-na-gi´, ē´, hē´, pī´-na-nī´, hin´-ta-na´-wi ni-ka´-na-ga´ na´-geka-na´ ē´, hē´.

The Nika´ni are finding fault with me, inside of my lodge.

[The arm at the side of the Mide wigan points to the interior, the place spoken of.]



Oⁿsh´-koⁿsh-na-nā´ pi-na´-wa niⁿ-bosh´-i-na´na.

With the bear's claws I almost hit him.

The Midē´ used the bear's claw to work a charm, or exorcism, and would seem to indicate that he claimed the powers of a Wâbĕnō´. The one spoken of is an evil man ´idō, referred to in the preceding line, in which he speaks of having heard him.

At the conclusion of this protracted ceremony a few speeches may be made by a Midē´, recounting the benefits to be enjoyed and the powers wielded by the knowledge thus acquired, after which the chief priest intimates to his colleagues the advisability of adjourning. They then leave the Midē´wigân by the western door, and before night all movable accessories are taken away from the structure.

The remainder of the evening is spent in visiting friends, dancing, etc., and upon the following day they all return to their respective homes.

DESCRIPTIVE NOTES.

Although the mī'gis shell of the several degrees is generally of the same species, some of the older Midē' priests claim that there were formerly specific shells, each being characteristic and pertaining specially to each individual grade. The objects claimed by Sika's-sigĕ as referring to the third degree are, in addition to the Cypræa monata, L., a piece of purple wampum, and one shell of elongated form, both shown on Pl. xi, Nos. 3 and 5, respectively.

The fact of a Midē´ having been subjected to "mī´gis shooting" for the third time is an all-sufficient reason to the Indian why his powers are in a corresponding manner augmented. His powers of exorcism and incantation are greater; his knowledge and use of magic medicines more extended and certain of effect; and his ability to do harm, as in the capacity of a Wâběnō´, is more and more lauded and feared. He becomes possessed of a greater power in prophecy and prevision, and in this state enters the class of personages known as the Jěs´sakkīd´, or jugglers. His power over darkness and obscurity is indicated on Pl. III, A, No. 77, upon which the head, chest, and arms are represented as being covered with lines to designate obscurity, the extended arms with outstretched hands denoting ability to grasp and control that which is hidden to the eye.



Fig. 26.—Jĕs´sakkân´ or juggler's lodge.

The Jĕs´sakkīd´ and his manner of performing have already been mentioned. This class of sorcerers were met with by the Jesuit Fathers early in the seventeenth century, and referred to under various designations, such as jongleur, magicien, consulteur du manitou, etc. Their influence in the tribe was recognized, and formed one of the greatest obstacles encountered in the Christianization of the Indians. Although the Jĕs´sakkīd´ may be a seer and prophet as well as a practitioner of exorcism without becoming a member of the Midē´wiwin, it is only when a Midē´ attains the rank of the third degree that he begins to give evidence of, or

pretends to exhibit with any degree of confidence, the powers accredited to the former. The structure erected and occupied by the Jěs´sakkīd´ for the performance of his powers as prophet or oracle has before been described as cylindrical, being made by planting four or more poles and wrapping about them sheets of birch bark, blankets, or similar material that will serve as a covering. This form of structure is generally represented in pictographic records, as shown in Fig. 26.

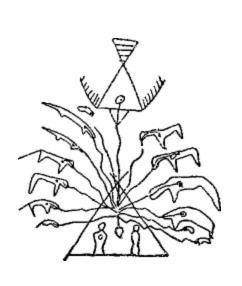


Fig. 27.—Jĕs´sakkân´, or juggler's lodge.

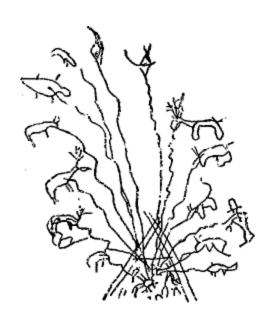


Fig. 28.—Jĕs´sakkân´, or juggler's lodge.

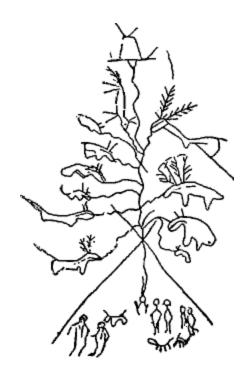


Fig. 29.—Jěs´sakkân´, juggler's lodge.

The accompanying illustrations, Figs. 27, 28, and 29, reproduced from birch-bark etchings, were the property of Jĕs'sakkīd', who were also Midē' of the third and fourth degrees. It will be noticed that the structure used by them is in the form of the ordinary wig'iwam, as their profession of medical magic is apparently held in higher esteem than the art of prophecy; their status and claims as Jes'sakkīd' being indicated by the great number of ma'nidos which they have the power of invoking. These man'idos, or spirits, are indicated by the outline of their material forms, the heart being indicated and connected with the interior of the structure to show the power of the Jes'sakkid' over the life of the respective spirits. The Thunder-bird usually occupies the highest position in his estimation, and for this reason is drawn directly over the wig'iwam. The Turtle is claimed to be the man'idō who acts as intermediary between the Jes 'sakkīd' and the other man'idos, and is therefore not found among the characters on the outside of the wig'iwam, but

his presence is indicated within, either at the spot marking the convergence of the "life lines," or immediately below it.



Fig. 30.— Jěs´sakkân´ or

juggler's lodge. Fig. 30 is a reproducton of an etching made by a les 'sakkīd' at White Earth, Minnesota, The two curved lines above the Jes'sakkan' represent the sky, from which magic power is derived, as shown by the waving line extending downward. The small spots within the structure are "magic spots," i.e., the presence of man'idōs. The juggler is shown upon the left side near the base. When a prophet is so fortunate as to be able to claim one of these man'idōs as his own tutelary daimon, his advantage in invoking the others is comparatively greater. Before proceeding to the Jes´sakkan´—or the "Jugglery," as the Jes 'sakkīd' wig'iwam is commonly designated, a prophet will prepare himself by smoking and making an offering to his man'idō, and by singing a chant, of which an example is presented on Pl. XIV, D. It is a reproduction of one made by a Jĕs´sakkīd´ who was also a Midē´ of the third degree. Each line is chanted as often as may be desired, or according to the effect which it may be desirable to produce or the inspired state of the singer.



PLATE XIV.D. MNEMONIC SONG.



Me-we'-yan, ha', ha', ha', I go into the Jes'sakkan' to see the medicine.

The circle represents the Jĕs´sakkīd´ as viewed from above; the short lines denote the magic character of the structure, and the central ring, or spot, the magic stone used by the prophet who appears entering from the side.



Tschi-nun´-dōn´, he´, he´, he´, he´, he´, l was the one who dug up life.

The Otter Man´idō emerging from the Midē ´wigân; he received it from Ki´tshi Mani´dō.



Ni´ka-nī´ we-do-koⁿ´-a, ha´, ha´, The spirit put down medicine on earth to grow.

The sacred or magic lines descending to the earth denote supernatural origin of the mī'gis, which is shown by the four small rings. The short lines at the bottom represent the ascending sprouts of magic plants.



Te-ti-ba'-tshi mŭt'-â-wit', tē', hē', hē', I am the one that dug up the medicine.

The otter shown emerging from the jugglery. The speaker represents himself "like unto the Otter Man´idō."



Ki´waⁿ-win´-da ma´-kwa-nan´, na´, ha´, I answer my brother spirit.

The Otter Man´idō responds to the invocation of the speaker. The diagonal line across the body signifies the "spirit character" of the animal.



Rest or pause.



Wa'-a-so'-at wĕn'-ti'-na-man, ha', ha, The spirit has put life into my body.

The speaker is represented as being in the Midē ´-wigân, where Ki´tshi Man´idō placed magic power into his body; the arms denote this act of putting into his sides the mī´gis. The line crossing the body denotes the person to be possessed of supernatural power.



Ki-to´-na-bi´-in, nē´, hē´, hē´, This is what the medicine has given us.

The Mide wigan, showing on the upper line the guardian man idos.



Ni´-sha-we´-ni-bĭ-ku´, hū´, hū´, hē´, I took with two hands what was thrown down to us. The speaker grasped life, i.e., the migīs´, to secure the mysterious power which he professes.

In addition to the practice of medical magic, the Jěs´sakkīd´ sometimes resorts to a curious process to extract from the patient's body the malevolent beings or man´idōs which cause disease. The method of procedure is as follows: The Jěs´sakkīd´ is provided with four or more tubular bones, consisting of the leg bones of large birds, each of the thickness of a finger and 4 or 5 inches in length. After the priest has fasted and chanted prayers for success, he gets down upon all fours close to the patient and with his mouth near the affected part. After using the rattle and singing most vociferously to cause the evil man´idō to take shelter

at some particular spot, so that it may be detected and located by him, he suddenly touches that place with the end of one of the bones and immediately thereafter putting the other end into his mouth, as if it were a cigar, strikes it with the flat hand and sends it apparently down his throat. Then the second bone is treated in the same manner, as also the third and fourth, the last one being permitted to protrude from the mouth, when the end is put against the affected part and sucking is indulged in amid the most violent writhings and contortions in his endeavors to extract the man'idō. As this object is supposed to have been reached and swallowed by the Jes'sakkid' he crawls away to a short distance from the patient and relieves himself of the demon with violent retchings and apparent suffering. He recovers in a short time, spits out the bones, and, after directing his patient what further medicine to swallow, receives his fee and departs. Further description of this practice will be referred to below and illustrated on Pl. xvIII.

The above manner of disposing of the hollow bones is a clever trick and not readily detected, and it is only by such acts of jugglery and other delusions that he maintains his influence and importance among the credulous.

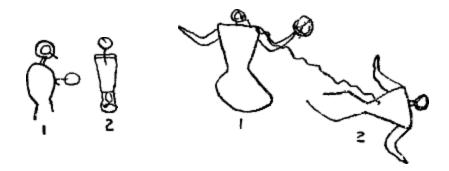


Fig. 31.—Jěs´sakkīd´ Fig. 32.—Jěs´sakkīd´ curing man. curing woman.

Fig. 31 represents a Jěs'sakkīd' curing a sick woman by sucking the demon through a bone tube. The pictograph

was drawn upon a piece of birch bark which was carried in the owner's Mide´ sack, and was intended to record an event of importance.

No. 1 represents the actor, holding a rattle in hand. Around his head is an additional circle, denoting quantity (literally, more than an ordinary amount of knowledge), the short line projecting to the right indicating the tube used.

No. 2 is the woman operated upon.

Fig. 32 represents an exhibition by a Jěs´sakkīd´, a resident of White Earth, Minnesota. The priest is shown in No. 1 holding his rattle, the line extending from his eye to the patient's abdomen signifying that he has located the demon and is about to begin his exorcism. No. 2 is the patient lying before the operator.

FOURTH DEGREE.

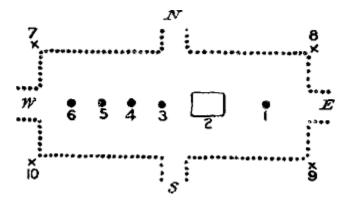


Fig. 33.—Diagram of Midē´wigân of the fourth degree.

The Mide wigan, in which this degree is conferred, differs from the preceding structures by having open doorways in both the northern and southern walls, about midway between the eastern and western extremities and opposite to one another. Fig. 33 represents a ground plan, in which

may also be observed the location of each of the four Mide' posts. Fig. 34 shows general view of same structure. A short distance from the eastern entrance is deposited the sacred stone, beyond which is an area reserved for the presents to be deposited by an applicant for initiation. The remaining two-thirds of the space toward the western door is occupied at regular intervals by four posts, the first being painted red with a band of green around the top. (Pl. xv, No. 1.) The second post is red, and has scattered over its surface spots of white clay to symbolize the sacred mī'gis shell. Upon it is perched the stuffed skin of an owl—kŏ-kó-kŏ-ō´. (Pl. xv, No. 2.) The third post is black; but instead of being round is cut square. (Pl. xv, No. 3.) The fourth post, that nearest the western extremity, is in the shape of a cross, painted white, with red spots, excepting the lower half of the trunk, which is squared, the colors upon the four sides being white on the east, green on the south, red on the west, and black on the north. (Pl. xv, No. 4.)

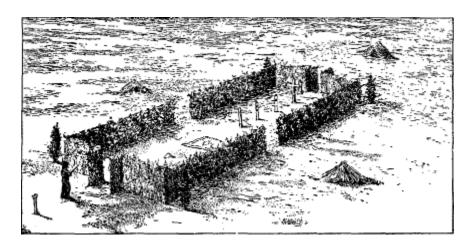


Fig. 34.—General view of Midē´wigân.

About 10 paces east of the main entrance, in a direct line between it and the sweat lodge, is planted a piece of thin board 3 feet high and 6 inches broad, the top of which is cut so as to present a three-lobed apex, as shown in Fig. 4. The eastern side of this board is painted green; that facing the

Midē'wigân red. Near the top is a small opening, through which the Midē' are enabled to peep into the interior of the sacred structure to observe the angry man'idōs occupying the structure and opposing the intrusion of anyone not of the fourth degree.

A cedar tree is planted at each of the outer corners of the Mide wigan, and about 6 paces away from the northern, western, and southern entrances a small brush structure is erected, sufficiently large to admit the body. These structures are termed bears' nests, supposed to be points where the Bear Man'idō rested during the struggle he passed through while fighting with the malevolent man'idos within to gain entrance and receive the fourth-degree initiation. Immediately within and to either side of the east and west entrances is planted a short post, 5 feet high and 8 inches thick, painted red upon the side facing the interior and black upon the reverse, at the base of each being laid a stone about as large as a human head. These four posts represent the four limbs and feet of the Bear Man'idō, who made the four entrances and forcibly entered and expelled the evil beings who had opposed him. The fourth-degree Mide post— the cross—furthermore symbolizes the four days' struggle at the four openings or doors in the north, south, east, and west walls of the structure.

PREPARATION OF CANDIDATE.

Under ordinary circumstances it requires at least one year before a Midē´ of the third grade is considered eligible for promotion, and it is seldom that a candidate can procure the necessary presents within that period, so that frequently a number of years elapse before any intimation by a candidate is made to the chief priest that the necessary requirements can be complied with. The chief reason of this delay is attributed to the fact that the fee to the officiating

priests alone must equal in value and quantity four times the amount paid at the first initiation, and as the success in gathering the robes, skins, blankets, etc., depends upon the candidate's own exertions it will readily appear why so few ever attain the distinction sought. Should one be so fortunate, however, as to possess the required articles, he has only to make known the fact to the chief and assistant Mide priests, when a meeting is held at the wig iwam of one of the members and the merits of the candidate discussed. For this purpose tobacco is furnished by the candidate. The more valuable and more numerous the presents the more rapidly will his application be disposed of, and the more certainly will favorable consideration on it be had. It becomes necessary, as in former instances of preparation, for the candidate to procure the service of a renowned Mide, in order to acquire new or specially celebrated remedies or charms. The candidate may also give evidence of his own proficiency in magic without revealing the secrets of his success or the course pursued to attain it. The greater the mystery the higher he is held in esteem even by his jealous confrères.

There is not much to be gained by preparatory instruction for the fourth degree, the chief claims being a renewal of the ceremony of "shooting the mī´gis" into the body of the candidate, and enacting or dramatizing the traditional efforts of the Bear Man´idō in his endeavor to receive from the Otter the secrets of this grade. One who succeeds becomes correspondingly powerful in his profession and therefore more feared by the credulous. His sources of income are accordingly increased by the greater number of Indians who require his assistance. Hunters, warriors, and lovers have occasion to call upon him, and sometimes antidoting charms are sought, when the evil effects of an enemy's work are to be counteracted.

The instructor receives the visit of the candidate, and upon coming to a satisfactory agreement concerning the fee to be paid for the service he prepares his pupil by prompting him as to the part he is to enact during the initiation and the reasons therefor. The preparation and the merits of magic compounds are discussed, and the pupil receives instruction in making effective charms, compounding love powder, etc. This love powder is held in high esteem, and its composition is held a profound secret, to be transmitted only when a great fee is paid. It consists of the following ingredients: Vermilion; powdered snakeroot (Polygala senega, L.); exiguam particulam sanguinis a puella effusi, quum in primis menstruis esset; and a piece of ginseng cut from the bifurcation of the root, and powdered. These are mixed and put into a small buckskin bag. The preparation is undertaken only after an offering to Ki'tshi Man'idō of tobacco and a Mide song with rattle accompaniment. The manner of using this powder will be described under the caption of "descriptive notes." It differs entirely from the powder employed in painting the face by one who wishes to attract or fascinate the object of his or her devotion. The latter is referred to by the Rev. Peter Jones 16 as follows:

There is a particular kind of charm which they use when they wish to obtain the object of their affections. It is made of roots and red ocher. With this they paint their faces, believing it to possess a power so irresistible as to cause the object of their desire to love them. But the moment this medicine is taken away and the charm withdrawn the person who before was almost frantic with love hates with a perfect hatred.

It is necessary that the candidate take a sweat-bath once each day, for four successive days, at some time during the autumn months of the year preceding the year in which the initiation is to occur. This form of preparation is deemed agreeable to Ki´tshi Man´idō, whose favor is constantly invoked that the candidate may be favored with the powers supposed to be conferred in the last degree. As spring approaches the candidate makes occasional presents of tobacco to the chief priest and his assistants, and when the period of the annual ceremony approaches, they send out runners to members to solicit their presence, and, if of the fourth degree, their assistance.

INITIATION OF CANDIDATE.

The candidate removes to the vicinity of the Mide wigan so as to be able to go through the ceremony of purgation four times before the day of initiation. The sudatory having been constructed on the usual site, east of the large structure, he enters it on the morning of the fifth day preceding the initiation and after taking a sweat-bath he is joined by the preceptor, when both proceed to the four entrances of the Midē wigân and deposit at each a small offering of tobacco. This procedure is followed on the second and third days, also, but upon the fourth the presents are also carried along and deposited at the entrances, where they are received by assistants and suspended from the rafters of the interior. On the evening of the last day, the chief and officiating priests visit the candidate and his preceptor, in the sweat-lodge, when ceremonial smoking is indulged in followed by the recitation of Mide chants. The following (Pl. xvi, A) is a reproduction of the chant taught to and recited by the candidate. The original was obtained from an old mnemonic chart in use at Mille Lacs, Minnesota, in the year 1825, which in turn had been copied from a record in the possession of a Mide priest at La Pointe, Wisconsin, Many of the words are of an older form than those in use at the present day. Each line may be repeated ad libitum.

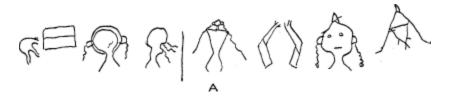


PLATE XVI.A. MNEMONIC SONG.



Ni-ka'-ni-na', ni-ka'-ni-na', ni-ka'-ni-na', I am the Nika'ni, I am the Nika'ni, I am the Nika'ni, man'-i-dō wig'-i-wam win'-di-ge'-un.
I am going into the sacred lodge.

[The speaker compares himself to the Bear Man 'ido, and as such is represented at the entrance of the Midē'wigân.]



Ni-ka´-ni-na´, ni-ka´-ni-na´, ni-ka´-ni-na´, I am the Nika´ni, I am the Nika´ni, I am the Nika´ni, ni-kan´-gi-nun´-da wé-mĭ-dŭk´.

I "suppose" you hear me.

[The lines from the ear denotes hearing; the words are addressed to his auditors.]



Wâ´, he-wa´-ke-wa ke-wâ´, he-wa´-ke-wâ´, wâ´.

He said, he said.

Signifies that Ki´tshi Man´idō, who is seen with the voice lines issuing from the mouth, and who promised the Ani´shinâ´bēg "life," that they might always live.

Rest. A ceremonial smoke is now indulged in.





ke-nosh'-ki-nun'-do-ni-ne'.

This is the first time you hear it.

[The lines of hearing are again shown; the words refer to the first time this is chanted as it is an intimation that the singer is to be advanced to the higher grade of the Midē´wiwin.]



Hwe´-na-ni-ka he-na´, he-nō´ mi-tē´-wiⁿ-wiⁿ´ gi´-ga-wa´-pi-no-dōn´.

You laugh, you laugh at the "grand medicine."

[The arms are directed towards Ki´tshi Man´idō, the creator of the sacred rite; the words refer to those who are ignorant of the Midē´wiwin and its teachings.]



Nun-te´-ma-ne´, hē´, wi´-na-nun´-te-ma-ne´ ki´-pi-nan´.

I hear, but they hear it not.

[The speaker intimates that he realizes the importance of the Mide rite, but the uninitiated do not.]



Pe´-ne-sŭi´-a ke´-ke-kwi´-yan.

I am sitting like a sparrow-hawk.

The singer is sitting upright, and is watchful, like a hawk watching for its prey. He is ready to observe, and to acquire, everything that may transpire in the Midē´ structure.

Upon the conclusion of the chant, the assembled Midē´ smoke and review the manner of procedure for the morrow's ceremony, and when these details have been settled they disperse, to return to their wig´iwams, or to visit Midē´ who may have come from distant settlements.

Early on the day of his initiation the candidate returns to the sudatory to await the coming of his preceptor. The gifts of tobacco are divided into parcels which may thus be easily distributed at the proper time, and as soon as the officiating priests have arrived, and seated themselves, the candidate produces some tobacco of which all present take a pipeful, when a ceremonial smoke-offering is made to Ki´tshi Man 'idō. The candidate then takes his midē' drum and sings a song of his own composition, or one which he may have purchased from his preceptor, or some Mide priest. The following is a reproduction of an old mnemonic song which the owner, Sikas'sige, had received from his father who in turn had obtained it at La Pointe, Wisconsin, about the year 1800. The words are archaic to a great extent, and they furthermore differ from the modern language on account of the manner in which they are pronounced in chanting, which peculiarity has been faithfully followed below. The pictographic characters are reproduced in Pl. xvi, B. As usual, the several lines are sung ad libitum, repetition depending entirely upon the feelings of the singer.

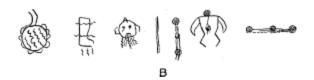


PLATE XVI.B. MNEMONIC SONG.



Hin´-to-nâ-ga-ne´ o-sa-ga-tshī´-wēd o-do´-zhi-tōn´.

The sun is coming up, that makes my dish.

The dish signifies the feast to be made by the singer. The zigzag lines across the dish denote the sacred character of the feast. The upper lines are the arm holding the vessel.



Man´-i-dō i´-ya-nē´, ish´-ko-te´-wi-wa´-we-yan´. My spirit is on fire. The horizontal lines across the leg signify magic power of traversing space. The short lines below the foot denote flames, i.e., magic influence obtained by swiftness of communication with the man idos.



Ko´tshi-hâ-ya-nē´, nē´, ish´-ki-to´-ya-ni´, nin-do´-we-hē´, wi´-a-we-yan´. I want to try you, I am of fire.

[The zigzag lines diverging from the mouth signify voice, singing; the apex upon the head superior knowledge, by means of which the singer wishes to try his Midē´ sack upon his hearer, to give evidence of the power of his influence.]



A pause. Ceremonial smoking is indulged in, after which the chant is continued.



Ni-mī'-ga-sim'-ma man'-i-dō, sa-ko'-tshi-na'.

My mī'gis spirit, that is why I am stronger than you.

The three spots denote the three times the singer has received the mī'gis by being shot; it is because this spirit is within him that he is more powerful than those upon the outside of the wigiwam who hear him.



Mī´-ga-ye´-nin en´-dy-ân, ya´, hō´, ya´, man´-i-dō´-ya.

That is the way I feel, spirit.

The speaker is filled with joy at his power, the mī 'gis within him, shown by the spot upon the body, making him confident.



Ya-gō´-sha-hī´, nâ´, ha´, ha´, Ya-gō´-sha-hi´, man´-i-dō-wī´-yĭn. I am stronger than you, spirit that you are.

[He feels more powerful, from having received three times the mī'gis, than the evil spirit who antagonizes his progress in advancement.]

Upon the completion of this preliminary by the candidate, the priests emerge from the wig'iwam and fall in line according to their official status, when the candidate and preceptor gather up the parcels of tobacco and place themselves at the head of the column and start toward the eastern entrance of the Mide wigan. As they approach the lone post, or board, the candidate halts, when the priests continue to chant and drum upon the Mide drum. The chief Mide then advances to the board and peeps through the orifice near the top to view malevolent man'idos occupying the interior, who are antagonistic to the entrance of a stranger. This spot is assumed to represent the resting place or "nest," from which the Bear Man'idō viewed the evil spirits during the time of his initiation by the Otter. The evil spirits within are crouching upon the floor, one behind the other and facing the east, the first being Mi-shi'—the panther; the second, Me-shi'-kĕ—the turtle; the third, kwin'go-â'-gĭ—the big wolverine; the fourth, wâ'-gŭsh—the fox; the fifth, ma-in'-gun—the wolf; and the sixth, ma-kwa'—the bear. They are the ones who endeavor to counteract or destroy the good wrought by the rites of the Mide wiwin, and only by the aid of the good man'idos can they be driven from the Midē´wigân so as to permit a candidate to enter and receive the benefits of the degree. The second Mide' then views the group of malevolent beings, after which the third, and lastly the fourth priest looks through the orifice. They then advise the presentation by the candidate of tobacco at that point to invoke the best efforts of the Mide' Man'idos in his behalf.

It is asserted that all of the malevolent man'idos who occupied and surrounded the preceding degree structures have now assembled about this fourth degree of the Mide wigan to make a final effort against the admission and advancement of the candidate: therefore he impersonates the good Bear Man'idō, and is obliged to follow a similar course in approaching from his present position the entrance of the structure. Upon hands and knees he slowly crawls toward the main entrance, when a wailing voice is heard in the east which sounds like the word han'. prolonged in a monotone. This is ge'-gi-si'-bi-ga'-ne-dât man'idō. His bones are heard rattling as he approaches; he wields his bow and arrow; his long hair streaming in the air, and his body, covered with mī'gis shells from the salt sea, from which he has emerged to aid in the expulsion of the opposing spirits. This being the information given to the candidate he assumes and personates the character of the man'idō referred to, and being given a bow and four arrows, and under the guidance of his preceptor, he proceeds toward the main entrance of the structure while the officiating priests enter and station themselves within the door facing the west. The preceptor carries the remaining parcels of tobacco, and when the candidate arrives near the door he makes four movements with his bow and arrow toward the interior, as if shooting, the last time sending an arrow within, upon which the grinning spirits are forced to retreat toward the other end of the inclosure. The candidate then rushes in at the main entrance, and upon emerging at the south suddenly turns and again employs his bow and arrow four times toward the crowd of evil man'idos, who have rushed toward him during the interval that he was within. At the last gesture of shooting into the inclosure, he sends forward an arrow, deposits a parcel of tobacco and crouches to rest at the so-called "bear's nest." During this period of repose the Mide priests continue to drum and

sing. Then the candidate approaches the southern door again, on all fours, and the moment he arrives there he rises and is hurried through the inclosure to emerge at the west, where he turns suddenly, and imitating the manner of shooting arrows into the group of angry man'idos within, he at the fourth movement lets fly an arrow and gets down into the western "bear's nest." After a short interval he again approaches the door, crawling forward on his hands and knees until he reaches the entrance, where he leaves a present of tobacco and is hastened through the inclosure to emerge at the northern door, where he again turns suddenly upon the angry spirits, and after making threatening movements toward them, at the fourth menace he sends an arrow among them. The spirits are now greatly annoyed by the magic power possessed by the candidate and the assistance rendered by the Mide Man idos, so that they are compelled to seek safety in flight. The candidate is resting in the northern "bear's nest," and as he again crawls toward the Mide wigan, on hands and knees, he deposits another gift of a parcel of tobacco, then rises and is hurried through the interior to emerge at the entrance door, where he turns around, and seeing but a few angry man'idos remaining, he takes his last arrow and aiming it at them makes four threatening gestures toward them, at the last sending the arrow into the structure, which puts to flight all opposition on the part of this host of man'idos. The path is now clear, and after he deposits another gift of tobacco at the door he is led within, and the preceptor receives the bow and deposits it with the remaining tobacco upon the pile of blankets and robes that have by this time been removed from the rafters and laid upon the ground midway between the sacred Mide' stone and the first Mide' post.

The chief Mide priest then takes charge of the candidate, saying:

gwa

Mi´-a-shi´- wi-ka´-we-a´-kwa-mŭs-sin´- Mī´-a-shi´nŭk.

awa

Now is the time

[to take] the path that has no end

Now is the time

wi-kan´-do-we-ân´ mi´-ga-ī´-zhid wen´- dzhi-bi-mâ´-dis. I shall inform you [of] that which I was told the reason Llive.

To this the second Mide priest remarks to the candidate, Wa´-shi-gân´-do-we-an´ mi-gai´-i-nŏk´ wa´-ka-no´-shi-dzin which freely translated signifies: "The reason I now advise you is that you may heed him when he speaks to you." The candidate is then led around the interior of the inclosure. the assistant Mide' fall in line of march and are followed by all the others present, excepting the musicians. During the circuit, which is performed slowly, the chief Mide drums upon the Mide drum and chants. The following, reproduced from the original, on Pl. xvII, B, consists of a number of archaic words, some of which are furthermore different from the spoken language on account of their being chanted, and meaningless syllables introduced to prolong certain accentuated notes. Each line and stanza may be repeated ad libitum.

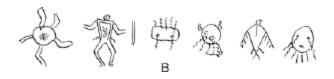


PLATE XVII.B. MNEMONIC SONG.



Man'-i-dō, hē', nē'-yē', man'-i-dō, hē', nē', yē', ēn'-da-na'-bi-yĕn wen'-dō-bi'-yĕn.

A spirit, a spirit, you who sit there, who sit there.

The singer makes a spirit of the candidate by thus giving him new life, by again shooting into his body the sacred migis. The disk is the dish for feast of spirits in the dzhibai' midē'wigân

—"Ghost Lodge," the arms reaching towards it denoting the spirits who take food therefrom. The signification is that the candidate will be enabled to invoke and commune with the spirits of departed Midē´, and to learn of hidden powers.]



He´-ha-wa´-ni, yē´, he´-ha-wa´-ni, yē´, na´-bi-nesh´-ga-na´-bi, hī´, hē´.

These words were chanted, while the following are those as spoken, apart from the music. Â-wan´-ō-de´-no-wĭn nī´-bi-dĕsh´-ka-wĭn un´-de-no´-wĭn.

The fog wind goes from place to place whence the wind blows. [The reason of the representation of a human form was not satisfactorily explained. The preceptor felt confident, however, that it signified a man 'īdō who controls the fog, one different from one of the a-na'-mi-ki', or Thunderers, who would be shown by the figure of an eagle, or a hawk, when it would also denote the thunder, and perhaps lightning, neither of which occurs in connection with the fog.]



Rest.



Man´-i-dō´-we ni´-mi-nan´ ku-ni´-ne man-to´-ke ni´-mi-ne´.

I who acknowledge you to be a spirit, and am dying.

The figure is an outline of the Mide wigan with the sacred Mide stone indicated within, as also another spot to signify the place occupied by a sick person. The waving lines above and beneath the oblong square are magic lines, and indicate magic or supernatural power. The singer compares the candidate to a sick man who is seeking life by having shot into his body the mī 'gis.



Ga-kwe´-in-nân´ tshi-ha´-gĕ-nâ´ ma-kwa´ ni-go´tshi-ni´.

I am trying you who are the bear.

The Mide´ who is chanting is shown in the figure; his eyes are looking into the candidate's heart. The lines from the mouth are also shown as denoting speech, directed to his hearer. The horns are a representation of the manner of indicating superior powers.



Pĭ-nē´-si ka´-ka-gī´-wai-yan´ wen´-dzhi man´-i-dō´wid.

The bird, the crow bird's skin is the reason why I am a spirit. Although the crow is mentioned, the Thunder-bird (eagle) is delineated. The signification of the phrase is, that the speaker is equal in power to a man'idō, at the time of using the Midē' sack—which is of such a skin.



Tshin-gwe´-wi-he´-na nē´, kan´, tshi-wâ´-ba-kunēt´.

The sound of the Thunder is the white bear of fire.

The head is, in this instance, symbolical of the white bear man'idō; the short lines below it denoting flame radiating from the body, the eyes also looking with penetrating gaze, as indicated by the double waving lines from each eye. The white bear man'idō is one of the most powerful man'idōs, and is so recognized.

By the time this chant is completed the head of the procession reaches the point of departure, just within the eastern door, and all of the members return to their seats, only the four officiating Mide remaining with the candidate and his preceptor. To search further that no malevolent man ´idōs may remain lurking within the Midē´wigân, the chief priests lead the candidate in a zigzag manner to the western door, and back again to the east. In this way the path leads past the side of the Mide' stone, then right oblique to the north of the heap of presents, thence left oblique to the south of the first-degree post, then passing the second on the north, and so on until the last post is reached, around which the course continues, and back in a similar serpentine manner to the eastern door. The candidate is then led to the blankets, upon which he seats himself, the four officiating priests placing themselves before him, the preceptor standing back near the first of the four degree posts.

The Midē´ priest of the fourth rank or place in order of precedence approaches the kneeling candidate and in a manner similar to that which has already been described shoots into his breast the mī´gis; the third, second and first Midē´ follow in like manner, the last named alone shooting his mī´gis into the candidate's forehead, upon which he falls forward, spits out a mī´gis shell which he had previously secreted in his mouth, and upon the priests rubbing upon his back and limbs their Midē´ sacks he recovers and resumes his sitting posture.

The officiating priests retire to either side of the inclosure to find seats, when the newly received member arises and with the assistance of the preceptor distributes the remaining parcels of tobacco, and lastly the blankets, robes, and other gifts. He then begins at the southeastern angle of the inclosure to return thanks for admission, places both hands upon the first person, and as he moves them downward over his hair says: Mi-gwĕtsh´ga-o´-shi-tō´-ĭn bi-mâ´-dĭ-sĭ-win—"Thanks, for giving to me life." The Midē´ addressed bows his head and responds, hau´, ēn´,—yes when the newly admitted member steps back one pace, clasps his hands and inclines his head to the front. This movement is continued until all present have been thanked, after which he takes a seat in the southeastern corner of the inclosure.

A curious ceremony then takes place in which all the Midē' on one side of the inclosure arise and approach those upon the other, each grasping his Mide sack and selecting a victim pretends to shoot into his body the mī'gis, whereupon the Mide' so shot falls over, and after a brief attack of gagging and retching pretends to gain relief by spitting out of his mouth a mī'gis shell. This is held upon the left palm, and as the opposing party retreat to their seats, the side which has just been subjected to the attack moves rapidly around among one another as if dancing, but simply giving rapid utterance to the word ho', ho', ho', ho', ho', and showing the mi'gis to everybody present, after which they place the flat hands quickly to the mouth and pretend again to swallow their respective shells. The members of this party then similarly attack their opponents, who submit to similar treatment and go through like movements in exhibiting the mī'gis, which they again swallow. When guiet has been restored, and after a ceremonial smoke has been indulged in, the candidate sings, or chants, the production being either his own composition or that of some other person from whom it has been purchased. The chant presented herewith was obtained from Sikas'sige, who had received it in turn from his father when the latter was chief priest of the Mide wiwin at Mille Lacs, Minnesota. The pictographic characters are reproduced on Pl. xvII, A, and the musical notation, which is also presented, was obtained during the period of my

preliminary instruction. The phraseology of the chant, of which each line and verse is repeated ad libitum as the singer may be inspired, is as follows:

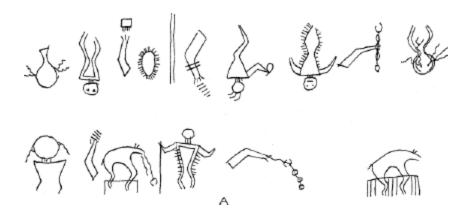


PLATE XVII.A. MNEMONIC SONG.



Do-nâ´-ga- Na´-wa-kwe´ in-do´-shi- do-nâ´-ganī´, tōn´, nī´. My dish, At noon I make it, my dish.

The singer refers to the feast which he gives to the Mide´ for admitting him into the Mide´wiwin.



Do-na-ga-ni, Do-na-ga-ni, Do-na-ga-ni,

Do-na-ga-ni, Do-na-ga-ni; Na-´kwa-wē´, In-do-shi-tōn Donagani,

Donaga-ni, Do-na-ga-ni, Do-na-ga-ni, Do-na-ga-ni, Do-na-ga-ni.

MIDI files: drum, flute, piano (default)



Man´-ī-dō´ i-yan-nī´, Esh-ko´-te nin´-do-we´-yo-wĭn´, I am such a spirit, My body is made of fire.

His power reaches to the sky, i.e., he has power to invoke the aid of Ki´tshi Man´idō. The four degrees which he has received are indicated by the four short lines at the tip of the hand.



Ma´ni-dō-i-ya-ni, Ma´ni-dō-i-ya-ni, Ma´ni-dō-i-ya-ni, Ma´ni-dō-i-ya-ni, Ma´ni-dō-i-ya-ni;

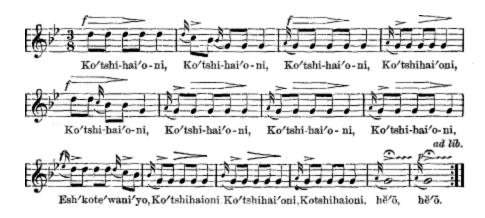
Esh´ko-te nin-do we-yo-win, Manidōiya-ni, Ma´ni-dō-i-ya-ni,

Ma´ni-dō-i-ya-ni, Ma´ni-dō-i-ya-ni.

MIDI files: drum, flute, piano (default)



Kŏ´-tshi-hai´-o-nī´, Esh-ko´-te wa-ni´-yō. I have tried it, My body is of fire. He likens himself to the Bear Man'idō, and has like power by virtue of his mī'gis, which is shown below the lines running downward from the mouth. He is represented as standing in the Midē'wigân—where his feet rest.



Koʻtshi-haiʻo-ni, Koʻtshi-haiʻo-ni, Koʻtshi-haiʻo-ni, Koʻtshihaiʻoni, Koʻtshi-haiʻo-ni, Koʻtshi-haiʻo-ni, Koʻtshi-haiʻo-ni, Koʻtshi-haiʻo-ni, Eshʻkoteʻwaniʻyo, Koʻtshihaioni.

Ko´tshihai´oni, Kotshihaioni, hĕ´ō, hĕ´ō.

MIDI files: drum, flute, piano (default)

Pause. An offering of smoke is made to Ki´tshi Man´idō.



Ni-mī´-gi-sĭm´ man´-i-dō´-we, hwē´, hē´, Sha´-go-dzhĭ´-hi-na´.

My mī'gis spirit, I overpower death with.

[His body is covered with mī'gis as shown by the short lines radiating from the sides, and by this power he is enabled to overcome death.]



Nimegasi mani dō-wē, hwē, hē, Nimegasi mani dō-wē, hwē, hē,

Shagodzhihinani-mega-si, Manido-wē, hwē, hē. Ni-me-ga-si-ma-ni-dō-wē, hwē, hē.

MIDI files: drum, flute, piano (default)



Ni´-ka-ni´ nin-man´-e-dō´-we-ya´. Ya´-ho-ya´ man´-i-dō´-wa nin-da´-ho-ha´. That is the way with me, spirit that I am.

[The hand shows how he casts the mī'gis forward into the person requiring life. He has fourfold power, i.e., he has received the mī'gis four times himself and is thus enabled to infuse into the person requiring it.]



Ni´-ga-ne´ nin ma´ni-dō´we ya Ni´-ga-ne´ nin ma´ni-dō´we ya, Ya´ho-ya´ ma´nidō-we,

Nin´dohōha ni´gane, ma´ni-dō-we, ya, hē.

MIDI files: drum, flute, piano (default)



Ē-kotsh´-i-na´-ha, Ē-kotsh´-ha man´-i-dō´ hwe-do´-wī.

I hang it, I hang up the Spirit sack.

[After using his Midē´ sack he hangs it against the wall of the Midē´wigân, as is usually done during the ceremonial of initiation.]



E-ko´tshi-na-ha, E-ko´tshi-na-ha, E-ko´tshi-na-ha, E-ko´-tshi-na-ha, E-ko´-tshi-na-ha, E-ki´-tshi-ma´-ni-dō´ hwe-do-wi, E-ko´tshi-na-ha, E-ko´tshi-na-ha, hě´a.

MIDI files: drum, flute, piano (default)



He´-a-wi-non´-dam-a´-ni, Man´-i-dō´ mi-de´-wi-he´ ne´-ma-da´-wi-dzig´.

Let them hear, Midē´ spirit, those who are sitting around.

[He invokes Ki´tshi Man´idō to make his auditors understand his power.]



He-a-wi-non´-da-ma-ni hē, He-a-wi-nonda-ma-ni hē; He´-a-wi-non-da-ma-ni hē, He´-a-wi-non-da-ma-ni hē; Manidomidēwi hē, Nemadawi dzhig, Heawinondamani hē, hē, hē.

MIDI files: drum, flute, piano (default)



He´-a-we-na´ ni´-we-dō´, Man´-i-dō´ we-a-nī´ Ni´-ka-nā´ ni´-na-nā´.

He who is sleeping, The Spirit, I bring him, a kinsman.

[In the employment of his powers he resorts to the help of Ki´tshi Man´idō—his kinsman or Midē´ colleague.]



He-a-we-na-ne-we-dō, hō, He-a-we-na-ne-we-dō, hō, He-a-we-na-ne-we-dō, hō, He-a-we-na-ne-we-dō, hō; Ma´-ni-dō-we-a-ni ni-ka-na ni-ka-na, hō, hō.

MIDI files: drum, flute, piano (default)



Man´-i-dō´ we-a-nī´ Esh-ke´-ta we´-a-nĭ´ man´-i-dō´ we´-a-nĭ´. I am a spirit, Fire is my spirit body.

[The hand reaches to the earth to grasp fire, showing his ability to do so without injury and illustrating in this manner his supernatural power.]



Ma´ni-dō´wi-a-ni hē, Ma´ni-dō´wi-a-ni hē, Ma´-ni-dō´wi-a-ni hē,

Ma´-ni-dō´-wi-a-ni hē, Ma´-ni-dō´wi-a-ni hē; Esh´kato´weani hē, Ma´nidō´wiani hē, Ma´nidō´wia-ni hē.

MIDI files: drum, flute, piano (default)



Ai-ya´-swa-kĭt-te´, hē´, he´, He´-ā´ se-wī´-kit-te´, hē´, hē´ Na-se´-ma-gŏt´ nin-dē´. It is leaning, My heart breathes. [The phrase refers to the mī'gis within his heart. The short radiating lines indicate the magic power of the shell.]



He´-a-si-wi-kit-te hē, He´-a-si-wi-kit-te hē, He´a-siwikit-te hē,

He´a-si-wi-kit-te hē, Na´simagot nin´de hē, He´-a-siwi-kit-te hē,

He´-a-si-wi-kit-te hē, He´-a-si-wi-kit-te hē´, He´a-si-wi-kitte hē.

MIDI files: drum, flute, piano (default)



Rest, or pause, after which dancing accompanies the remainder of the song.



Ni-ka´-nin-ko´-tshi´-ha ni´-ka-na Ni-ka´-na-nin-ko´-tshi-ha.

Midē´ friends, I am trying, Midē´ friends, Midē´ friends, I am trying. [His hand and arm crossed by lines to denote magic power, in reaching to grasp more than four degrees have given him; he has in view a fifth, or its equivalent.]



Ni´-ka-ni ko´tshiha Ni´ka-ni ha,

Ni´-ka-ni ko´tshini Ni´-ka-ni ha,

Ni´-ka-ni ko´-tshi-ha Ni´-ka-ni ha.

MIDI files: drum, flute, piano (default)



Hi´-ne-na-wa´ ni-be´-i-dōn´ ni-di´-na.

I hold that which I brought, and told him.

The singer is holding the mī'gis and refers to his having its power, which he desires Ki'tshi Man'idō to augment.



He-ne-na-wa-ni-bei-dōn, He-ne-na-wa-ni-bei-dōn, He-ne-na-wa-ni-bei-dōn, He-ne-na-wa-ni-bei-dōn.

MIDI files: drum, flute, piano (default)



Ye´-we-ni´-mi-dē´, hwa´, da´, Ke-wa´-shi-mi-dē´, hĭ-a, hwē´,

Ye´-we-ni´-mi-dē?

Who is this grand Mide´? You have not much grand medicine. Who is the Mide´?

[The first line, when used with the music, is a '-we-nin-o '-au-mide'. The whole phrase refers to

boasters, who have not received the proper initiations which they profess. The figure is covered with mī'gis shells, as shown by the short lines attached to the body.]



Ye-we-ni-mi-dē hwa, da. Ke-wa-shi-mi-dē hĭa, hwē, Ye-we-ni-mi-dē hwa, da. Ke-wa-shi-mi-dē hĭa, hwe. Ye-we-ni-mi-dē, Ye-we-ni-mi-dē hwa, da.

MIDI files: drum, flute, piano (default)



Nai´-a-na-wi´ na-ma´, ha´, Wa-na´-he-ne-ni-wa´, ha´,

O´-ta-be-we-ni´, mē´, hē´.

I can not reach it.

Only when I go round the Mide wigan;

I can not reach it from where I sit.

[The mī'gis attached to the arrow signifies its swift and certain power and effect. The first line of the phrase, when spoken, is nin-na'-na-wi-nan'.]



Nai-a-na-wi-na-ma ha, Nai-a-na-wi-na-ma ha, Nai-a-na-wi-na-ma ha, Nai-a-na-wi-na-ma ha, Wa-na-he-ne-ni-wa ha, O-ta-be-we-ni-me ha.

MIDI files: drum, flute, piano (default)



Ai-yā ha '-na-wi '-na-ma'.

I can not strike him.

The speaker is weeping because he can not see immediate prospects for further advancement in the acquisition of power. The broken ring upon his breast is the place upon which he was shot with the mī'gis.



Ai-ya-ha-na-wi-na-ma, Ai-ya-ha-na-wi-na-ma, Ai-ya-ha-na-wi-na-ma, Ai-ya-ha-na-wi-na—ma, hĕō, hĕō.

MIDI files: drum, flute, piano (default)

The following musical notation presents accurately the range of notes employed by the preceptor. The peculiarity of Mide songs lies in the fact that each person has his own individual series of notes which correspond to the number of syllables in the phrase and add thereto meaningless words to prolong the effect. When a song is taught, the words are the chief and most important part, the musical rendering of a second person may be so different from that of the person from whom he learns it as to be unrecognizable without the words. Another fact which often presents itself is the absence of time and measure, which prevents any reduction to notation by full bars; e.g., one or two bars may appear to consist of four quarter notes or a sufficient number of guarters and eighths to complete such bars, but the succeeding one may consist of an additional guarter, or perhaps two, thus destroying all semblance of rythmic continuity. This peculiarity is not so common in dancing music, in which the instruments of percussion are employed to assist regularity and to accord with the steps made by the dancers, or vice versa.

In some of the songs presented in this paper the bars have been omitted for the reasons presented above. The peculiarity of the songs as rendered by the preceptor is thus more plainly indicated.

When the chant is ended the ushers, who are appointed by the chief Midē´, leave the inclosure to bring in the vessels of food. This is furnished by the newly elected member and is prepared by his female relatives and friends. The kettles and dishes of food are borne around four times, so that each one present may have the opportunity of eating sufficiently. Smoking and conversation relating to the Midē´wiwin may then be continued until toward sunset, when, upon an intimation from the chief Midē´, the members quietly retire, leaving the structure by the western door. All personal

property is removed, and upon the following day everybody departs.

DESCRIPTIVE NOTES.

The amount of influence wielded by Midē´ generally, and particularly such as have received four degrees, is beyond belief. The rite of the Midē´wiwin is deemed equivalent to a religion—as that term is commonly understood by intelligent people—and is believed to elevate such a Midē´ to the nearest possible approach to the reputed character of Mi´nabō´zho, and to place within his reach the supernatural power of invoking and communing with Ki´tshi Man´idō himself.

By reference to Pl. III, A, No. 98, it will be observed that the human figure is specially marked with very pronounced indications of mī´gis spots upon the head, the extremities, and more particularly the breast. These are placed where the mīgis was "shot" into the Midē´, and the functions of the several parts are therefore believed to be greatly augmented. All the spots are united by a line to denote unity and harmony of action in the exercise of power.

The mī'gis, typical of the fourth degree, consists of small pieces of deer horn, covered with red paint on one end and green upon the other. Sometimes but one color is employed for the entire object. The form is shown on Pl. xi, No. 6. No. 2, upon the same plate, represents a shell, used as a mī'gis, observed at White Earth.

Figs. 5-11, on Pl. xv, present several forms of painting mide posts, as practiced by the several societies in Minnesota. Each society claims to preserve the ancient method. The cross, shown in No. 7, bears the typical colors—red and green—upon the upper half, while the lower post is square and colored white on the east, green on the south, red on

the west, and black on the north. The Midē´ explain the signification of the colors as follows: White represents the east, the source of light and the direction from which the sacred mī´gis came; green, sha´manō the southern one, refers to the source of the rains, the direction from which the Thunderers come in the spring, they who revivify the earth; red refers to the land of the setting sun, the abode of the shadows or the dead; and north being black, because that is the direction from which come cold, hunger, and disease.

The words of the Mide´ priest alluding to "the path that has no end" refer to the future course and conduct of the candidate for the last degree, as well as to the possibility of attaining unlimited powers in magic, and is pictorially designated upon the chart on Pl. III, A, at No. 99. The path is devious and beset with temptations, but by strict adherence to the principles of the Mide´ wiwin the Mide´ may reach the goal and become the superior of his confrères, designated Mi-ni´-si-no´-shkwe, "he who lives on the island."

A Mide´-Wâbĕnō´ of this degree is dreaded on account of his extraordinary power of inflicting injury, causing misfortune, etc., and most remarkable tales are extant concerning his astounding performances with fire.

The following performance is said to have occurred at White Earth, Minnesota, in the presence of a large gathering of Indians and mixed bloods. Two small wig'iwams were erected, about 50 paces from each other, and after the Wâbĕnō´ had crawled into one of them his disparagers built around each of them a continuous heap of brush and firewood, which were then kindled. When the blaze was at its height all became hushed for a moment, and presently the Wâbĕnō´ called to the crowd that he had transferred himself to the other wig'iwam and immediately, to their profound astonishment, crawled forth unharmed.

This is but an example of the numerous and marvelous abilities with which the Wâbĕnō´ of the higher grade is accredited.

The special pretensions claimed by the Midē-Wâběnō´ have already been mentioned, but an account of the properties and manner of using the "love powder" may here be appropriate. This powder—the composition of which has been given—is generally used by the owner to accomplish results desired by the applicant. It is carried in a small bag made of buckskin or cloth, which the Wâběnō´ carefully deposits within his Midē´ sack, but which is transferred to another sack of like size and loaned to the applicant, for a valuable consideration.

During a recent visit to one of the reservations in Minnesota. I had occasion to confer with a Catholic missionary regarding some of the peculiar medical practices of the Indians, and the implements and other accessories employed in connection with their profession. He related the following incident as having but a short time previously come under his own personal observation: One of the members of his church, a Norwegian, sixty-two years of age, and a widower, had for the last preceding year been considered by most of the residents as demented. The missionary himself had observed his erratic and frequently irrational conduct, and was impressed with the probable truth of the prevailing rumor. One morning, however, as the missionary was seated in his study, he was surprised to receive a very early call, and upon invitation his visitor took a seat and explained the object of his visit. He said that for the last year he had been so disturbed in his peace of mind that he now came to seek advice. He was fully aware of the common report respecting his conduct, but was utterly unable to control himself, and attributed the cause of his unfortunate condition to an occurrence of the year before. Upon waking one morning his thoughts were unwillingly

concentrated upon an Indian woman with whom he had no personal acquaintance whatever, and, notwithstanding the absurdity of the impression, he was unable to cast it aside. After breakfast he was, by some inexplicable influence, compelled to call upon her, and to introduce himself, and although he expected to be able to avoid repeating the visit, he never had sufficient control over himself to resist lurking in the vicinity of her habitation.

Upon his return home after the first visit he discovered lying upon the floor under his bed, a Midē´ sack which contained some small parcels with which he was unfamiliar, but was afterward told that one of them consisted of "love powder." He stated that he had grown children, and the idea of marrying again was out of the question, not only on their account but because he was now too old. The missionary reasoned with him and suggested a course of procedure, the result of which had not been learned when the incident was related.

Jugglery of another kind, to which allusion has before been made, is also attributed to the highest class of Jes´sakkīd´. Several years ago the following account was related to Col. Garrick Mallery, U.S. Army, and myself, and as Col. Mallery subsequently read a paper before the Anthropological Society of Washington, District of Columbia, in which the account was mentioned, I quote his words:

Paul Beaulieu, an Ojibwa of mixed blood, present interpreter at White Earth Agency, Minnesota, gave me his experience with a Jěs´sakkīd´, at Leech Lake, Minnesota, about the year 1858. The reports of his wonderful performances had reached the agency, and as Beaulieu had no faith in jugglers, he offered to wager \$100, a large sum, then and there, against goods of equal value, that the juggler could not perform satisfactorily one of the tricks of his repertoire to be

selected by him (Beaulieu) in the presence of himself and a committee of his friends. The Jĕs´sakkân´—or Jĕs´sakkīd´ lodge—was then erected. The framework of vertical poles, inclined to the center, was filled in with interlaced twigs covered with blankets and birch-bark from the ground to the top, leaving an upper orifice of about a foot in diameter for the ingress and egress of spirits and the objects to be mentioned, but not large enough for the passage of a man's body. At one side of the lower wrapping a flap was left for the entrance of the lĕs´sakkīd´.

A committee of twelve was selected to see that no communication was possible between the Jěs´sakkīd´ and confederates. These were reliable people, one of them the Episcopal clergyman of the reservation. The spectators were several hundred in number, but they stood off, not being allowed to approach.

The Jěs´sakkīd´ then removed his clothing, until nothing remained but the breech-cloth. Beaulieu took a rope (selected by himself for the purpose) and first tied and knotted one end about the juggler's ankles; his knees were then securely tied together, next the wrists, after which the arms were passed over the knees and a billet of wood passed through under the knees, thus securing and keeping the arms down motionless. The rope was then passed around the neck, again and again, each time tied and knotted, so as to bring the face down upon the knees. A flat river-stone, of black color—which was the Jěs´sakkīd´'s ma´nidō or amulet—was left lying upon his thighs.

The Jĕs´sakkīd´ was then carried to the lodge and placed inside upon a mat on the ground, and the flap covering was restored so as to completely hide him from view.

Immediately loud, thumping noises were heard, and the framework began to sway from side to side with great violence; whereupon the clergyman remarked that this was the work of the Evil One and 'it was no place for him,' so he left and did not see the end. After a few minutes of violent movements and swayings of the lodge accompanied by loud inarticulate noises, the motions gradually ceased when the voice of the juggler was heard, telling Beaulieu to go to the house of a friend, near by, and get the rope. Now, Beaulieu, suspecting some joke was to be played upon him, directed the committee to be very careful not to permit any one to approach while he went for the rope, which he found at the place indicated, still tied exactly as he had placed it about the neck and extremities of the Jes 'sakkīd'. He immediately returned, laid it down before the spectators, and requested of the Jes'sakkid' to be allowed to look at him, which was granted, but with the understanding that Beaulieu was not to touch him.

When the covering was pulled aside, the Jěs´sakkīd´ sat within the lodge, contentedly smoking his pipe, with no other object in sight than the black stone mánidō. Beaulieu paid his wager of \$100.

An exhibition of similar pretended powers, also for a wager, was announced a short time after, at Yellow Medicine, Minnesota, to be given in the presence of a number of Army people, but at the threat of the Grand Medicine Man of the Leech Lake bands, who probably objected to interference with his lucrative monopoly, the event did not take place and bets were declared off.

Col. Mallery obtained further information, of a similar kind from various persons on the Bad River Reservation, and at Bayfield, Wisconsin. All of these he considered to be mere variants of a class of performances which were reported by the colonists of New England and the first French missionaries in Canada as early as 1613, where the general designation of "The Sorcerers" was applied to the whole body of Indians on the Ottawa River. These reports, it must be remembered, however, applied only to the numerous tribes of the Algonkian linguistic family among which the alleged practices existed; though neighboring tribes of other linguistic groups were no doubt familiar with them, just as the Winnebago, Omaha, and other allied tribes, profess to have "Medicine Societies," the secrets of which they claim to have obtained from tribes located east of their own habitat, that practiced the peculiar ceremony of "shooting small shells" (i.e., the mī´gis of the Ojibwa) into the candidate.

In <u>Pl. xviii</u> is shown a Jěs´sakkīd´ extracting sickness by sucking through bone tubes.

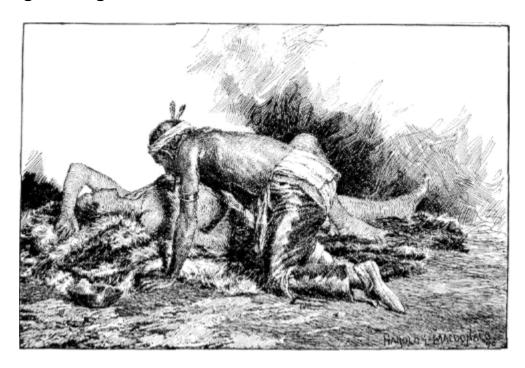


PLATE XVIII. JES 'AKKĪD ' REMOVING DISEASE.

DZHIBAI MIDĒ WIGÂN, OR "GHOST LODGE."

A structure erected by Indians for any purpose whatever, is now generally designated a lodge, in which sense the term is applied in connection with the word dzhibai'—ghost, or more appropriately shadow—in the above caption. This lodge is constructed in a form similar to that of the Midē wigan, but its greatest diameter extends north and south instead of east and west. Further reference will be made to this in describing another method of conferring the initiation of the first degree of the Mide wiwin. This distinction is attained by first becoming a member of the so-called "Ghost Society," in the manner and for the reason following: After the birth of a male child it is customary to invite the friends of the family to a feast, designating at the same time a Mide to serve as godfather and to dedicate the child to some special pursuit in life. The Mide is governed in his decision by visions, and it thus sometimes happens that the child is dedicated to the "Grand Medicine," i.e., he is to be prepared to enter the society of the Mide. In such a case the parents prepare him by procuring a good preceptor, and gather together robes, blankets, and other gifts to be presented at initiation.

Should this son die before the age of puberty, before which period it is not customary to admit any one into the society, the father paints his own face as before described, viz, red, with a green stripe diagonally across the face from left to right, as in Pl. vi, No. 4, or red with two short horizontal parallel bars in green upon the forehead as in Pl. vi, No. 5, and announces to the chief Midē´ priest his intention of becoming himself a member of the "Ghost Society" and his readiness to receive the first degree of the Midē´wiwin, as a substitute for his deceased son. Other members of the mourner's family blacken the face, as shown on Pl. vii, No. 5.

In due time a council of Mide priests is called, who visit the wig iwam of the mourner, where they partake of a feast, and the subject of initiation is discussed. This wig iwam is

situated south and east of the Mide´wigân, as shown in Fig. 35, which illustration is a reproduction of a drawing made by Sikas´sigĕ.

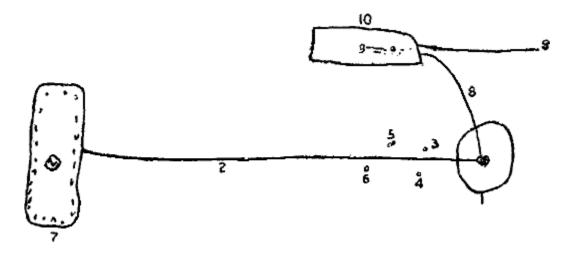


Fig. 35.—Indian diagram of ghost lodge.

The following is an explanation of the several characters:

- No. 1 represents the wig'iwam of the mourner, which has been erected in the vicinity of the Mide'wigan, until after the ceremony of initiation.
- No. 2 is the path supposed to be taken by the shadow (spirit) of the deceased; it leads westward to the Dzhibai´ Midē´wigân; literally, shadow-spirit wig ´iwam.
- No. 3, 4, 5, and 6, designate the places where the spirit plucks the fruits referred to—respectively the strawberry, the blueberry, the June cherries, and the plum.
- No. 7 designates the form and location of the Dzhihai´ Midē ´wigân. The central spot is the place of the dish of food for Dzhibai´ Man´idō—the good spirit—and the smaller spots around the interior of the inclosure are places for the deposit of dishes for the other Midē´ spirits who have left this earth.

- No. 8 is the path which is taken by the candidate when going from his wig'iwam to the Midē'wigân.
- No. 9 indicates the place of the sweat-lodge, resorted to at other periods of initiation.
- No. 10 is the Mide wigan in which the ceremony is conducted at the proper time.

It is stated that in former times the Ghost Lodge was erected west of the location of the mourner's wig'iwam, but for a long time this practice has been discontinued. The tradition relating to the Spirit's progress is communicated orally, while the dramatic representation is confined to placing the dishes of food in the Midē'wigân, which is selected as a fitting and appropriate substitute during the night preceding the initiation.

This custom, as it was practiced, consisted of carrying from the mourner's wig'iwam to the Ghost Lodge the dishes of food for the spirits of departed Midē' to enjoy a feast, during the time that the Midē' priests were partaking of one. A large dish was placed in the center of the structure by the mourner, from which the supreme Midē' spirit was to eat. Dishes are now carried to the Midē'wigân, as stated above.

The chief officiating Midē´ then instructs the father of the deceased boy the manner in which he is to dress and proceed, as symbolizing the course pursued by the spirit of the son on the way to the spirit world. The instructions are carried out, as far as possible, with the exception of going to an imaginary Ghost Lodge, as he proceeds only to the Midē´ wigân and deposits the articles enumerated below. He is told to take one pair of bear-skin moccasins, one pair of wolf-skin, and one pair of birds´ skins, in addition to those which he wears upon his feet; these are to be carried to the structure in which the Midē´ spirits are feasting, walking

barefooted, picking a strawberry from a plant on the right of the path and a blueberry from a bush on the left, plucking June cherries from a tree on the right and plums on the left. He is then to hasten toward the Ghost Lodge, which is covered with mī'gis, and to deposit the fruit and the moccasins; these will be used by his son's spirit in traveling the road of the dead after the spirits have completed their feast and reception of him. While the candidate is on his mission to the Ghost Lodge (for the time being represented by the Midē'wigân) the assemblage in the wig'iwam chant the following for the mourner: Yan'-i-ma-tsha', yan'-i-ma-tsha', yan'-i-ma-tsha', yan'-i-ma-tsha' yan'-i-ma-tsha' ha', yu'-te-no-win' gē', hē' nin-de'-so-ne'—"I am going away, I am going away away.

The person who desires to receive initiation into the Midē wigân, under such circumstances, impersonates Minabō zho, as he is believed to have penetrated the country of the abode of shadows, or ne'-ba-qī'-zis—"land of the sleeping sun." He, it is said, did this to destroy the "Ghost Gambler" and to liberate the many victims who had fallen into his power. To be enabled to traverse this dark and dismal path, he borrowed of Kŏ-ko´-kŏ-ō´—the owl—his eyes, and received also the services of we '-we-te'-si-wugthe firefly, both of which were sent back to the earth upon the completion of his journey. By referring to Pl. III, A, the reference to this myth will be observed as pictorially represented in Nos. 110 to 114. No. 110 is the Mide wigan from which the traveler has to visit the Dzhibai´ Midē´wigân (No. 112) in the west. No. 113, represented as Kŏ-ko´-kŏ-ō '—the owl—whose eyes enabled Mī'nabō'zho to follow the path of the dead (No. 114); the owl skin Mide sack is also sometimes used by Mide priests who have received their first degree in this wise. The V-shaped characters within the

circle at No. 111 denote the presence of spirits at the Ghost Lodge, to which reference has been made.

The presents which had been gathered as a gift or fee for the deceased are now produced and placed in order for transportation to the Mide wigan, early on the following morning.

The Midē´ priests then depart, but on the next morning several of them make their appearance to assist in clearing the Midē´wigân of the dishes which had been left there over night, and to carry thither the robes, blankets, and other presents, and suspend them from the rafters. Upon their return to the candidate's wig´iwam, the Midē´ priests gather, and after the candidate starts to lead the procession toward the Midē´wigân, the priests fall in in single file, and all move forward, the Midē´ priests chanting the following words repeatedly, viz: Ki-e´-ne-kwo-tâ´ ki-e´-ne-kwo-tâ´, ha´, ha´, nōs e´wi-e´, hē´, ki´-na-ka´-ta-mǔn´ do-nâ´-gan—"I also, I also, my father, leave you my dish."

This is sung for the deceased, who is supposed to bequeath to his father his dish, or other articles the names of which are sometimes added.

The procession continues toward and into the Midē´wigân, passing around the interior by the left side toward the west, north, and east to a point opposite the space usually reserved for the deposit of goods, where the candidate turns to the right and stands in the middle of the inclosure, where he now faces the Midē´ post in the west. The members who had not joined the procession, but who had been awaiting its arrival, now resume their seats, and those who accompanied the candidate also locate themselves as they desire, when the officiating priests begin the ceremony as described in connection with the initiation for the first degree after the candidate has been turned over to the chief by the preceptor.

Sometimes the mother of one who had been so dedicated to the Mide´wiwin is taken into that society, particularly when the father is absent or dead.

INITIATION BY SUBSTITUTION.

It sometimes happens that a sick person can not be successfully treated by the Midē´, especially in the wig ´iwam of the patient, when it becomes necessary for the latter to be carried to the Midē´wigân and the services of the society to be held. This course is particularly followed when the sick person or the family can furnish a fee equivalent to the gift required for initiation under ordinary circumstances.

It is believed, under such conditions, that the evil man idos can be expelled from the body only in the sacred structure, at which place alone the presence of Ki tshi Man ido may be felt, after invocation, and in return for his aid in prolonging the life of the patient the latter promises his future existence to be devoted to the practice and teachings of the Mide wiwin. Before proceeding further, however, it is necessary to describe the method pursued by the Mide priest.

The first administrations may consist of mashki´kiwabūn´, or medicine broth, this being the prescription of the Midē´ in the capacity of mashki´kike´winĭ´nĭ, or herbalist, during which medication he resorts to incantation and exorcism, accompanying his song by liberal use of the rattle. As an illustration of the songs used at this period of the illness, the following is presented, the mnemonic characters being reproduced on Pl. xvi, C. The singing is monotonous and doleful, though at times it becomes animated and discordant.

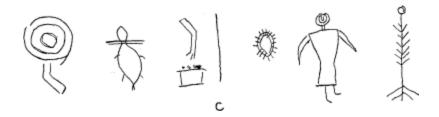


PLATE XVI.C. MNEMONIC SONG.



In´-do-nâ-gât in-da´-kwo-nan

That which I live upon has been put on this dish by the spirit. Ki´tshi Man´idō provides the speaker with the necessary food for the maintenance of life. The dish, or feast, is shown by the concentric rings, the spirit's arm is just below it.



Mo´-ki-yan tshik´-ko-min´.

I bring life to the people.

The speaker, as the impersonator of the sacred Otter, brings life. The Otter is just emerging from the surface of the water, as he emerged from the great salt sea before the Âni´shi-nâ´beg, after having been instructed by Mi´nabō´zho to carry life to them.



Ni´-no-mūn´ mash-ki´-ki

I can also take medicine from the lodge, or the earth

The Mide's arm is reaching down to extract magic remedies from the earth. The four spots indicate the remedies, while the square figure denotes a hole in the ground.



Rest. During this interval the Mide's thoughts dwell upon the sacred character of the work in which he is engaged.



Ni´-nin-dē´ in´-dai-yo´.

It is all in my heart, the life.

The concentric circles indicates the mī'gis, life, within the heart, the former showing radiating lines to denote its magic power.



M'bi-mo'-se-an-kĭnk'.

The spirit saw me and sent me medicine from above.

The figure is that of Ki´tshi Man´idō, who granted power to the speaker.



Dōn´-de-na mi-tĭz´-kŭnk.

It is also on the trees, that from which I take life.

The tree bears "medicine" which the speaker has at his command, and is enabled to use.

When the ordinary course of treatment fails to relieve the patient the fact is made known to the Mide priests and he is consequently taken to the Mide wigan and laid upon blankets so that part of his body may rest against the sacred mide stone. Associate Mide then attend, in consultation, with the Mide -in-chief, the other members present occupying seats around the walls of the structure.

The accompanying lecture is then addressed to the sick person, viz:

Mi-shosh´-yâ-gwa´ ga´-a-nin-nan´ gi´-de-wēn´-du-nŭn ne´-tun-ga´-da-da-we´-in man´-i-dōmī´-gis. Kit´-ti-mâ´-gi-si ē´-ni-dau´-â-ya-we´-yĭn o-ma´-e-nâ´-sa-ba-bĭt bī-i-sha´-gaban´-dĕ-a gi-bi´-sha-ban-da´-ĕt na-pĭsh-kâ-tshi-dŏsh ke´-a-yū´-ĭn-ki-go gŏt-tâ-sō-nĕn´, mi´-a-shi´-gwa-gō-dĭn´-na-wât dzhi-ma´-di-a-kad´-dŏ-yōn bi-mâ-di-si-wĭn´.

The following is a free translation of the above:

The time of which I spoke to you has now arrived, and you may deem it necessary to first borrow the sacred mī 'gis. Who are you that comes here as a supplicant? Sit down opposite to me, where I can see you and speak to you, and fix your attention upon me, while you receive life you must not permit your thoughts to dwell upon your present condition, but to support yourself against falling into despondency.

Now we are ready to try him; now we are ready to initiate him.

The reference to borrowing a mī'gis signifies that the patient may have this mysterious power "shot into his body" where he lies upon the ground and before he has arrived at the place where candidates are properly initiated; this, because of his inability to walk round the inclosure.

The last sentence is spoken to the assisting Midē´. The following song is sung, the mnemonic characters pertaining thereto being reproduced on <u>Pl. xvi, D</u>.



PLATE XVI.D. MNEMONIC SONG.



O-da´-pi-nŭng´-mung oâ´-ki-wen´-dzhi man´-i-dō we´-an-ĭ-win´-zhi-gu-sân´.

We are going to take the sacred medicine out of the ground.

[The speaker refers to himself and the assistants as resorting to remedies adopted after consultation, the efficiency thereof depending upon their combined prayers. The arm is represented as reaching for a remedy which is surrounded by lines denoting soil.]



We-a´-ki man´-i-dō we-an-gwĭs´.

The ground is why I am a spirit, my son.

The lower horizontal line is the earth, while the magic power which he possesses is designated by short vertical wavy lines which reach his body.



Rest.



Nish´-u-we-ni-mi´-qu nish´-u-we-ni-mi´-qu we´-gi ma´-ŏ-dzhig´.

The spirits have pity; the spirits have pity on me.

The Mide is supplicating the Mide spirits for aid in his wishes to cure the sick.



Kish´-u-we-ni-mi´-qu ki´-shi´-gŭng don´-dzhi-wa´-wa-mĭk.

The spirits have pity on me; from on high I see you.

The sky is shown by the upper curved lines, beneath which the Midē´ is raising his arm in supplication.



Man´-i-dō´-â ni´-o.

My body is a spirit.

The Mide likens himself to the Bear Man ido, the magic powers of which are shown by the lines across the body and short strokes upon the back.



Pi-ne´-si-wi-ân´ ke-ke´-u-wi-an´.

A little bird I am: I am the hawk.

Like the thunderer, he penetrates the sky in search of power and influence.



Man´-i-dō´ nu´-tu wa´-kan.

Let us hear the spirit.

The Ki´tshi Man´idō is believed to make known his presence, and all are enjoined to listen for such intimation.



Ka´-nun-ta´-wa man´-i-dō´ wi´-da-ku-ē´, hē´, ki´-a-ha-mī´.

You might hear that he is a spirit.

The line on the top of the head signifies the person to be a superior being.



Ka´-ke-na gus-sâ´ o´-mi-si´-nī´ na´-ēn. I am afraid of all, that is why I am in trouble.

The Midē´ fears that life can not be prolonged because the evil man´idōs do not appear to leave the body of the sick person. The arm is shown reaching for mī´gis, or life, the strength of the speaker's, having himself received it four times, does not appear to be of any avail.

Should the patient continue to show decided symptoms of increased illness, the singing or the use of the rattle is continued until life is extinct, and no other ceremony is attempted; but if he is no worse after the preliminary course of treatment, or shows any improvement, the first attendant Midē´ changes his songs to those of a more boastful character. The first of these is as follows, chanted repeatedly and in a monotonous manner, viz:

A'-si-na'-bi-hu'-ya, a-si'-na'-b-hu'-ya.
I have changed my looks, I have changed my looks.

[This refers to the appearance of the Mide´ stone which it is believed absorbs some of the disease and assumes a change of color.]

Nish´-a-we´nī´, hū´, gū´, mi-dē´, wug, a-ne´-ma-bī´-tshig.

The Mide have pity on me, those who are sitting around, and those who are sitting from us.

[The last line refers to those Mide who are sitting, though absent from the Mide wigan.]

The following illustrates the musical rendering:



A-si-na-bi-hŭ-i-ya, A-si-na-bi-hŭ-i-ya hĭa,

A-si-na-bi-hŭ-i-ya, A-si-na-bi-hŭ-i-ya hĭa.

MIDI files: drum, flute, piano (default)



Nish-a-wi-in-hu gū, O-ko-mi-dē-wog hē, A-ne-ma-bitshig hē,

Nishawiinhu gū, O-ko-mi-dē-wog hē, Nish-a-wi-ni-hu gŭ O-ko-mi-dē-wog hē.

MIDI files: drum, flute, piano (default)

As the patient continues to improve the song of the Midē´ becomes more expressive of his confidence in his own abilities and importance.

The following is an example in illustration, viz:

Ni-ne´-ta-we-hē´ wa-wâ´-bâ-ma´ man´-i-dō, wa-wâ´-bâ-ma

[I am the only one who sees the spirit, who sees the spirit.]

Nin´-da-nī-wĭ-a, nin´-da-nī´-wĭ-a.

I surpass him, I surpass him.

[The speaker overcomes the malevolent man'idō and causes him to take flight.]

Na´-sa-ni-nēn´-di-yaⁿ a-we´-si-yŏk´ no-gwe´-no´-wŏk. See how I act, beasts I shoot on the wing.

[The signification of this is, that he "shoots at them as they fly," referring to the man'idōs as they escape from the body.]

The following is the musical notation of the above, viz:



Ni-ne-ta-we-hē wa-wâ´bâ-ma man-i-dō wa-wâ´-bâ-ma man-i-dō,

Ni-ne-ta-we-hē wa-wâ´-bâ-ma man-i-dō, wa-wâ´-bâ-ma man-i-dō.

MIDI files: drum, flute, piano (default)



Hen-ta-ne-we-a, Hen-ta-ne-we-a, Hen-ta-ne-we-a, Hen-ta-ne-we-a,

Hen-ta-ne-we-a, Hen-ta-ne-we-a, Hen-ta-ne-we-a, Hen-ta-ne-we-a,

Hen-ta-ne-we-a, Hen-ta-ne-we-a, Hen-ta-ne-we-a, hō.

MIDI files: drum, flute, piano (default)



Na-sa-ni-nen-di-ya, Na-sa-ni-nen-di-ya, Na-sa-ni-nen-di-ya,

Awasiyōk, Nogwenowōk.

MIDI files: drum, flute, piano (default)

If the patient becomes strong enough to walk round the inclosure he is led to the western end and seated upon a blanket, where he is initiated. If not, the mī'gis is "shot into his body" as he reclines against the sacred stone, after which a substitute is selected from among the Midē' present, who takes his place and goes through the remainder of the initiation for him. Before proceeding upon either course, however, the chief attendant Midē' announces his readiness in the following manner: Mi'-o-shi'-gwa, wi-kwod'-gi-o-wŏg' ga-mâ'-dzhi-a-ka'-dŭng bi-mâ-di-si-wĭn'—"Now we are ready to escape from this and to

begin to watch life." This signifies his desire to escape from his present procedure and to advance to another course of action, to the exercise of the power of giving life by transferring the sacred mī'gis.

The remainder of the ceremony is then conducted as in the manner described as pertains to the first degree of the Midē wiwin.

SUPPLEMENTARY NOTES.

PICTOGRAPHY.

Before concluding, it may be of interest to refer in some detail to several subjects mentioned in the preceding pages. The mnemonic songs are in nearly every instance incised upon birch bark by means of a sharp-pointed piece of bone or a nail. The inner surface of the bark is generally selected because it is softer than the reverse. Bark for such purposes is peeled from the trunk during the spring months. On the right hand upper corner of Pl. xix is reproduced a portion of a mnemonic song showing characters as thus drawn. The specimen was obtained at White Earth, and the entire song is presented on Pl. xvi, C. A piece of bark obtained at Red Lake, and known to have been incised more than seventy years ago, is shown on the right lower corner of Pl. xix. The drawings are upon the outer surface and are remarkably deep and distinct. The left hand specimen is from the last named locality, and of the same period, and presents pictographs drawn upon the inner surface.



PLATE XIX. SACRED BIRCH BARK RECORDS.

In a majority of songs the characters are drawn so as to be read from left to right, in some from right to left, and

occasionally one is found to combine both styles, being truly boustrophic. Specimens have been obtained upon which the characters were drawn around and near the margin of an oblong piece of bark, thus appearing in the form of an irregular circle.

The pictographic delineation of ideas is found to exist chiefly among the shamans, hunters, and travelers of the Ojibwa, and there does not appear to be a recognized system by which the work of any one person is fully intelligible to another. A record may be recognized as pertaining to the Midē´ ceremonies, as a song used when hunting plants, etc.; but it would be impossible for one totally unfamiliar with the record to state positively whether the initial character was at the left or the right hand. The figures are more than simply mnemonic; they are ideographic, and frequently possess additional interest from the fact that several ideas are expressed in combination. Col. Garrick Mallery, U.S. Army, in a paper entitled "Recently Discovered Algonkian Pictographs," read before the American Association for the Advancement of Science, at Cleveland, 1888, expressed this fact in the following words:

It is desirable to explain the mode of using the Mide´ and other bark records of the Ojibwa and also those of other Algonkian tribes to be mentioned in this paper. The comparison made by Dr. E. B. Tylor of the pictorial alphabet to teach children "A was an archer," etc., is not strictly appropriate in this case. The devices are not only mnemonic, but are also ideographic and descriptive. They are not merely invented to express or memorize the subject, but are evolved therefrom. To persons acquainted with secret societies a good comparison for the charts or rolls would be what is called the tressel board of the Masonic order, which is printed and published and publicly exposed without exhibiting any of the secrets of the order, yet is not only significant,

but useful to the esoteric in assistance to their memory as to degrees and details of ceremony.

A more general mode of explaining the so-called symbolism is by a suggestion that the charts of the order or the song of a myth should be likened to the popular illustrated poems and songs lately published in Harper's Magazine for instance, "Sally in our Alley," where every stanza has an appropriate illustration. Now, suppose that the text was obliterated forever, indeed the art of reading lost, the illustrations remaining, as also the memory to many persons of the ballad. The illustrations kept in order would supply always the order of the stanzas and also the general subject-matter of each particular stanza and the latter would be a reminder of the words. This is what the rolls of birch bark do to the initiated Ojibwa, and what Schoolcraft pretended in some cases to show, but what for actual understanding requires that all the vocables of the actual songs and charges of the initiation should be recorded and translated. This involves not only profound linguistic study, but the revelation of all the mysteries. In other instances the literation in the aboriginal language of the nonesoteric songs and stories and their translation is necessary to comprehend the devices by which they are memorized rather than symbolized. Nevertheless, long usage has induced some degree of ideography and symbolism.



PLATE XX. SACRED BARK SCROLL AND CONTENTS.

On Pl. xx are presented illustrations of several articles found in a Mide sack which had been delivered to the Catholic priest at Red Lake over seventy years ago, when the owner professed Christianity and forever renounced (at least verbally) his pagan profession. The information given below was obtained from Mide priests at the above locality. They are possessed of like articles, being members of the same society to which the late owners of the relics belonged. The first is a birch-bark roll, the ends of which were slit into short strips, so as to curl in toward the middle to prevent the escaping of the contents. The upper figure is that of the Thunder god, with waving lines extending forward from the eyes, denoting the power of peering into futurity. This character has suggested to several Mide priests that the owner might have been a Mide'-Jes'sakkīd'. This belief is supported by the actual practice pursued by this class of priests when marking their personal effects. The lower figure is that of a buffalo, as is apparent from the presence of the hump. Curiously enough both eyes are drawn upon one side of the head, a practice not often followed by Indian artists.

The upper of the four small figures is a small package, folded, consisting of the inner sheet of birch-bark and resembling paper both in consistence and color. Upon the upper fold is the outline of the Thunder bird. The next two objects represent small boxes made of pine wood, painted or stained red and black. They were empty when received, but were no doubt used to hold sacred objects. The lowest figure of the four consists of a bundle of three small bags of cotton wrapped with a strip of blue cloth. The bags contain, respectively, love powder, hunter's medicine—in this instance red ocher and powdered arbor vitæ leaves—and another powder of a brownish color, with which is mixed a small quantity of ground medicinal plants.

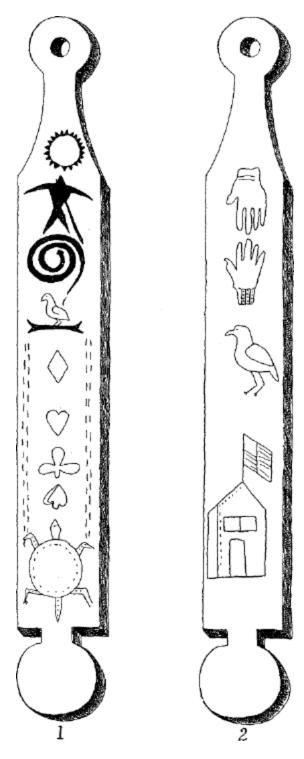


PLATE XXI. MIDE' RELICS FROM LEECH LAKE.

The roll of birch-bark containing these relics inclosed also the skin of a small rodent (Spermophilus sp.?) but in a torn and moth-eaten condition. This was used by the owner for purposes unknown to those who were consulted upon the subject. It is frequently, if not generally, impossible to ascertain the use of most of the fetiches and other sacred objects contained in Midē´ sacks of unknown ownership, as each priest adopts his own line of practice, based upon a variety of reasons, chiefly the nature of his fasting dreams.

Fancy sometimes leads an individual to prepare medicine sticks that are of curious shape or bear designs of odd form copied after something of European origin, as exemplified in the specimen illustrated on. Pl. xxi, Nos. 1 and 2, showing both the obverse and reverse. The specimen is made of ash wood and measures about ten inches in length. On the obverse side, besides the figures of man´-idōs, such as the Thunder bird, the serpent, and the tortoise, there is the outline of the sun, spots copied from playing cards, etc.; upon the reverse appear two spread hands, a bird, and a building, from the top of which floats the American flag. This specimen was found among the effects of a Mide´ who died at Leech Lake, Minnesota, a few years ago, together with effigies and other relics already mentioned in another part of this paper.

MUSIC.

In addition to the examples of Indian music that have been given, especially the songs of shamans, it may be of interest to add a few remarks concerning the several varieties of songs or chants. Songs employed as an accompaniment to dances are known to almost all the members of the tribe, so that their rendition is nearly always the same. Such songs are not used in connection with mnemonic characters, as there are, in most instances, no words or phrases recited, but simply a continued repetition of meaningless words or syllables. The notes are thus rhythmically accentuated,

often accompanied by beats upon the drum and the steps of the dancers.

An example of another variety of songs, or rather chants, is presented in connection with the reception of the candidate by the Mide priest upon his entrance into the Mide wigan of the first degree. In this instance words are chanted, but the musical rendition differs with the individual, each Mide' chanting notes of his own, according to his choice or musical ability. There is no set formula, and such songs, even if taught to others, are soon distorted by being sung according to the taste or ability of the singer. The musical rendering of the words and phrases relating to the signification of mnemonic characters depends upon the ability and inspired condition of the singer; and as each Mide priest usually invents and prepares his own songs, whether for ceremonial purposes, medicine hunting, exorcism, or any other use, he may frequently be unable to sing them twice in exactly the same manner. Love songs and war songs, being of general use, are always sung in the same style of notation.

The emotions are fully expressed in the musical rendering of the several classes of songs, which are, with few exceptions, in a minor key. Dancing and war songs are always in quick time, the latter frequently becoming extraordinarily animated and boisterous as the participants become more and more excited.

Midē´ and other like songs are always more or less monotonous, though they are sometimes rather impressive, especially if delivered by one sufficiently emotional and possessed of a good voice. Some of the Midē´ priests employ few notes, not exceeding a range of five, for all songs, while others frequently cover the octave, terminating with a final note lower still.

The statement has been made that one Midē´ is unable either to recite or sing the proper phrase pertaining to the mnemonic characters of a song belonging to another Midē´ unless specially instructed. The representation of an object may refer to a variety of ideas of a similar, though not identical, character. The picture of a bear may signify the Bear man´idō as one of the guardians of the society; it may pertain to the fact that the singer impersonates that man ´idō; exorcism of the malevolent bear spirit may be thus claimed; or it may relate to the desired capture of the animal, as when drawn to insure success for the hunter. An Indian is slow to acquire the exact phraseology, which is always sung or chanted, of mnemonic songs recited to him by a Midē´ preceptor.

An exact reproduction is implicitly believed to be necessary, as otherwise the value of the formula would be impaired, or perhaps even totally destroyed. It frequently happens, therefore, that although an Indian candidate for admission into the Mīdē'wiwin may already have prepared songs in imitation of those from which he was instructed, he may either as yet be unable to sing perfectly the phrases relating thereto, or decline to do so because of a want of confidence. Under such circumstances the interpretation of a record is far from satisfactory, each character being explained simply objectively, the true import being intentionally or unavoidably omitted. An Ojibwa named "Little Frenchman," living at Red Lake, had received almost continuous instruction for three or four years, and although he was a willing and valuable assistant in other matters pertaining to the subject under consideration, he was not sufficiently familiar with some of his preceptor's songs to fully explain them. A few examples of such mnemonic songs are presented in illustration, and for comparison with such as have already been recorded. In each instance the Indian's interpretation of the character is given first, the notes in

brackets being supplied in further explanation. Pl. xxII, A, is reproduced from a birch-bark song; the incised lines are sharp and clear, while the drawing in general is of a superior character. The record is drawn so as to be read from right to left.



PLATE XXII.A. MNEMONIC SONG.



From whence I sit.

[The singer is seated, as the lines indicate contact with the surface beneath, though the latter is not shown. The short line extending from the mouth indicates voice, and probably signifies, in this instance, singing.]



The big tree in the center of the earth.

[It is not known whether or not this relates to the first destruction of the earth, when Mi´nabō´zho escaped by climbing a tree which continued to grow and to protrude above the surface of the flood. One Midē´ thought it related to a particular medicinal tree which was held in estimation beyond all others, and thus represented as the chief of the earth.]



I will float down the fast running stream.

[Strangely enough, progress by water is here designated by footprints instead of using the outline of a canoe. The etymology of the Ojibwa word used in this connection may suggest footprints, as in the Delaware language one word for river signifies "water road," when in

accordance therewith "footprints" would be in perfect harmony with the general idea.]



The place that is feared I inhabit, the swift-running stream I inhabit.

[The circular line above the Midē´ denotes obscurity, i.e., he is hidden from view and represents himself as powerful and terrible to his enemies as the water monster.]

You who speak to me.



I have long horns.



[The Mide likens himself to the water monster, one of the malevolent serpent man idos who antagonize all good, as beliefs and practices of the Mide wiwin.]



A rest or pause.



I, seeing, follow your example.



You see my body, you see my body, you see my nails are worn off in grasping the stone.



[The Bear man'idō is represented as the type now assumed by the Midē'. He has a stone within his grasp, from which magic remedies are extracted.]



You, to whom I am speaking.

[A powerful Man´idō´, the panther, is in an inclosure and to him the Midē´ addresses his request.]

I am swimming—floating—down smoothly.



[The two pairs of serpentine lines indicate the river banks, while the character between them is the Otter, here personated by the Mide'.]



Bars denoting a pause.



I have finished my drum.

[The Mide is shown holding a Mide drum which he is making for use in a ceremony.]

My body is like unto you.



[The mī'gis shell, the symbol of purity and the Mide wiwin.1



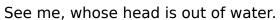
Hear me, you who are talking to me!

[The speaker extends his arms to the right and left indicating persons who are talking to him from their respective places. The lines denoting speech —or hearing—pass through the speaker's head to exclaim as above.1



See what I am taking.

[The Mide has pulled up a medicinal root. This denotes his possessing a wonderful medicine and appears in the order of an advertisement.]





On Pl. xxII, B, is presented an illustration reproduced from a piece of birch bark owned by the preceptor of "Little Frenchman," of the import of which the latter was ignorant. His idea of the signification of the characters is based upon general information which he has received, and not upon any pertaining directly to the record. From general

appearances the song seems to be a private record pertaining to the Ghost Society, the means through which the recorder attained his first degree of the Midē´wiwin, as well as to his abilities, which appear to be boastfully referred to:

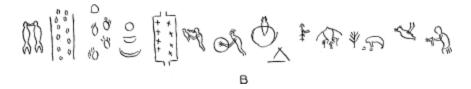


PLATE XXII.B. MNEMONIC SONG.

I am sitting with my pipe.

- G-12

[Midē´ sitting, holding his pipe. He has been called upon to visit a patient, and the filled pipe is handed to him to smoke preparatory to his commencing the ceremony of exorcism.]



I employ the spirit, the spirit of the owl.

[This evidently indicates the Owl Man´idō, which has been referred to in connection with the Red Lake Mide´ chart, Pl. III, No. 113. The Owl man´idō is there represented as passing from the Midē´wigân to the Dzhibai´ Midē´wigân, and the drawings in that record and in this are sufficiently alike to convey the idea that the maker of this song had obtained his suggestion from the old Midē´ chart.]



It stands, that which I am going after.

[The Mide, impersonating the Bear Man, ido, is seeking a medicinal tree of which he has knowledge, and certain parts of which he employs in his profession. The two footprints indicate the direction the animal is taking.]

I, who fly.



[This is the outline of a Thunder bird, who appears to grasp in his talons some medical plants.]

*

Ki´-bi-nan´ pi-zan´. Ki´binan´ is what I use, it flies like an arrow. [The Midē´'s arm is seen grasping a magic arrow, to symbolize the velocity of action of the remedy.]

I am coming to the earth.



[A Man´idō is represented upon a circle, and in the act of descending toward the earth, which is indicated by the horizontal line, upon which is an Indian habitation. The character to denote the sky is usually drawn as a curved line with the convexity above, but in this instance the ends of the lines are continued below, so as to unite and to complete the ring; the intention being, as suggested by several Midē´ priests, to denote great altitude above the earth, i.e., higher than the visible azure sky, which is designated by curved lines only.]

I am feeling for it.



[The Mide is reaching into holes in the earth in search of hidden medicines.]

I am talking to it.



[The Mide is communing with the medicine Man ido with the Mide sack, which he holds in his hand. The voice lines extend from his mouth to the sack, which appears to be made of the skin of an Owl, as before noted in connection with the second character in this song.]

They are sitting round the interior in a row.



[This evidently signifies the Ghost Lodge, as the structure is drawn at right angles to that usually made to represent the Midē´wigân, and also because it seems to be reproduced from the Red

Lake chart already alluded to and figured in Pl. III, No. 112. The spirits or shadows, as the dead are termed, are also indicated by crosses in like manner.]

0])

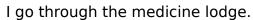
You who are newly hung; you have reached half, and you are now full.

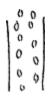
[The allusion is to three phases of the moon, probably having reference to certain periods at which some important ceremonies or events are to occur.]

I am going for my dish.



[The speaker intimates that he is going to make a feast, the dish being shown at the top in the form of a circle; the footprints are directed toward, it and signify, by their shape, that he likens himself to the Bear man'idō, one of the guardians of the Midēwiwin.]





[The footprints within the parallel lines denote his having passed through an unnamed number of degrees. Although the structure is indicated as being erected like the Ghost Lodge, i.e., north and south, it is stated that Midēwiwin is intended. This appears to be an instance of the non-systematic manner of objective ideagraphic delineation.]



Let us commune with one another.

[The speaker is desirous of communing with his favorite man'idōs, with whom he considers himself on an equality, as is indicated by the anthropomorphic form of one between whom and himself the voice lines extend.]

On Figs. 36-39, are reproduced several series of pictographs from birch-bark songs found among the effects of a

deceased Mide priest, at Leech Lake. Reference to other relics belonging to the same collection has been made in connection with effigies and beads employed by Mide in the endeavor to prove the genuineness of their religion and profession. These mnemonic songs were exhibited to many Mide priests from various portions of the Ojibwa country, in the hope of obtaining some satisfactory explanation regarding the import of the several characters; but, although they were pronounced to be "Grand Medicine," no suggestions were offered beyond the merest repetition of the name of the object or what it probably was meant to represent. The direction of their order was mentioned, because in most instances the initial character furnishes the guide. Apart from this, the illustrations are of interest as exhibiting the superior character and cleverness of their execution.

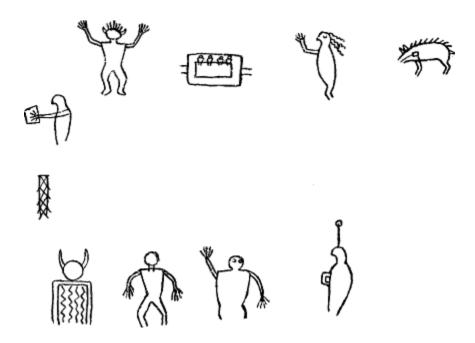


Fig. 36.—Leech Lake Mide' song.

The initial character on <u>Fig. 36</u> appears to be at the right hand upper corner, and represents the Bear Man´idō. The third figure is that of the Midē´wiwin, with four man´idōs within it, probably the guardians of the four degrees. The

owner of the song was a Mide of the second degree, as was stated in connection with his Mide wi-gwas or medicine chart, illustrated on Plate III, C.

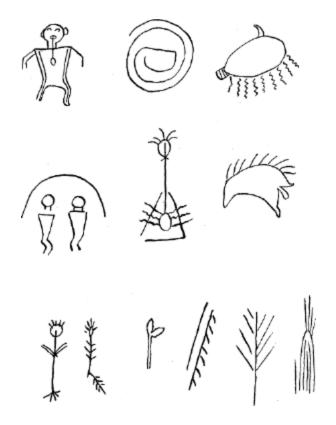


Fig. 37.—Leech Lake Mide song.

Fig. 37 represents what appears to be a mishkiki or medicine song, as is suggested by the figures of plants and roots. It is impossible to state absolutely at which side the initial character is placed, though it would appear that the human figure at the upper left hand corner would be more in accordance with the common custom.

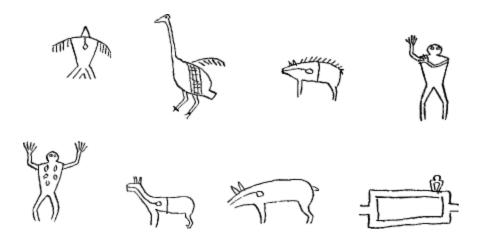


Fig. 38.—Leech Lake Midē´ song.

Fig. 38 seems to pertain to hunting, and may have been recognized as a hunter's chart. According to the belief of several Midē´, it is lead from right to left, the human figure indicating the direction according to the way in which the heads of the crane, bear, etc., are turned. The lower left hand figure of a man has five marks upon the breast, which probably indicate mī´gis spots, to denote the power of magic influence possessed by the recorder.

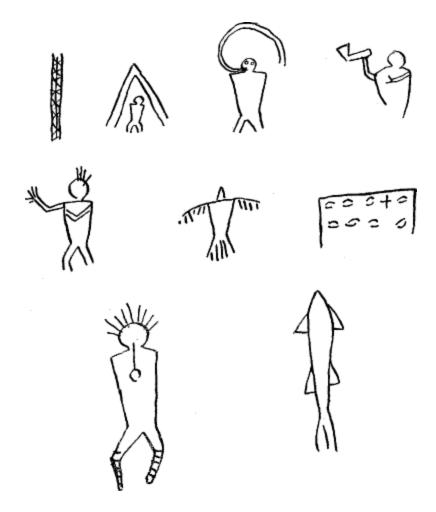


Fig. 39.—Leech Lake Midē' song.

The characters on Fig. 39 are found to be arranged so as to read from the right hand upper corner toward the left, the next line continuing to the right and lastly again to the left, terminating with the figure of a Midē´ with the mī´gis upon his breast. This is interesting on account of the boustrophic system of delineating the figures, and also because such instances are rarely found to occur.

DRESS AND ORNAMENTS.

While it is customary among many tribes of Indians to use as little clothing as possible when engaged in dancing, either of a social or ceremonial nature, the Ojibwa, on the contrary, vie with one another in the attempt to appear in the most costly and gaudy dress attainable. The Ojibwa Midē´ priests, take particular pride in their appearance when attending ceremonies of the Midē´ Society, and seldom fail to impress this fact upon visitors, as some of the Dakotan tribes, who have adopted similar medicine ceremonies after the custom of their Algonkian neighbors, are frequently without any clothing other than the breechcloth and moccasins, and the armlets and other attractive ornaments. This disregard of dress appears, to the Ojibwa, as a sacrilegious digression from the ancient usages, and it frequently excites severe comment.

Apart from facial ornamentation, of such design as may take the actor's fancy, or in accordance with the degree of which the subject may be a member, the Midē´ priests wear shirts, trousers, and moccasins, the first two of which may consist of flannel or cloth and be either plain or ornamented with beads, while the latter are always of buckskin, or, what is more highly prized, moose skin, beaded or worked with colored porcupine quills.





PLATE XXIII. MIDE' DANCING GARTERS.

Immediately below each knee is tied a necessary item of an Ojibwa's dress, a garter, which consists of a band of beads varying in different specimens from 2 to 4 inches in width, and from 18 to 20 inches in length, to each end of which strands of colored wool yarn, 2 feet long, are attached so as to admit of being passed around the leg and tied in a bowknot in front. These garters are made by the women in such patterns as they may be able to design or elaborate. On Pl. xxIII are reproductions of parts of two patterns which are of more than ordinary interest, because of the symbolic signification of the colors and the primitive art design in one, and the substitution of colors and the introduction of modern designs in the other. The upper one consists of green, red, and white beads, the first two colors being in accord with those of one of the degree posts, while the white is symbolical of the mī'gis shell. In the lower illustration is found a substitution of color for the preceding, accounted for by the Mide informants, who explained that neither of the varieties of beads of the particular color desired could be obtained when wanted. The yellow beads are substituted for white, the blue for green, and the orange and pink for red. The design retains the lozenge form, though in a different arrangement, and the introduction of the blue border is adapted after patterns observed among their white neighbors. In the former is presented also what the Ojibwa term the groundwork or type of their original style of ornamentation, i.e., wavy or gently zigzag lines. Later art work consists chiefly of curved lines, and this has gradually become modified through instruction from the Catholic sisters at various early mission establishments until now, when there has been brought about a common system of working upon cloth or velvet, in patterns, consisting of vines, leaves, and flowers, often exceedingly attractive though not aboriginal in the true sense of the word.

Bands of flannel or buckskin, handsomely beaded, are sometimes attached to the sides of the pantaloons, in imitation of an officer's stripes, and around the bottom. Collars are also used, in addition to necklaces of claws, shells, or other objects.

Armlets and bracelets are sometimes made of bands of beadwork, though brass wire or pieces of metal are preferred.

Bags made of cloth, beautifully ornamented or entirely covered with beads, are worn, supported at the side by means of a broad band or baldric passing over the opposite shoulder. The head is decorated with disks of metal and tufts of colored horse hair or moose hair and with eagle feathers to designate the particular exploits performed by the wearer.

Few emblems of personal valor or exploits are now worn, as many of the representatives of the present generation have never been actively engaged in war, so that there is generally found only among the older members the practice of wearing upon the head eagle feathers bearing indications of significant markings or cuttings. A feather which has been split from the tip toward the middle denotes that the wearer was wounded by an arrow. A red spot as large as a silver dime painted upon a feather shows the wearer to have been wounded by a bullet. The privilege of wearing a feather tipped with red flannel or horse hair dyed red is recognized only when the wearer has killed an enemy, and when a great number have been killed in war the so-called war bonnet is worn, and may consist of a number of feathers exceeding the number of persons killed, the idea to be expressed being "a great number," rather than a specific enumeration.

Although the Ojibwa admit that in former times they had many other specific ways of indicating various kinds of personal exploits, they now have little opportunity of gaining such distinction, and consequently the practice has fallen into desuetude.

FUTURE OF THE SOCIETY.

According to a treaty now being made between the United States Government and the Ojibwa Indians, the latter are to relinquish the several areas of land at present occupied by them and to remove to portions of the Red Lake and White Earth Reservations and take lands in severalty. By this treaty about 4,000,000 acres of land will be ceded to the Government, and the members of the various bands will become citizens of the United States, and thus their tribal ties will be broken and their primitive customs and rites be abandoned.

The chief Midē´ priests, being aware of the momentous consequences of such a change in their habits, and foreseeing the impracticability of much longer continuing the ceremonies of so-called "pagan rites," became willing to impart them to me, in order that a complete description

might be made and preserved for the future information of their descendants.

There is scarcely any doubt that these ceremonies will still be secretly held at irregular intervals; but under the watchful care of the national authorities it is doubtful whether they will be performed with any degree of completeness, and it will be but a comparatively short time before the Midē´wiwin will be only a tradition.

Footnotes

- 1. Coll. Minn. Hist. Soc., 1885, vol. 5, p. 130.
- 2. Reproduced from the ninth volume of the New York Colonial Documents, pp. 1054, 1055.
- 3. New Voyages to North America, London, 1703, vol. 2, pp. 47, 48.
- 4. London, 1689, p. 59, et seq.
- 5. Information respecting the history, condition, and prospects of the Indian tribes of the United States. Philadelphia, 1851, vol. 1, p. 319.
- 6. Ibid., p. 362.
- 7. Op. cit., vol. 5, p. 423.
- 8. Op. cit., pp. 65, 66.
- 9. Op. cit., vol. 5, p, 71.
- <u>10.</u> Op. cit., p. 25.
- 11. History of the Ojebway Indians, London [1843(?)], pp. 143,144.
- <u>12.</u> Op. cit., p. 78 et seq.

- 13. Op. cit., p. 81.
- 14. Vol. 1, No. 3, 1888, p. 216, Figs. 2 and 3.
- 15. History of the Ojebway Indians, etc., London (1843?), pp. 145, 146.
- 16. Hist. of the Ojebway Indians. London [1843?], p. 155.

Transcriber's Footnotes:

Α.

The chief priest then says to him, "Ō 'mishga'n"—"get up"—which he does

The backward apostrophe in $\bar{\mathbf{O}}$ 'mishga'n occurs nowhere else in the text; it may be phonetic (glottal stop?) or an error.

В.

Gi´-gi-min´-ĕ-go´-min mi-dē´-wi-wĭn mi-dē´ man´-i-dō´ 'n-gi-gĭn´-o-a-mâk

The apostrophe in 'n-gi-gĭn'-o-a-mâk occurs nowhere else in the text; it may be phonetic (elision?) or an error.

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NOTE ON MIDIFILES

Depending on your browser, the MIDI files accompanying each piece of music may play when clicked, or may need to be downloaded and played in a separate application.

The "files" directory containing the MIDI samples also includes the musical notation in lilypond (.ly) format. These are simplified versions of the music as printed, omitting lyrics and dynamic marks. The meter is as printed, except that most songs marked 6/8 in the printed text were changed to 3/4.

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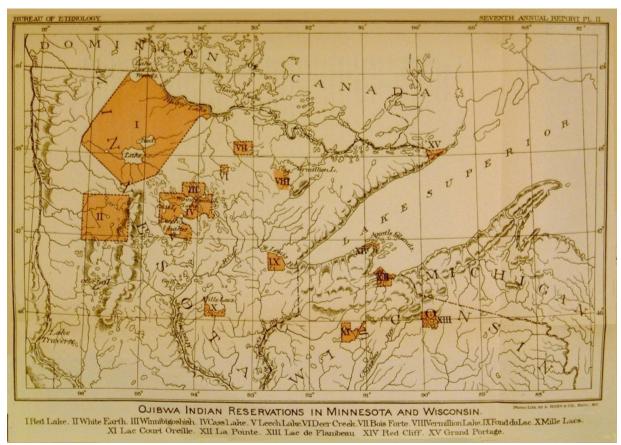
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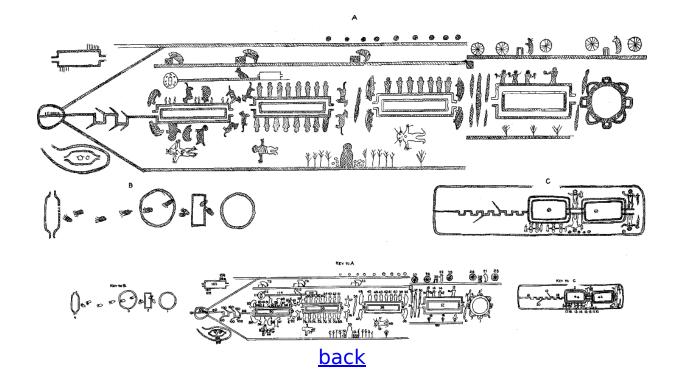
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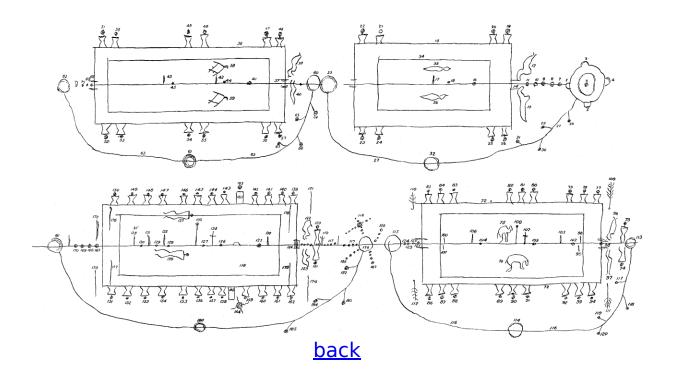
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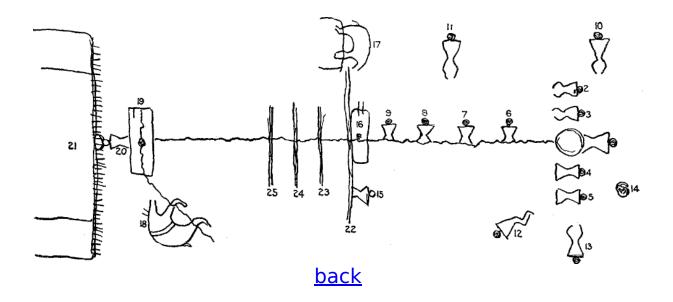
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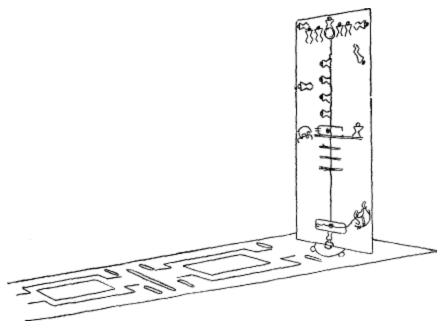


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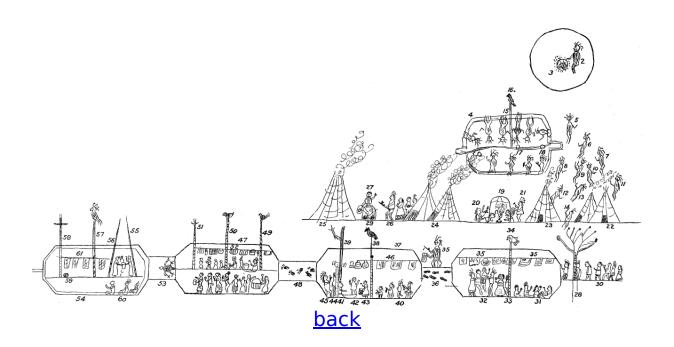








<u>back</u>



Tshing-gwē'-o-dē

The thunder is heavy.

[The Thunder Bird, who causes the rain.]

back

