WOODEN MONUMENTS OF THE NORTHWEST COAST INDIANS.*

CURIOUS TOTEMS AND THEIR MEANING.

BY HARLAN I. SMITH.

On an expedition along the northwest coast of America, between Seattle and Skagway, Mr. Harlan I. Smith of the Department of Anthropology of the American Museum, New York, was able to resume during the past summer the archaeological reconnaissance which he began on the Jesup North Pacific Expeditions of 1897-98-99, and continued on that of the American Museum in 1903. He carried this reconnaissance onward from the northern end of Vancouver Island, where work stopped on the previous expeditions, to Kluckwan, Alaska, some twenty-five miles above Haines on the Chilkat River; obtaining also photographs and many data regarding the ethnology of the region and securing specimens not already represented in the Museum collections. He was accompanied by Mr. Will S. Taylor, mural artist, who made color sketches of the Indians and their natural and artificial environments. These sketches, together with the photographs and the actual ancient costumes and other specimens available in the Museum, will form the basis upon which Mr. Taylor will build up mural

decorations for the Hall of Northwest Coast Ethnology, to illustrate the home country, characteristic

MORTUARY COLUMN, WRANGEL, ALASKA. THE BODIES ARE WITHIN TWO COVERED NICHES IN THE SHAFT

occupations and social customs of the seven great groups of northwest coast natives.

The scientific results of the trip are interesting because the archæology of the entire coast north of Vancouver Island as far as Mount McKinley has been unknown to the scientific world. In the Bella Coola valley about midway along the British Columbia coast Smith saw chipped implements, marking the farthest north of the art of chipping stone in British Columbia. Evidences were also found here of the relation of the early people to those of the interior. Although the Indians have given up much of their old life, he still found many purely native manufactures among them. Pictures bruised on the rocks by some of the ancient Indians were seen near Wrangel. The first stop of any length was at Victoria, a town perhaps more typically English than any other in North America. The Indians here have been little disturbed, so that even near the city both the southern Salish and the Nootka groups may be studied. Among the interesting photographs and sketches made here were one of an Indian making a dugout canoe from a cedar tree, and one of a Nootka man carving a totem pole.

From Victoria the expedition went by steamer to a small island near the northern end of Vancouver Isl-

* Abstracted from articles in the American Museum Journal, February 1910. 1. A visit to the Indian Tribes of the Northwest Coast, by Harlan I. Smith. 2. Results of an Art Trip to the Northwest Coast, by Will S. Taylor.

PAGAN VILLAGE, BELLA COOLA, DESERTED, THE INHABITANTS BRING AWAY AT THE SALMON CANNERIES.

CHILCAT BLANKET (UNFINISHED) AND PATTERN BOARD, KLUCKWAN, ALASKA.

CHINOOK CANOE, NEAR VICTORIA. THE INDIAN IS DIGGING OUT THE INTERIOR WITH AN ADZ. NATIVE CEMETERY, BELLA COOLA. WOODEN REPRESENTATIONS OF "COPPERS" AND CANOES INDICATIVE OF WEALTH AND HOSPITALITY OF THE DECEASED.

TREE-TOP BURIAL, SHOWING INDIAN GRAVES IN TREES, ALERT BAY.

WOODEN MONUMENTS OF THE NORTHWEST COAST INDIANS.

and, where at Alert Bay there is a tribe of the Kwakwaka'wakw. In spite of the influence of several other races living and working in their midst the Indians of Alert Bay in many ways keep to their old methods of living. For instance, although there has been a missionary here for a long time he has not been able to stop burial in tree tops, as shown in the tree-grave illustration. The Indians must have practised this custom very recently, as some of the bodies were doubled up in common cheap trunks which can be bought only in the white man's store and are of a sort not made till a few years since. In the older graves the bodies were placed in boxes made of three pieces of wood split from red cedar. One of the pieces served as the bottom, another as the top, and the third was notched and bent around to form the ends and sides of the box. Where the edges of the boards met they were sewed together with spruce roots. Sometimes the boxes were painted, and occasionally both painted and carved with the characteristic animal pictures of the region.

Some of the Indians bury their dead in the Christian cemetery, but even then show remnants of old customs. Near one of the graves a fine bureau stood in the wind and rain. Perhaps it had been owned and highly regarded by the woman interred or had been something that she had longed for, and now that she was dead her relatives were showing the greatness of their grief by sacrificing a valuable piece of property to the elements. The Indians often erect beside the graves curious monuments such as wooden representations of "coppers," as shown in the engraving. These coppers are pieces of metal of distinctive shape and markings. They are of no great intrinsic value, but when bought and sold among the Indians they increase to almost fabulous worth. When a copper is transferred there is always a gathering and a feast. The Indians value a copper so highly that the white storekeeper takes the piece of metal as credit and advances groceries and drygoods to the Indians for perhaps a whole year until they are able to go to the cannery and earn money. On coming back from the canneries the Indians always redeem their copper securities and again use them, buying and selling them at enhanced values and with special ceremonials.

From Alert Bay the expedition moved northward to Rivers Inlet, where lives another tribe of the Kwakwaka'wakw Indians, and there a photograph was secured of a perfect specimen of totem pole, reproduced herewith.

The expedition next went to Bella Coola, at the extreme eastern end of Burke Channel, about sixty miles inland beyond the usual course of steamers. There is an Indian village on each side of the river. The one to the north consists of Christianized Indians who have settled here, leaving the pagan Indians on the south side. The houses in the Christianized village are similar to those of the white people of the vicinity. Near the pagan village, seen in the engraving, dwell Mr. John Clayton and his family. He is the venerable Hudson's Bay man who keeps the store and is one of the richest and best known men living on the coast of British Columbia north of Vancouver. In the Christianized village are the church and the home of the missionary, the Rev. W. H. Gibson. Both Mr. Gibson and Mr. Clayton were instrumental in assisting the scientists to secure totem poles for the Museum.

The river at this place is fed from the snow peaks farther to the east and is icy cold. It is very swift and navigated only by long canoes dug out of single tree trunks. These canoes are spoon-shaped at each end and are entirely different from the ocean canoes of the coast. They are poled where the river is too swift for paddling. A stranger's best policy is to sit on the bottom of the canoe and leave its management to the Indian owner.

At Bella Coola they found an old man carving spoons out of alder wood and an old woman weaving strips of cedar bark into mats. Indians from the interior come to Bella Coola. They look different from those of the coast, are more active and angular. The costumes of both men and women are slightly different from those of the people of the coast. They wear moccasins, which are not used by the Bella Coola or their neighbors, who spend much of their time in the surf and on the beach.

The longest stay was made at Wrangel, in the country of the Tlingit Indians, where are large numbers of totem poles, carved grave posts and mortuary columns.

Kluckwan is a village of the Tlingit Indians on the old Dalton trail to the Klondyke. Here they saw the Tlingit women making Chilcat blankets. This blanket, as is well known, is one of the most remarkable kinds of weaving done in North America. It is made from cedar bark and mountain goat wool and decorated with woven designs characteristic of the region. In very ancient times the designs were of a geometric character, similar to those of the Tlingit baskets, but the blankets which are seen to-day bear the animal motives common on the carved wooden boxes of these people.

From Kluckwan, Mr. Smith returned to the Mu-

seum, while Mr. Taylor continued his color studies for two distinct series of pictures in mural decorations planned to show Indian industries and Indian

TOTEM POLE OF RIVERS INLET INDIANS.
WOODEN MONUMENTS OF THE NORTHWEST
COAST INDIANS.

ceremonials, by visiting the Haida at Masset on the northern end of Queen Charlotte Island and the Nootka at villages along the western coast of Vancouver Island.

According to prominent writers the typical industry of each tribe serves as a means of commerce and trade among the neighboring tribes, the conditions of the country naturally influencing its products; for example, when the northern Indian is weaving blankets out of mountain goat wool, the southern Indian may be drying clams for the winter's food. Therefore in the first series of paintings the effect will be made to show not only the industries, but also the connections of these industries with those of other tribes. These pictures will present the scenes where the material was procured, how it was prepared, and as far as possible the use of the finished article in trade.

To gather the artistic and scientific data for the first painting of the series, showing the weaving of the Chilcat blanket, search was made through many towns and villages, often in vain, because the weather-beaten and adz-carved boards of the old houses had their original color hidden under white man's paint. In Wrangel, Mr. Taylor made many color notes valuable to his work, and he got the remainder of the subject in the Chilcat River section at Kluckwan, where two old women, seated in their peculiar fashion on their heels, were creating a blanket, stripping the cedar bark for warp, and spinning the wool from the crude wool of the mountain goat.

The Queen Charlotte Islands have long been inhabited by the most skillful builders of canoes, enormous dugouts from cedar trees. An Indian engaged at this work is represented in the accompanying view. Although no canoe was being built while he was there, one six fathoms long had been made the previous winter. The Indians were still interested in it and manifested considerable pride in showing their work. Urged on by their pride, they carefully explained details and in many cases excellently illustrated them, as a result of which dozens of pencil compositions and many local color notes were gained, so that the Haida painting will show graphically the Indians at work carving and steaming the canoe in the midst of characteristic surroundings.

On the way to Nass River they were informed that a native artist lived at Georgetown. To learn that a picture painter, not a mere decorator, existed among these serious-minded peoples who are accustomed to make only abstract designs stimulated their interest. They finally reached the shack of the artist and, watched by a large and curious family, were ushered into his "studio." He exhibited odd bits of broken glass which when held toward the light showed strange drawings in color, sometimes almost caricatures. Yet they held a certain charm, telling tales of legendary battles or of wonderful ceremonials. In spite of the difficulties in the way of his work, the man was a true artist, an eager spirit, in a race where enthusiasm is rare.

Mr. Taylor found that since the traders have taken away from the Indians all the skins and furs, tribal currency has been limited to blankets, though to a large extent it has given place to the money of the United States and Canada. He saw the Kwakwaka'wakw Indian still using blankets for exchange in their potlatches. It must have been no unusual thing in the past to see ornamented natives unload canoes full of blankets, while groups of waiting "financiers" stood in picturesque arrangement before their houses and totem poles. The Tlingit exchanged their Chilcat blankets for Haida canoes. (The making of a Chilcat blanket with an Indian woman at the frame is depicted in the half-tone.) The Haida traded their canoes for the eulachon grease of the Tsimshian. The Bella-Coola who were the bread makers exchanged their bread with neighboring tribes. Thus through all the coast tribes Taylor found a distribution of industrial products going on, and to-day the results of this commerce are evident, for in the extreme south one finds the work of the tribe living farthest north, and *vice versa*.

JACQUARD LOOM IMPROVEMENT.

INTERESTED circles have long been devoting attention to the possibility of weaving without cards, and in still more recent times to the weaving of fancy patterns in various colors by the aid of electricity. Certain inventions have been patented in this connection, and these have now been brought into a practical form. The chief object of the inventions in question has been to avoid the troublesome work in lifting the corresponding pattern cards out of the design frame. After several years' work success has at last been attained, and a machine has been constructed which is able to produce a piece of material bearing a pattern or design taken from an ordinary drawing. As the principle of this invention is such that it can be applied to a very wide field, and as it is also possible to reproduce in woven design photographs of pictures with all their lights and shades, quite a new field for Jacquard weaving will be called into existence. If it also

SCIENTIFIC AMERICAN

SUPPLEMENT. No. 1789

Entered at the Post Office of New York, N. Y., as Second Class Matter.
Copyright, 1910, by Munn & Co., Inc.

Published weekly by Munn & Co., Inc., at 361 Broadway, New York.

Charles Allen Munn, President, 361 Broadway, New York.
Frederick Converse Beach, Sec'y and Treas., 361 Broadway, New York.

Scientific American, established 1845.

Scientific American Supplement, Vol. LXIX., No. 1789.

NEW YORK, APRIL 16, 1910.

Scientific American Supplement, \$5 a year.

Scientific American and Supplement, \$7 a year.

A TOTEM POLE, ALERT BAY, VANCOUVER ISLAND.

WOODEN MONUMENTS OF THE NORTHWEST COAST INDIANS.—[SEE PAGE 248.]