

# DEPARTMENT OF THE INTERIOR

U. S. GEOGRAPHICAL AND GEOLOGICAL SURVEY OF THE ROCKY MOUNTAIN REGION

J. W. POWELL IN CHARGE

# Ethnographic Sketch of

# KLAMATH INDIANS

OF

# SOUTHWESTERN OREGON

BY

# ALBERT SAMUEL GATSCHET

An Extract from CONTRIBUTIONS TO NORTH AMERICAN ETHNOLOGY, Vol. II, part I.



WASHINGTON
GOVERNMENT PRINTING OFFICE
1890

FACSIMILE REPRODUCTION 1966

THE SHOREY BOOK STORE 815 Third Avenue Seattle, Washington 98104

SJS # 118

# ETHNOGRAPHIC SKETCH OF THE KALAMATH INDIANS

FOURTH PRINTING
Of Facsimile Reprint

Limited to 150 Copies November 1973

ISBN # 0-8466-0118-4 (In Paper Covers)

ISBN # 0-8466-2118-5
(In Publisher's Library Bindings)

# CONTENTS

	Page
Letter of Transmittal	.vii
Ethnographic sketch	
Introduction to the texts	1

# LETTER OF TRANSMITTAL.

# SMITHSONIAN INSTITUTION,

BUREAU OF ETHNOLOGY, Washington, D. C., June 25, 1890.

Sir: I have the honor to transmit to you my report upon the Klamath Indians of Southwestern Oregon, the result of long and patient study. It deals with their beliefs, legends, and traditions, their government and social life, their racial and somatic peculiarities, and, more extensively, with their language. To this the reader is introduced by numerous ethnographic "Texts," suggested or dictated by the Indians themselves, and accompanied by an interlinear translation and by "Notes," a method which I regard as the most efficient means of becoming acquainted with any language. In this report I have given prominence to the exposition of the language, because I consider language to be the most important monument of the American Indian. Archæology and ethnography are more apt to acquaint us with facts concerning the aborigines, but language, when properly investigated, gives us the ideas that were moving the Indian's mind, not only recently but long before the historic period.

Repeated and prolonged visits to the people of the northern as well as of the southern chieftaincy have yielded sufficient material to enable me to classify the language of both united tribes as belonging to a distinct family. In their territorial seclusion from the nearer Indian tribes they show anthropologic differences considerable enough to justify us in regarding them as a separate nationality.

There is probably no language spoken in North America possessed of a nominal inflection more developed than the Klamath, although in this particular, in the phonetic elements and in the syllabic reduplication pervading all parts of speech, it shows many analogies with the Sahaptin dialects. The analytic character of the language and its synthetic character balance each other pretty evenly, much as they do in the two classic languages of antiquity.

Concerning the ethnography of both chieftaincies and the mythology of the Modoc Indians, I have gathered more material than could be utilized for the report, and I hope to publish it at a later day as a necessary supplement to what is now embodied in the two parts of the present volume.

Very respectfully, yours,

ALBERT S. GATSCHET.

Hon. J. W. Powell,

Director of the Bureau of Ethnology.

# ETHNOGRAPHIC SKETCH

OF THE

# KLAMATH PEOPLE.

# THE KLAMATH INDIANS OF SOUTHWESTERN OREGON.

# BY ALBERT S. GATSCHET.

# ETHNOGRAPHIC SKETCH OF THE PEOPLE.

# INTRODUCTION.

The Klamath people of North American Indians, the subject of this descriptive sketch, have inhabited from time immemorial a country upon the eastern slope of the Cascade Range, in the southwestern part of the territory now forming the State of Oregon. That territory is surrounded by mountain ridges and by elevations of moderate height, and watered by streams, lakes, marshes, and pond-sources issuing from the volcanic sands covering the soil. The secluded position of these Indians within their mountain fastnesses has at all times sheltered them against the inroads of alien tribes, but it has also withheld from them some of the benefits which only a lively intercourse and trade with other tribes are able to confer. The climate of that upland country is rough and well known for its sudden changes of temperature, which in many places render it unfavorable to agriculture. But the soil is productive in edible roots, bulbs, berries, and timber, the limpid waters are full of fish and fowl, and game was plentiful before the white man's rifle made havoc with it. Thus the country was capable of supplying a considerable number of Indians with food, and they never manifested a desire to migrate or "be removed to a better country."

The topography of these highlands, which contain the headwaters of the Klamath River of California, will be discussed at length after a mention of the scanty literature existing upon this comparatively little explored tract of land.

#### BIBLIOGRAPHY.

The list below contains titles of books and articles upon the two tribes of the Klamath people, which are of scientific interest, whereas others, also mentioned in this list, are of popular interest only. Several of the latter I have never been able to inspect personally. During the Modoc war a large number of articles appeared in the periodical press, expatiating upon the conduct of that war, the innate bravery of the Indian, the cruelty of the white against the red race, and other commonplace topics of this sort. As the majority of these were merely repetitions of facts with which every reader of the political press was then familiar, I did not secure the titles of all of these articles.

#### ARMY AND NAVY JOURNAL:

A weekly periodical published in New York from 1863 to 1880. 4°. During the Modoc war of 1872-1873 many strategic articles appeared in it upon the conduct of that war, composed by a specialist.

#### ATWELL, WILLIAM:

War correspondent of the periodical "Sacramento Record" at the time of the Modoc war. Mentioned in Note to Texts (p. 48).

# BANCROFT, HUBERT HOWE:

- (1) In section: "The Northern Californians" (Vol. I, pp. 326-361) of "Native Races," where the Klamath Lake and Modoc tribes are referred to in connection with other tribes. Notes and literature, pp. 443, 444.
- (2) Remark on the Klamath language; list of numerals. In "Native Races," Vol. III, p. 640. (San Francisco, Cal., 1882. 8°.)

# BLAND, T. A.:

Life of Alfred B. Meacham, together with his lecture, "The tragedy of the lava beds," delivered in Park Street Church, Boston, Mass. Illustrated by seven portraits. Washington, 1883. 8°. 48 pp. (Published by the author.)

# CLARK, W. C.:

Vocabnlary of the Modoc of Southern Oregon. Manuscript, 12 pp. 4°. Collected in 1878 at Yaneks. In the Library of the Bureau of Ethnology.

# CLARKE, WILLIAM J.:

Rock piles and ancient dams in the Klamath Valley. American Antiquarian, 1885, pp. 40, 41. (Refers to the obstructions in the river at Linkville, etc.)

# DRAKE, SAMUEL G.:

The Aboriginal Races of North America, etc. Fifteenth edition. By Professor Williams. New York, 1880. 8°. Appendix: The Modocs and the Modoc War, pp. 707-714.

## FIELDS, CAPTAIN, U. S. ARMY:

The Modoc War. The causes which led to it and the results. Correspondence of the Constitution, Atlanta, Ga., Sundays, October 13 and 20, 1889.

### FRÉMONT, COL. J. C.:

The Exploring Expedition to the Rocky Monntains, Oregon and California, etc. New York and Anburn, 1856. Small 8°. 456 pp. and map. (May, 1842, to Angust, 1844.) Klamath Country of Oregon, pp. 283-294. Snake Indians, p. 297. Summer Lake, p. 290. Abert Lake, p. 292. (Passed only through the eastern part of the country and from Klamath Marsh northward.)

#### GABB. DR. WILLIAM M.:

Vocabulary of the Klamath of Sonthern Oregon. MS. 10 leaves. 4°. 150 words. Collected by means of the Chinook Jargon in 1864. In the Library of the Burean of Ethnology.

### GATSCHET, ALBERT S.:

- (1) Adjectives of color in Indian Languages. In American Naturalist, XIII, pp. 475-485. Philadelphia, 1879.
- (2) The same was, with few changes only, published in German under the heading: "Farbenbenenungen in nordamerikanischen Sprachen." In Zeitschrift für Ethnologie, Vol. XI, Berlin, 1879. The first of the seven languages spoken of is the Klamath of Oregon.
- (3) Sketch of the Klamath language of Sonthern Oregon. In Amer. Autiquarian, I, pp. 81-84. (1878-1879.)
- (4) Mythologic text in the Klamath language of Sonthern Oregon, with translation and comments. *Ibid.*, I, pp. 161-166.
- (5) The numeral adjective in the Klamath language of Southern Oregon. *Ibid.*, II, pp. 210-217. (1879-1880.)
- (6) Volk und Sprache der Maklaks im südwestlichen Oregon. In Globns, illustr. Zeitschrift f. Länder und Völkerkunde, Vol. 35, No. 11, pp. 167-171 und 187-189. 4°. Brannschweig, 1879.
- (7) Three short texts were published in the First Annual Report of the Bureau of Ethnology, Washington, 1831. Imp. 8°. pp. 582-587, with commentaries: Details of a conjurer's practice; The Relapse; Sweat Lodges. (They are also embodied in the author's Report, under "Texts."

# HADLEY, LEWIS F.:

Vocabulary of the Modoc. Manuscript in three blank books, on 34 unpaged leaves. 4°. In the Library of the Bureau of Ethnology.

# HALE, HORATIO:

Ethnography and Philology of the United States Exploring Expedition during the years 1838-1842, under the command of Charles Wilkes, U. S. Navy. This work forms Vol. VI of the report of that expedition, and was published Philadelphia, 1846. 4°. It contains about 190 words of the "Lutnami" or Klamath language, pp. 570-629. The words which Mr. Hale obtained for father, nine, yes, dead show that his informant was a Klamath Lake and not a Modoc Indian.

### JACKSON, WILLIAM HENRY:

Photographs of Klamath Lake and Modoe Indians were taken by him, and the subjects described in his Descriptive Catalogue of the Photographs of the U.S. Geological Survey of the Territories, from 1869 to 1873, inclusive; F. V. Havden in charge. 8°.

# LATHAM, ROBERT G.:

Comparative vocabnlary of the Lutnami, Shasti, Palaik, and Yakon. In "Elements of Comparative Philology," London, 1862, pp. 407-408. Compare with it the list he gives in "Transactions of Philological Society of London," 1856, pp. 74-76.

# MATTHEWS, DR. WASHINGTON:

Notes and Vocabulary of the Modoc. Obtained from Slúlks or George Denny, prisoner at Alcatraz Fort, in the harbor of San Francisco, Cal. Manuscript, pp. 50, fol.

# MEACHAM, A. B.:

- (1) Wigwam and Warpath, or the Royal Chief in Chains, with portraits, etc. Boston, John P. Dale & Co.: second edition, 1875. 8°. 700 pp.
- (2) Winema and her People. Hartford, Conn., Bliss & Co., 1876. 12°. 160 pp.

### MILLER, JOAQUIN:

Life amongst the Modocs: Unwritten History. London, Bentley, 1873. 8°. 400 pp. Also with the title transposed: Unwritten History: Life amongst the Modocs. Illustrated from new designs. Hartford, Conn., Amer. Publishing Co., 1874. 8°. 445 pp.

# MODOGS, THE, AND DEATH OF GENERAL CANBY:

In the "Republic," of Washington, D. C., Vol. I, 118. (1873.)

# MODOC MASSACRE, THE:

In Harper's Monthly, Vol. 47, p. 139. (1873.)

# MÜLLER, DR. FRIEDRICH:

Grandriss der Sprachwissenschaft, Vol. II. (Wien, 1882.) P. 431, the namerals of the "Latami."

# NEWBERRY, J. S., M. D.:

Geology of Pit River and Klamath Basins. In "Report npon Explorations for a Railroad Ronte from the Sacramento Valley to the Columbia River; made by Lient. R. S. Williamson." Washington, 1855, Vol. VI, Part II, pp. 34-39.

# NEW YORK HERALD, THE:

J. G. Bennett, the proprietor of this daily paper, had dispatched a special correspondent to the seat of the Modoc war, who sent home many long and graphic accounts, which were published in the Herald, accompanied by maps.

# POWERS, STEPHEN:

- (1) Vocabulary of the Modoc Language. Mannscript, 1 fol. sheet, 31 words. In Library of Bureau of Ethnology.
- (2) The Modok. Forms Chapter XXVII of his "Tribes of California," printed in J. W. Powell's Contributions to North American Ethnology. Washington, 1877. Quarto. Vol. III, pp. 252-266; numerals also on p. 45.

(3) The Modocs. Forms No. 8 of a serial of Powers's articles: "The Californian Indians" (1872–1874), and is contained in the Overland Monthly, San Francisco, Carmany & Co., 1873, June number, pp. 535–545. With a myth, "The woman of stone" (at Nilakshi mountain).

# RUSSELL, ISRAEL C.:

A Geological Reconnaissance in Southern Oregon. In Powell's Fourth Annual Report of U.S. Geological Survey, Washington, 1884. Imper. octavo; pp. 433 to 464, with maps and illustrations. This article has furnished several data to my "Ethnographic Sketch."

# SHASTAS, THE, AND THEIR NEIGHBORS. 1874:

A manuscript in the possession of Mr. H. H. Bancroft, San Francisco. TURNER, W. M.:

Scraps of Modoc History. In Overland Monthly of San Francisco, Vol. XI, 21-25. (1873.)

# VICTOR, MRS. FRANCES FULLER (of Salem, Oregon):

- (1) History of the Modoc War. In manuscript.
- (2) Indians of Oregon. In Overland Monthly of San Francisco, Vol. VII, 344-352, especially p. 348. (1871.)
- (3) All over Washington and Oregon. San Francisco, 1872.

# WILLIAMSON, LIEUT. R. S., and CROOK, LIEUT. GEORGE H.:

Vocabulary of the Klamath Language. In Reports of Explorations, Vol. VI, Part 1, pp. 71-72, Washington, 1857. 4°.

# GEOGRAPHY OF THE KLAMATH HIGHLANDS.

The first part in the historical and social study of a tribe or nation must be a thorough examination of the country and of the climate (in the widest sense of this term) in which it has grown up, for these two agencies give character to peoples, races, languages, institutions, and laws. This principle applies equally to the cultured and to the ruder or less developed populations of the globe, for none of them can possibly hold itself aloof from the agencies of nature, whether acting in a sudden manner or gradually, like the influences of climate. The races inhabiting coasts, islands, peninsulas, jungles, plains, prairies, woodlands, foot-hills, mountains, and valleys differ one from another in having distinguishing characteristic types indelibly impressed upon their countenances by their different environments. That upland and mountaineer tribes have made very different records from those of nations raised in plains, lowlands, on coasts and islands is a fact of which history gives us many well-authenticated instances.

# THE HOME OF THE PEOPLE.

The home of the Klamath tribe of southwestern Oregon lies upon the eastern slope of the southern extremity of the Cascade Range, and very nearly coincides with what we may call the headwaters of the Klamath River, the main course of which lies in Northern California. Its limits are outlined in a general manner in the first paragraph of the treaty concluded between the Federal Government and the Indians, dated October 14, 1864, which runs as follows: "The Indians cede all the country included between the water-shed of the Cascade Mountains to the mountains dividing Pit and McCloud Rivers from the waters on the north; thence along this water-shed eastwards to the southern end of Goose Lake; thence northeast to the southern end of Harney Lake;\* thence due north to the forty-fourth degree of latitude; thence west along this same degree to Cascade Range." It must be remarked that the homes and hunting-grounds of two "bands" of the Snake Indians were included within these limits, for these people were also made participants to the treaty.

Here, as with all other Indian tribes, the territory claimed must be divided into two parts, the districts inclosing their habitual dwelling-places and those embodying their hunting and fishing grounds, the latter being of course much larger than the former and inclosing them. The habitual haunts and dwelling-places of the tribes were on the two Klamath Lakes, on Klamath Marsh, on Tule Lake, and on Lost River. Some of these localities are inclosed within the Klamath Reservation, of which we will speak below.

The Cascade Range is a high mountain ridge following a general direction from north to south, with some deflections of its main axis. The line of perpetual snow is at least 10,000 feet above the sea-level, and the altitude of the highest peaks about 12,000 to 14,000 feet. On the west side the sloping is more gradual than on the east side, where abrupt precipices and steep slopes border the Klamath highlands and the valley of Des Chutes River. The range is the result of upheaval and enormous volcanic

<sup>\*</sup> Harney Lake is the western portion of Malheur Lake, and now united with it into a single sheet of water.

eruption, the series of the principal peaks, as the Three Sisters, Mount Jefferson, and Mount Hood, marking the general direction of the ridge.

The formation consists of a dark and hard basaltic and andesitic lava, which also forms numerous extinct volcanic cones and basins lying on the east side of the range (Mount Scott, Crater Lake, craters in Sprague River valley, etc.). This formation underlies the whole of the Klamath River headwaters, but stratified deposits cover it at many places, consisting of sandstone, infusorial marls, volcanic ashes, pumice-stone, etc. Prof J. S Newberry\* describes this volcanic rock as "a dark vesicular trap".

East of the basin of the Klamath Lakes and south of the Columbia River water-shed lies an extensive territory extending to the east towards Owyhee River, and having its largest area in Nevada and Utah. It has been called the Great Basin of the Interior, and has an average altitude of 5,000 feet. The numerous fault-fissures intersecting it from north to south form its principal geologic feature. In the Quaternary period long and narrow lakes marked those faults on the obverse side of their dip; and even now, when evaporation has left these depressions almost dry, small bodies of water mark the site of the fissures even where erosion has obliterated most traces of a fracture of the earth's crust. The most conspicuous of these fissures in the basaltic formations are in Oregon, northern California and Nevada: the valley of Quinn River, Alvord Valley with Pueblo Valley, Guano Valley, Warner Lake with Long and Surprise Valley, Abert, Summer, and Silver Lake Valley. A geologic reconnaissance of the country west of this northwestern portion of the Great Basin, the central parts of which were once filled by the Quaternary Lake Lahontan, with its enormous drainage basin, would probably prove a similar origin for the two Klamath Lakes with Klamath Marsh, and for Goose Lake Valley.

These two secondary basins lie nearest the base of the great mountain wall of the Cascade Range, and therefore receive a larger share of the rain precipitated upon it than the more distant ones. The supply of water received during the year being thus larger than the annual evaporation, the excess flows off in the streams which drain the basin. There is much analogy between the basin of the Klamath Lakes and that of Pit River;

Pacific Railroad Reports, 1854-'55, vol. 6, part 2, pp. 34-39.

both form elongated troughs, and the waters escaping from them reach the lowlands through deep cuts in the resistant material. The difference lies only in this, that the drainage of the Klamath headwater basin has been less complete than that of the Sacramento and upper Pit River; and large portions of its surface are still occupied by bodies of water.

The lakes which show the location of longitudinal faults are the more shallow the more distant they are from the Cascade Range, and those which possess no visible outlet necessarily contain brackish water, as the alkaline materials in them are not removed by evaporation. It is a noticeable fact that those lakes which were nearest the seats and haunts of the Klamath Indians are all disposed in one large circle: Klamath Marsh, Upper and Lower Klamath Lakes, Rhett or Tule Lake, Clear or Wright Lake, Goose Lake, Abert Lake, Summer Lake, Silver Lake with Pauline Marsh. Besides this several other depressions now filled with marshes and alkali flats show the existence of former water-basins.

# 'TOPOGRAPHIC NOTES.

The most prominent object of nature visible from the level parts of the Klamath Reservation is the Cascade Range with its lofty peaks. Seen from the east shore of Upper Klamath Lake, it occupies nearly one hundred and fifty degrees of the horizon. Though Shasta Butte, visible on the far south, does not properly belong to it, the ridge rises to high altitudes not very far from there, reaching its maximum height in the regular pyramid forming This pyramid is wooded on its slopes, and hides several mount-Mount Pitt. ain lakes-Lake of the Woods, Buck Lake, and Aspen Lake-on its southeastern base. Following in a northern direction are Union Peak, Mount Scott, and Mount Thielsen, with many elevations of minor size. At the southwestern foot of Mount Scott lies a considerable lake basin about twenty miles in circumference, and at some places two thousand feet below its rim. The water being of the same depth, this "Crater Lake" has been pointed out as probably the deepest lake basin in the world (1,996 feet by one sounding), and it also fills the largest volcanic crater known. At its southwestern end a conical island emerges from its brackish waters, which is formed of scoriæ—proof that it was once an eruption crater. The altitude of the

water's surface was found to be 6,300 feet; and this remarkable lake is but a short distance south of the forty-third degree of latitude. Capt. C. E. Dutton, of the U. S. Geological Survey, has made an examination of the lake and its surroundings, and gave a short sketch of it in the weekly "Science" of New York, February 26, 1886, from which an extract was published in the "Ausland" of Stuttgart, 1887, pp. 174, 175.

On the west side of Mount Scott and Crater Lake rise the headwaters of the North Fork of Rogue River, which run down the western slope, and a narrow trail crosses the ridge south of the elevation. Northeast of it and west of Walker's Range lies a vast level plain strewed with pulverized pumice-stone, and forming the water-shed between the affluents of the Klamath and those of Des Chutes River, a large tributary of the Columbia.

Upper Klamath Lake, with its beautiful and varied Alpine scenery, verdant slopes, blue waters, and winding shores, is one of the most attractive sights upon the reservation. Its principal feeder is Williamson River, a water-course rising about thirty miles northeast of its mouth. After passing through Klamath Marsh it pursues its winding course south through a cañon of precipitous hills, six miles in length; then reaches a wide, fertile valley, joins Sprague River coming from Yáneks and the east, and after a course of about sixty miles empties its volume of water into Upper Klamath Lake near its northern end. The elevation of this lake was found to be about eighty feet higher than that of Little Klamath Lake, which is 4,175 feet. Wood River, with its affluent, Crooked River, is another noteworthy feeder of the lake, whose shores are partly marshy, partly bordered by prairies and mountains. The lake is embellished by a number of pretty little islands, is twenty-five miles long in an air-line, and varies between three and seven miles in width. On the eastern shores the waters are more shallow than on the western.

The waters of the lake first empty themselves through Link River (I-ulalóna), and after a mile's course fall over a rocky ledge at the town of Linkville. From there onward the stream takes the name of Klamath River. Passing through a marsh, it receives the waters of Little Klamath Lake, then winds its circuitous way towards the Pacific Ocean through a hilly and wooded country, canons, and rapids, innavigable for craft of any

considerable size.\* Hot springs of sulphuric taste flow westward east of Linkville, one of them showing a temperature of 190° Fahr.

The Klamath Reservation is studded with a large number of isolated and short volcanic hill ridges, with a general direction from northwest to southeast. South of Klamath Marsh there are elevations culminating at 5,650 and 6,000 feet, and in Fuego Mountain 7,020 feet are attained. Yámsi Peak, between Klamath Marsh and Sykan Marsh (5,170 feet) reaches an altitude of not less than 8,242 feet, thus rivaling many peaks of the Cascade Range. The Black Hills, south of Sykan (Saikéni) Marsh, rise to 6,410 feet, but are surpassed by several elevations south of Sprague River, near the middle course of which the Yáneks Agency (4,450 feet) is situated. Sprague River (P'laíkni kóke), the most considerable tributary of Williamson River, drains a valley rich in productive bottoms and in timber.

The basaltic ridge, which forms a spur of the Cascade Range and passes east of Fort Klamath (I-ukák), slopes down very abruptly toward the Quaternary lake basin, now forming a low marshy prairie and watered by Wood River (E-ukalkshíni kóke), which enters upper Klamath Lake near Koháshti and by Seven Mile Creek, nearer the Cascade Range. This basaltic spur, called Yanalti by the Indians, represents the eastern side of a huge faultfissure. Its altitude constantly decreases until it is crossed by a rivulet oneeighth of a mile long, called Beetle's Rest (Tgulutcham Kshute'lsh), which issues from a pond, drives a mill, and then joins Crooked River (Yánalti kóke, or Tutashtalíksini kóke). This beautiful spring and stream were selected by the Government as the site for the Klamath Agency buildings. The old agency at Koháshti (Guhuáshkshi or "Starting-place") on the lake, three miles south, was abandoned, and a subagency established at Yáneks. The agency buildings are hidden in a grove of lofty pine trees. South of these the ridge rises again and culminates in an elevation, called Pitsua (4,680 feet). The junction of Sprague and Williamson Rivers is marked by a rock called Ktái-Tupákshi, and described in Dictionary, page 149, as of mythic fame. South of Sprague River the ledge rises again, and, approaching close to the lake shore, forms Modoc Point, a bold head-

<sup>•</sup> I have not been able to visit personally other parts of the Klamath highlands than the eastern shore of Upper Klamath Lake, from Fort Klamath to Linkville.

land, which culminates in an elevation east of it, measuring 6,650 feet, in Nílaks Mountain (Nílakshi, "Daybreak"), on the lake shore, and in Swan Lake Point (7,200 feet), about eight miles from Klamath Lake. A deep depression south of this height is Swan Lake Valley (4,270 feet), and a high hill north of the two, near Sprague River, is called Saddle Mountain (6,976 feet). Yáneks Butte, with a summit of 7,277 feet, lies midway between the headwaters of Sprague River and the Lost River Valley. A long and steep ridge, called the Plum Hills, rises between Nílaks and the town of Linkville.

We now arrive at what is called the "Old Modoc Country." The main seat of the Modoc people was the valley of Lost River, the shores of Tule and of Little Klamath Lake. Lost River follows a winding course about as long as that of Williamson River, but lies in a more genial climate. The soil is formed of sandstone interstratified with infusorial marls. Nushaltkága is one of its northern side valleys. At the Natural Bridge (Tilhuántko) these strata have been upheaved by a fault, so that Lost River passes underneath. The sandstone is of volcanic origin, and contains pumice and black scoria in rounded masses, often of the size of an egg. The largest part of Tule Lake, also called Rhett Lake and Modoc Lake (Móatak, Móatokni é-ush), lies within the boundaries of California. It is drained by evaporation only, has extinct craters on its shores, and the celebrated Lava Beds, long inhabited by the Kómbatwash Indians, lie on its southern end.

Clear Lake, also called Wright Lake (by the Modocs, Tchápszo), is a crater basin, with the water surface lying considerably below the surrounding country. Its outlet is a tributary of Lost River, but is filled with water in the cooler season only. Little or Lower Klamath Lake (Aká-ushkni é-ush) is fed by Cottonwood Creek, and on its southern side had several Indian settlements, like Agáwesh. It has an altitude of 4,175 feet, and belongs to the drainage basin of Klamath River. South of these lakes there are considerable volcanic formations, which, however, lie beyond the pale of our descriptive sketch.

Peculiar to this volcanic tract is the frequent phenomenon of the pond sources (wélwash, nushaltkága). These sources are voluminous springs of limpid water, which issue from the ground at the border of the ponds with

a strong bubbling motion, without any indication of other springs in the vicinity. They are met with in soil formed of volcanic sands and detritus, have a rounded shape with steep borders, and form the principal feeders of the streams into which they empty. Ponds like these mainly occur in wooded spots. Some of them have a diameter of one hundred feet and more, and are populated by fish and amphibians of all kinds.

The lake region east of the Reservation was often visited in the hunting and fishing season by the Klamath Lake, Modoc, and especially by the Snake Indians Goose Lake was one of the principal resorts of the Snake and the Pit River Indians; and even now the numerous rivulets flowing into it make its shores desirable to American stockmen and settlers. Warner (or Christmas) Lake, fully thirty-five miles in length, was once enlivened by the troops camping at Fort Warner, on the eastern side.\* Chewaukan Marsh (Tchuaxē'ni) has its name from the tchuá or "water potato", the fruit of Sagittaria, and is by its outlet connected with Abert Lake.

The Indians of the Reservation annually repair about the month of June to Klumth Marsh (É ukshi) to fish hunt, and guther berries and wókash or pond-lily seed, which is one of their staple foods. Its surface is somewhat less than that of Upper Klamath Luke. Its shores are high on the southeastern, low and marshy on the northwestern side. Water appears at single places only, insufficient to warrant the marsh being called, as it often is, a lake.

The Oregonian portions of the country described belong politically to Klamath and to Lake Counties, the county seats of which are Linkville and Lakeview, on the northern end of Goose Lake. The latter place also contains a United States land office.

#### FLORA AND FAUNA.

Vegetation usually gives a characteristic stamp to a country, but in arid districts, as those of the Klamath highlands, it is rather the geological features which leave an impress on our minds The further we recede from

<sup>•</sup> Goose and Warner Lakes are described in Lieutenant Wheeler's Report, Annual Report of Chief of Engineers, 1878 8°. Appendix N N, pp. 113-120. Goose Lake, by Stephen Powers, in "A Pony Ride on Pit River," Overland Monthly of San Francisco, October, 1874, pp. 342-351.

the Cascade Range and its more humid atmosphere the less vegetation is developed. The lake shores and river banks, when not marshy, produce the cottonwood tree and several species of willows, and the hills are covered with the yellow or pitch pine and the less frequent western cedar. In the western parts of the Reservation large tracts are timbered with pitch pine, which seems to thrive exceedingly well upon the volcanic sands and detritus of the hilly region. These pines (kō'sh) are about one hundred feet in height, have a brownish-yellow, very coarse bark, and branch out into limbs at a considerable height above the ground. They stand at intervals of twenty to fifty feet from each other, and are free from manzanita bushes and other undergrowth except at the border of the forest, leaving plenty of space for the passage of wagons almost everywhere. A smaller pine species, Pinus contorta (kápka, in Modoc kúga), which forms denser thickets near the water, is peeled by the Indians to a height of twenty feet when the sap is ascending, in the spring of the year, to use the fiber-bark for food. Up high in the Cascade Range, in the midst of yellow pines, grows a conifera of taller dimensions, the sugar-pine (ktéleam kō'sh). The hemlock or white pine (wā'ko), the juniper (ktā'lo), and the mountain mahogany (yúkmalam) are found in and south of Sprague River Valley.

The lake shores and river banks produce more edible fruits and berries than the marshy tracts; and it is the shores of Klamath and Tule Lakes which mainly supply the Indian with the tule reed and scirpus, from which the women manufacture mats, lodge-roofs, and basketry. The largest tule species (má-i) grows in the water to a height of ten feet and over, and in the lower end of its cane furnishes a juicy and delicate bit of food. Woods, river sides, and such marshes as Klamath Marsh, are skirted by various kinds of bushes, supplying berries in large quantities. The edible bulbs, as camass, kō'l, l'bá, ipo, and others, are found in the prairies adjacent. Pond-lilies grow in profusion on lake shores and in the larger marshes, especially on the Wókash Marsh west of Linkville, and on Klamath Marsh, as previously mentioned. The Lost River Valley is more productive in many of these spontaneous growths than the tracts within the Reservation.

It is claimed by the Klamath Lake Indians that they employ no drugs of vegetal origin for the cure of diseases, because their country is too cold

to produce them. This is true to a certain extent; but as there are so many plants growing there that narcotize the fish, how is it that the country produces no medical plants for the cure of men's diseases? Of the plant shlē'dsh, at least, they prepare a drink as a sort of tea.

The fauna of the Klamath uplands appears to be richer in species than the vegetal growth. What first strikes the traveler's attention on the eastern shore of the Upper Lake is the prodigious number of burrows along the sandy road, especially in the timber, varying in size from a few inches to a foot in diameter. They are made by chipmunks of two species, and others are the dens of badgers, or of the blue and the more common brown squirrel. The covote or prairie-wolf makes burrows also, but this animal has lately become scarce. No game is so frequent as the deer. This is either the black-tail deer, (shuá-i, Cervus columbianus), or the white tail deer (múshmush, Cariacus virginianus macrurus), or the mule-deer (pakólesh, Cervus macrotis). Less frequent is the antelope (tché-u, Antilocapra americana), and most other four legged game must be sought for now upon distant heights or in the deeper cañons, as the elk (vún), the bear in his three varieties (black, cinnamon, and grizzly; witä'm, náka, lû'k), the lynx (shlóa), the gray wolf (kä'-utchish), the silver or red fox (wán), the little gray fox (kétchkatch), the cougar (táslatch), and the mountain sheep (kó-il). Beavers, otters, minks, and woodchucks are trapped by expert Indians on the rivers, ponds, and brooklets of the interior.

The shores of the water-basins are enlivened by innumerable swarms of water-fowls, (mä'mäkli), as ducks, geese, herons, and cranes. Some can be seen day by day swimming about gracefully or fishing at Modoc Point (Nílakshi) and other promontories, while others venture up the river courses and fly over swampy tracts extending far inland. Among the ducks the more common are the mallard (wē'ks), the long-necked kílidshiks; among the geese, the brant (lálak) and the white goose (waíwash). Other water-birds are the white swan (kúsh), the coot or mudhen (túhush), the loon (táplal), the pelican (yámal or kúmal), and the pinguin (kuítsia). Fish-hawks and bald-headed eagles (yaúxal) are circling about in the air to catch the fish which are approaching the water's surface unaware of danger. Marsh-hawks and other raptores infest the marshes and are lurking there

for small game, as field-mice, or for sedge-hens and smaller birds. The largest bird of the country, the golden eagle, or Californian condor (p'laí-wash), has become scarce. Blackbirds exist in large numbers, and are very destructive to the crops throughout Oregon. Other birds existing in several species are the owl, lark, woodpecker, and the pigeon. Migratory birds, as the humming-birds and mocking-birds, visit the Klamath uplands, especially the Lost River Valley, and stop there till winter.

The species of fish found in the country are the mountain trout, the salmon, and several species of suckers. Of the snake family the more frequent species are the garter-snake (wíshink), the black-snake (wáměnigsh), and the rattlesnake (ké-ish, kī'sh). Crickets and grasshoppers are roasted and eaten by the Indians, also the chrysalis of a moth (púlzuantch).

#### THE ASPECTS OF THE COUNTRY.

Elle est riante ainsi que l'Italie, Terrible ainsi que les rives du Nord.

The Klamath plateau presents very different aspects and produces very different impressions, according to the observer's condition and the character of the localities he enters or beholds. Travelers coming over the monotonous rocky or alkaline plains extending between Mallieur Lake and the Reservation are gladdened at the sight of rivulets and springs, imparting a fresher verdure to the unproductive soil, and greet with welcome the pineries which they behold at a distance. Feelings of the same kind penetrate the hearts of those who enter the highlands from the Pit River country of California when they come to the well-watered plains of Lost River after crossing the desolate lava formations lying between. The scenery can be called grand only there, where the towering ridge of the Cascade Mountains and the shining mirrors of the lakes at their feet confront the visitor, surprised to see in both a reproduction of Alpine landscapes in the extreme West of America.\* The alternation of jagged and angular outlines with long level ridges on the horizon suggests, and the peculiar lava color retained by

<sup>•</sup> The large pyramidal cone of Mount Pitt is a rather accurate duplicate of the celebrated Niesen Peak in the Bernese Oberland, Switzerland, as seen from its northern and eastern side.

the highest peaks confirm the eruptive origin of these mountains. The pure azure sky and the perpetual silence of nature reigning in these uplands add impressions of grandeur which it is impossible to describe. The sense of the beautiful has no gratification in the austere forms of these mountains, but the blue and limpid waters of the lakes, their numerous islands, and the lovely green of the shores, delight it in the highest degree.

The other eminences perceptible on the horizon lack the boldness of outline seen upon the main ridge, and with their dusky timbers deeply contrast with it. They seem monotonous and commonplace, and people easily impressed by colors will call them somber. The open country, whether marshes, plains, clearings, meadows, or bare hills, presents an extremely bleak aspect, especially when under the influence of a hot summer sun. Its unvarying yellowish hue, produced by the faded condition of the coarse grasses, renders it monotonous.

The solitude and serenity of these places exercise a quieting influence upon the visitor accustomed to the noisy scenes of our towns and cities. Noiselessly the brooks and streams pursue their way through the purifying volcanic sands; the murmur of the waves and the play of the water-birds, interrupted at times by the cry of a solitary bird, are the only noises to break the silence. Beyond the few settlements of the Indian and away from the post-road, scarcely any trace of the hand of man reminds us of the existence of human beings. There Nature alone speaks to us, and those who are able to read history in the formations disclosed before him in the steeper ledges of this solitary corner of the globe will find ample satisfaction in their study.

The Klamath plateau, though productive in game, fish, and sundry kinds of vegetable food, could never become such a great central resort of Indian populations as the banks of Columbia River. The causes for this lie in its secluded position and chiefly in its climate, which is one of abrupt changes. The dryness of the atmosphere maintains a clear sky, which renders the summer days intensely hot; the sun's rays become intolerable in the middle of the day at places where they are reflected by a sandy, alkaline, or rocky soil and not moderated by passing breezes. Rains and hailstorms are of rare occurrence, and gathering thunder clouds often dissolve or "blow

over," so that the running waters never swell, but show the same water level throughout the year. Nights are chilly and really cold, for the soil reflects against the clear sky all the heat received from the sun during the day, and the dry night air pervading the highlands absorbs all the moisture it can. Winters are severe; snow begins to fall early in November, and in the later months it often covers the ground four feet high, so that the willow lodges (not the winter houses) completely disappear, and the inmates are thus sheltered from the cold outside. The lakes never freeze over entirely, but ice forms to a great thickness. The cold nights produce frosts which are very destructive to crops in the vicinity of the Cascade Range, but are less harmful to gardening or cereals at places more distant; and in Lost River Valley, at Yáneks—even at Linkville—melons, turnips, potatoes, and other vegetables rarely fail. The mean annual temperature as observed some years ago at Fort Klamath was 40.47° Fabr.

There are several instances in America where highlands have become centers of an aboriginal culture. Such instances are the plateaus of Anahuac, Guatemala, Bogotá, and of Titicaca Lake. They contained a dense population, more cultured than their barbaric neighbors, whom they succeeded in subjugating one after the other through a greater centralization and unity of power. The Klamath highlands can be compared to the plateaus above named in regard to their configuration, but they never nourished a population so dense that it could exercise any power analogous to that above mentioned. Moreover, there was no intellectual and centralizing element among these Indians that could render them superior to their neighbors, all of whom maintained about the same level of culture and intelligence

# TOPOGRAPHIC LIST OF CAMPING PLACES.

To form a correct idea of the dissemination of Indians in this sparsely inhabited country, the following lists of camping places will furnish serviceable data. The grounds selected by the Máklaks for camping places are of two kinds: either localities adapted for establishing a fishing or hunting camp of a few days' or weeks' duration or for a whole summer season, or they are places selected for permanent settlement. Winter lodges (luldamaláksh) or slab houses are often built at the latter places; whereas the

transitory camps are marked by frail willow lodges (látchash, stinā'sh) or other light structures. Indian camps are as a rule located near rivers, brooks, marshes, springs, or lakes. Hunters generally erect their lodges in convenient places to overlook a considerable extent of territory.

In the lists below the order in which the localities are mentioned indicates the direction in which they follow each other. I obtained them from the two interpreters of the reservation, Dave Hill and Charles Preston; and as regards the old Modoc country, from Jennie Lovwer, a Modoc girl living in the Indian Territory, who remembered these places from her youth. The grammatic analysis of the local names will in many instances be found in the Dictionary.

#### CAMPING PLACES ON KLAMATH MARSH.

The permanent dwellings upon this marsh have all been abandoned; but the Modocs and Klamath Lakes, together with some Snake Indians from Sprague River, resort there annually, when the pond-lily seed and the berries ripen, for a period of about six weeks. Its shores were permanently inhabited in 1853, when visited by the United States exploration party under Lieutenants Williamson and Abbott, and even later. Dave Hill's list below follows the localities in their topographic order from northeast to southwest and along the southeastern elevated shore of the marsh, which at some places can be crossed on foot. A few rocky elevations exist also on the northeast end of the marsh.

Katā'gsi "stumpy bushes."

Tāktaklishkshi "reddish spot."

Yaúkĕlain Láshi "eagle wing."

Yásh=Lamā'ds "projecting willow."

Spúklish Láwish "sweat lodge on promontory."

Mbākualsi "at the withered tree."

Kmutchuyāksi "at the old man's rock;"

a man-shaped rock formation near the open waters of the marsh and visible at some distance.

Lalawasχē'ni "slaty rock."

Taktχísh "cricket noise."

Tsásam Péwas "skunk's dive."

Ktaí=Wasi "rocky hollow."

Snálszěni "at the rock-pile."

Lúlpakat "chalk quarry."

Kapgā'ksi "dwarf-pine thicket."

Wáptaszäni "water moving through ponds perceptibly."

Tchókeam Psísh "pumice-stone nose."

Káksi "raven's nest."

Iwal "land's end."

Luyánsti "within the circle."

Yuúkělam Snólash "eagle nest."

Tchíkas=Walákish "bird-watch;" secreted spot where hunters watch their feathered game.

Tnílkat "at the small rail pyramid."

Awaluashzě'ni "at the island."

Tχalamgiplis "back away from the west;" probably referring to a turn of the shoreline.

Wák-Talíksi "white pine on water-line."
Wíshinkam Tinnash "drowned snake;"
place where a garter snake was found
drowned in the open waters of the
marsh.

Lgû'm--Ä-nshi "coal lake," with waters looking as black as coal.

Sumde "at the month or outlet."

Núsksi "skull-place;" a human skull was once found there. This is one of the spots where the natives submerge their dug-out canoes in the mnd or sand at the bottom of the lake for the wintry season.

Some of the above places near the outlet are also mentioned in Pete's Text on the "Seasons of the Year," and the following additional may be inserted here from it (74, 15-17):

Lēmé-isham Nutē'ks "impression of thnn-derbolt."

Lál'lāks "steep little eminence."

Stópalsh-tamā'ds "peeled pine standing alone."

Kák-Ksháwaliäksh "raven on the pole."

#### CAMPS ALONG WILLIAMSON RIVER.

In this list Dave Hill enumerated old camps and present locations of lodges (1877) on both sides of Williamson River, from the lower end of Klamath Marsh (4,547 feet) to Upper Klamath Lake. The river runs for six miles or more through a ravine about two hundred feet deep, and the road follows it on the east side, leading over the hills. The wigwams are built in proximity to the river course. At its outlet Williamson River forms a delta, projecting far out into the lake, and filled with bulrushes.\*

Kakagō'si "at the ford."

Samka-ushχä'ni "cliffs in the river;" a fishing place.

Yale-alant "clear waters."

Tánua Lntílsh "flatrocks under the water."

<u>K</u>ä'k-Taliksh, or <u>K</u>ä'k-Talish "twin rocky

pillars."

Awalokáksaksi "at the little island."

Mbúshaksham Wā'sh "where obsidian is found."

Txálmakstant (snpply: Ktái-Tupáksi) "on the west side of (Standing Rock)."

Tchpiuóksaksi "at the graveyard;" cemetery and ancient cremation ground of the E-nkshikni.

Ktá-iti "place of rocks."

Tchikësi "at the snbmerged spot."

Kúltam Wā'sh "otter's home."

Stílakgish "place to watch fish."

Yá aga "little willows." Here the road from Linkville to Fort Klamath crosses Williamson River on a wooden bridge built by the United States Government; here is also the center of the Indian settlements on Williamson River.

Kúls-Tgé-nsh, or Kúlsam-Tgé-ns "badger standing in the water."

Witä/mamtsi "where the black bear was." Knyám=Skä-iks "crawfish trail."

Slánkoshksöksi, or Shlankoshkshû'kshi "where the bridge was."

Kokáksi "at the brooklet."

Knyága, a former cremation place in the vicinity of Yá aga.

<sup>\*</sup>Compare Professor Newberry's description, pp. 38, 39, and Lieutenant Williamson's report (part I), p. 68.

# CAMPING PLACES AND OTHER LOCALITIES AROUND UPPER KLAMATH LAKE.

Places situated on the lake are as follows:

Skohuáshki, commonly called Koháshti, Kuhuáshti by Americans and Indians, "starting place of canoes, boats." Formerly location of the United States Agency; now numbering four or five Indian lodges.

Tulish, fishing place near the outlet of Williamson River: "spawning place."

Tókua or Túkua, near the outlet of Williamson River. From this the neighboring part of the lake is sometimes called Túkua Lake.

Nílakshi: lit. "dawn of day;" is now used to designate Modoc Point also, though it properly refers to the Nílaks mountain ridge only.

A-nshme, an island in the lake near Modoc Point Shuyakē'ksi or "jumping place."

I-ulalóna, or Yulalóuan, Link River above the falls at Linkville; lit. "rubbing, moving to and fro." The name was afterwards transferred to the town of Linkville, which is also called Tiwish χē'ni "where the cascade noise is."

Uχόtuash, name of an island uear Link-

Wákaksi Spúklish, a ceremonial sweatlodge on west side of the lake.

Kúmbat "in the rocks." Locality on western side of lake, called Rocky Point.

Lúkuashti "at the hot water." Name for the hot sulphuric springs about half a mile east and northeast of the town of Linkville, and of some others west of that town.

#### EMINENCES AROUND UPPER KLAMATH LAKE.

Of the majority of these names of hills and mountains I could not obtain the English name, the usual excuse being that they had only Indian names.

# In Cascade Range:

Giwash, or Géwash, Mount Scott; Giwash é ush, Crater Lake, in a depression west of Mount Scott.

Knkumē'kshi "at the caves or hollows;" northwest of the Agency.

Kakásam Yaína "monntain of the great blue heron;" northwest of Agency.

Mō'dshi Yaína or Long Pine; lit. "on the large mountain;" mō'dshi or mū'nptchi is a compound of the adjective múni, great, large.

Mbá-ush Shnékash "bosom burnt through," legendary name of a mountain located west southwest of the Agency; mbá-ush here refers to a piece of buckskin serving to cover the bosom.

Kē'sh yaiuatat, Mount Pitt, a high mountain lying southwest of the Agency. The Modocs call it Mělaiksi "steepness;" the Klamath Lake term signifies "snow on the mountain," snow-capped peak. Only in the warmest months Mount Pitt is free of snow.

Til $\chi$ o-it, an eminence south of Mount Pitt; lit. "drip water."

Wákakshi, Kä'käshti, Tchiutchiwäsamtch, mountains bordering the southwestern portion of Upper Klamath Lake.

On the east shore of the lake:

Wátanks, a hill ou southeastern side of the lake.

Kálalks, hill near Captain Ferree's house, south of the Nílaks ridge. A ceremonial sweat-lodge stands in the vicinity.

steep ridge of the same name extending from Modoc Point, on east side of lake, along the shore, and thence in the direction of Lost River Valley.

Wálpi, Múyant, Tóplaměni, Lázit: other elevations of the Nílaksi hill ridge.

Pítsua, hill ridge extending north of Williamson River.

Nílaksi, lit. "daybreak;" a point of the ! Yánalti or Yánaldi, a steep volcauic range stretching due north from the Agency to Fort Klamath and beyond it. It is the continuation of the Pitsua ridge.

E-ukalksíni Spů'klish is an ancient ceremonial sweat-lodge near Wood River, and not very distant from Fort Klamath (I-ukák).

# CAMPING PLACES IN SPRAGUE RIVER VALLEY.

Of this portion of the reservation I submit two separate lists of local The more extensive one I obtained from Charles Preston, nomenclature. who remembered more place names because he then was employed at the Yáneks subagency, which lies near the center of the Sprague River settle-Both lists follow the course of the river from east to west. Sprague River and the settlements above Yaneks are frequently called P'lai, "above".

# Charles Preston's list:

Tsuitiákshi "dog-rose patch," near headwaters.

Ulálkski "cottonwood."

Pálan É-ush "dry lake;" a large.flat rock is near the river.

Welékag-Knuklčkshákshi "at the stooping old woman," called so from a rock suggesting this name.

Aish Tkuliks "column rock."

Tsárcak Tkáwals "standing boy," from a rock of a boy-like shape.

Snitstis.

Wúksi "fire-place;" at same place as Suít-

Tchii'kěle Tsíwish "running with blood;" a little spring with reddish water; a settlement of Suake Indians.

Kos Tuets "standing pine;" settled by Suake Indians.

Kawamkshi'ksh "eel fishery." Suawáti "ford, crossing-place." Lúldam Tchi'ksh "winter village." Spawańksh, on bank of Sprague River. Yainaga "Little Butte," a hill at the subagency.

Yainakshi, Yaneks, "at the Little Butte:" location of subageucy buildings, two miles from Sprague River, on left-hand side.

Tatátmi, a butte or hillock in the vicinity. Lámkosh "willows;" name of a creek, called by Americans "Whiskey Creek." Skiiwashkshi, or Skii'wash, "projecting rocks "

Kä'tsi, name of a little water spring. Lúlukuashti "at the warm spring." Tchákawētch.

Káwa "eel spring;" inhabited by Modocs. Yétkash.

Uyáshksh "in the coomb."

Káktsamkshi, name of a spring and creek at the subageucy.

Té-unōlsh "spring running down from a hill."

Uχadé ush "planting a willow." (?) Shlokópashkshi "at the house cavity." Awalókat "at Little Island," in Sprague | River.

Né-ukish "confluence."

#### Dane Hill's list:

Hishtish Luélks "Little Sucker Fishery," on headwaters.

on neadwaters.

Kaílu-Tálam, for Ktä/lu Tkálamnish "juniper tree standing on an eminence."

Hópats "passage" to the timber.

Lúldam Tchī/ksh "wintēr houses."

Tsänódanksh "confluence."

Yainakshi "at the Small Butte."

Stáktaks "end of hill."

Kemútcham Látsaskshi "at the old man's house," name of a hill; kemútcham is said to stand here for K'mukamtsam.

Káwamyäni "eel spring."

Kókaχäni, or Kókäksi "at the creek."

Kumä'ksi "at the cave."

Kátsuäts "rocks sloping into the river."
Nakósksiks "river dam, river barrage,"
established for the capture of fish.

Ktaí-Túpaksi, or Ktá i-Tópoks, "standing rock," situated near junction of Sprague with Williamson River.

#### CAMPING PLACES OF THE MODOC COUNTRY.

On Lost River, close to Tule Lake, were the following camping places: Wá-isha, where Lost River was crossed, three or four miles northwest of the lake, and near the hills which culminate in Laki Peak; Wátchamshwash, a village upon the river, close to the lake; Nakōshxē'ni "at the dam," at the mouth of Tule Lake.

On Tule Lake, also called Modoc Lake, Rhett Lake: Páshxa, or Pásxa, name of a creek and a little Modoc village on the northwest shore, whose inhabitants were called Páshxanuash; Kálelk, camp near Pásxa, on northern shore; Lé-ush, on northern shore; Welwashxē'ni "at the large spring," east side of the lake, where Miller's house is; Wukaxē'ni "at the coomb," one mile and a half east of Welwashxē'ni; Kē'sh-Láktchuish "where ipo grows (on rocks)," on the southeastern side of the lake; Kúmbat "in the caves," on the rocky southern side of the lake, once inhabited by about one hundred Kúmbatwash, who were mainly Modocs, with admixture of Pit River, Shasti, and Klamath Lake Indians.

On Little or Lower Klamath Lake: Agawesh, a permanent Modoc settlement upon what is now called "Fairchild's faru," southwestern shore; Ke-utchish $\chi\bar{e}'$ ni "where the wolf-rock stands," upon Hot Creek; Sputuish- $\chi\bar{e}'$ ni "at the diving place," lying close to Ke-utchish $\chi\bar{e}'$ ni, where young men were plunging in cold water for initiation; Shapash $\chi\bar{e}'$ ni "where sun and moon live," camping place on the southeastern shore, where a crescent-shaped rock is standing; Stuikish $\chi\bar{e}'$ ni "at the canoe bay," on north side of the lake.

#### TRIBAL NAMES AND SUBDIVISIONS.

The two bodies of Indians forming the subject of the present report are people of the same stock and lineage through race, language, institutions, customs, and habitat. In language they radically differ from the neighboring peoples called Snake, Rogue River, Shasti, and Pit River Indians, as well as from the other inhabitants of Oregon, California, and Nevada.

For the Klamath people of Southwestern Oregon there exists no general tribal name comprehending the two principal bodies, except Máklaks, Indian. This term when pronounced by themselves with a lingual k has a reflective meaning, and points to individuals speaking their language, Modocs as well as Klamath Lake Indians; when pronounced with our common k it means Indian of any tribe whatsoever, and man, person of any nationality. derivation of máklaks will be found in the Dictionary. I have refrained from using it in the title and body of my work to designate these Oregon Indians because it would be invariably mispronounced as mä'kläks by the white people, and the peculiar sound of the k would be mispronounced also. To call them simply Klamath Indians or Klamaths would lead to confusion, for the white people upon the Pacific coast call the Shasti, the Karok or Ara, the Hupa, the Yurok or Alikwa Indians on Rlamath River of California, the Shasti upon the Siletz Reservation, Oregon, and our Máklaks all Klamaths. It was therefore necessary to select the compound appellation, "the Klamath Indians of Southwestern Oregon." The Warm Spring and other Sahaptin Indians possess a generic name for all the Indians living upon this reservation and its vicinity: Aígspaluma, abbr. Aígspalo, Aíkspalu, people of the chipmunks, from the innumerable rodents peopling that pine-covered district. This term comprises Snake, Payute, and Modoc Indians, as well as the Klamath Lake people. The name of Klamath or Tlámat, Tlamet River, probably originated at its mouth, in the Alíkwa language.

The two main bodies forming the Klamath people are (1) the Klamath Lake Indians; (2) the Modoc Indians.

#### THE KLAMATH LAKE INDIANS.

The Klamath Lake Indians number more than twice as many as the Modoc Indians. They speak the northern dialect and form the northern chieftaincy, the head chief residing now at Yá-aga, on Williamson River. Their dwellings are scattered along the eastern shore of Upper Klamath Lake (É-ush) and upon the lower course of Williamson (Kóketat) and Sprague Rivers (P'laí). They call themselves É-ukshikni máklaks, abbreviated into É-ukshikni, É-ukskni, Ä-uksni people at the lake. The Shasti near Yreka, Cal., call them Aúksiwash, some western Shasti: Makaítserk; by the Pit River Indians they are called Alámmimakt ísh, from Alámmig, their name for Upper Klamath Lake; by the Kalapuya Indians, Athlámeth; by the Snake Indians, Sáyi.

According to locality the Klamath Lake people may be subdivided into the following groups: The people at the agency; the people at Koháshti, at Yá-aga, at Modoc Point and upon Sprague River. Their settlements at Klamath Marsh, at Nílaks and at Linkville are now abandoned; the last named (Yulalóna) was held by them and the Modocs in common.

#### THE MODOC INDIANS.

The Modoc Indians speak the southern dialect, and before the war of 1872–1873 formed the southern division or chieftaincy, extending over Lost River Valley (Kóketat) and the shores of Little Klamath and Tule Lake. Of their number one hundred and fifty or more live on middle course of Sprague River; some have taken up lands in their old homes, which they cultivate in their quality of American citizens, and the rest are exiles upon the Quapaw Reservation, Indian Territory. They call themselves Móatokni máklaks, abbreviated Móatokni, Mō'dokni, Mō'dokish, living at Moatak, this being the name of Modoc or Tule Lake: "in the extreme south." A portion of the Pit River Indians calls them Lutuámi, "lake," by which Tule Lake is meant; another, through a difference of dialect, Lutmáwi. The Shasti Indians of Yreka call them Pxánai, the Sahaptins upon and near Columbia River call them Mówatak, the Snake Indians, Saidoka.

The more important local divisions of this people were the groups at Little Klamath Lake (Agáweshkni), the Kúmbatwash and the Pászanuash

at Tule Lake, the Nushaltzágakni or "Spring-people" near Bonanza, and the Plaíkni or "Uplanders" on Sprague River, at and above Yáneks. Formerly the Modocs ranged as far west as Butte Lake (Ná-uki) and Butte Creek, in Siskiyou County, California, about sixteen miles west of Little Klamath Lake, where they fished and dug the camass root.

#### THE SNAKE INDIANS.

A body of Snake Indians, numbering one hundred and forty-five individuals in 1888, is the only important fraction of native population foreign to the Máklaks which now exists upon the reservation. They belong to the extensive racial and linguistic family of the Shoshoni, and in 1864, when the treaty was made, belonged to two chieftaincies, called, respectively, the Yahooshkin and the Walpapi, intermingled with a few Payute Indians. They have been in some manner associated with the Máklaks for ages, though a real friendship never existed, and they are always referred to by these with a sort of contempt, and regarded as cruel, heartless, and filthy. This aversion probably results from the difference of language and the conflicting interests resulting from both bodies having recourse to the same hunting grounds. (Cf. Sā't, shā't, Shā'tptchi.) They are at present settled in the upper part of Sprague River Valley (P'laí) above Yáneks. They cultivate the ground, live in willow lodges or log houses, and are gradually abandoning their roaming proclivities. Before 1864 they were haunting the shores of Goose Lake (Newapkshi), Silver Lake (Kálpshi), Warner Lake, Lake Harney, and temporarily stayed in Surprise Valley, on Chewaukan and Safkiin Marshes, and gathered wókash on Klamath Marsh. They now intermarry with the Klamath Indians. As to their customs, they do not flatten their infants' heads,\* do not pierce their noses; they wear the hair long, and prefer the use of English to that of Chinook jargon. Before settling on the reservation they did not subsist on roots and bulbs, but lived almost entirely from the products of the chase.

Among other allophylic Indians, once settled outside the present limits of the Klamath Reservation, were a few Pit River and Shasti Indians,

<sup>•</sup> By the Modocs they are called conical headed (wakwaklish nû'sh gi'tko).

staying before the Modoc war among the Kúmbatwash-Modocs (q. v.) in the lava beds south of Tule Lake.

A few families of hunting Molale Indians, congeners of the "Old Kayuse" Indians near Yumatilla River, were formerly settled at Flounce Rock, on the headwaters of Rogue River, and farther north in the Cascade range. The Klamath Indians were filled with hatred against them; they were by them called Tchakä'nkni, inhabitants of Tchakzē'ni, or the "service berry tract," and ridiculed on account of their peculiar, incorrect use of the Klamath language. In former times Molale Indians held all the northeastern slopes of the Willamet Valley, claiming possession of the hunting grounds; the bottom lands they left in the hands of the peaceably disposed, autochthonic race of the Kalapuya tribes, whom they call Mókai or Móke.

# CHARACTERISTICS OF RACE.

These are either bodily or mental. To ascertain the former no measurements were made by me by means of instruments when I was among the Klamath Lake Indians, and hence all that follows rests upon ocular inspection. For Modoc skulls some accurate data are on hand, published by the United States Surgeon-General's Office, Washington, D. C.

The Mongolian features of prognathism and of high cheek bones are not very marked in this upland race, though more among the Modocs than in the northern branch. If it was not for a somewhat darker complexion and a strange expression of the eye, it would be almost impossible to distinguish many of the É-ukshikni men from Americans. The forehead is compressed in the tender age of childhood and looks rather low, but does not recede so acutely as might be expected from this treatment. Prognathism, where it exists, does not seem to be a consequence of head flattening. The cheek bones are more prominent than with us, but less than with the Central Californians. The fact that the head-man, Tatápkash, who was among the signers of the treaty of 1864, was called after this peculiarity shows that high cheek bones are rather uncommon. The nasal ridge is not aquiline, but very strong and forms an almost continuous line with the forehead. Convergence of the eyes is perceptible in a few individuals only, and anatomists have shown that it is nowhere produced by the structure of the skull

itself, but it is the result of the mother's manipulation on the baby's eyes, and causes them to look sleepy, the opening of the eyelids becoming narrower. (Cf. Texts 91, 5-8.)

These Indians have a piercing look and their eyeballs are of the deepest black, a circumstance which accounts for their great power of vision. In many Indians, namely in children, the white of the eye shows a blue tinge, perhaps the result of head flattening. The mouth is small and the teeth good; but with many Indians the thyroid cartilage, or Adam's apple, is very prominent. The hair upon the head is straight and dark. I did not find it very coarse, but with many Modoc women it is said to be so and to grow to an extreme length. On other portions of the body the hair is short and scarce, the natives doing their best to weed it out, the beard especially, with metallic pincers or tweezers (hushmoklotkish), which they always carry with them. As among most American aborigines, the beard is of scanty growth. The late chief Lelékash wore a beard, but I never saw anv Indian wearing one except Charles Preston, the Yáneks interpreter. The contents of the song 185;44 should also be noticed in this connection. Baldness is rare, and in fact it appears that the dearth of hairy covering of the skin is fully compensated in the Indian race by a more exuberant growth of hair upon the head, to protect them against excessive colds and the heat of the sun.

Among the Lake people the complexion is decidedly lighter than among the cinnamon-hued Modocs, and a difference between the sexes is hardly perceptible in this respect. Blushing is easily perceptible, though the change in color is not great. Those most approaching a white complexion like ours are numerous, but their skin is always of a yellowish lurid white. Owing to their outdoor life in the free and healthy mountain air, these Indians are well proportioned as to their bodily frame, and apparently robust; but their extremities, hands and feet, are rather small, as the extremities are of the majority of the North American Indians.

The average of Modoc men appear to be of a smaller stature than that of the Klamath Lake men, but in both tribes a notable difference exists between the length of body in the two sexes, most men being lank,

tall, and wiry, while the women are short and often incline to embon-point. Nevertheless obesity is not more frequent there than it is with us. No better illustration of their bodily characteristics can be had than a collection of their personal names. These sketch the Indian in a striking and often an unenviable light, because they generally depict the extremes observed on certain individuals. The sex can not, or in a few instances only, be inferred from the name of a person. We frequently meet with designations like "Large Stomach," "Big Belly," "Round Belly," "Sharp Nose," "Grizzly's Nose," "Spare-Built," "Grease," "Crooked Neck," "Conical Head," "Wide-Mouth," "Small-Eyes," "Squinter," "Large Eyes," "Halfblind," or with names referring to gait, to the carriage of the body, to habitual acts performed with hands or feet, to dress, and other accidental matters.

With all these deformities, and many others more difficult to detect, these Indians have bodies as well formed as those of the Anglo-American race, and in spite of their privations and exposure they live about as long as we do, though no Indian knows his or her age with any degree of accuracy. A very common defect is the blindness of one eye, produced by the smudge of the lodge-fire, around which they pass the long winter evenings. With the majority of the Indians the septum of the nose hangs down at adult age, for the nose of every Indian is pierced in early years, whether they afterwards wear the dentalium-shell in it or not.

Stephen Powers, who had good opportunities for comparing the Modocs with the tribes of Northern California, says of them:

They present a finer physique than the lowland tribes of the Sacramento, taller and less pudgy, partly, no doubt, because they engage in the chase more than the latter. There is more rugged and stolid strength of feature than in the Shastika now living; cheek bones prominent; lips generally thick and sensual; noses straight as the Grecian, but depressed at the root and thick walled; a dullish, heavy cast of feature; eyes frequently yellow where they should be white. They are true Indians in their stern immobility of countenance.\*

Passing over to the psychic and mental qualities of these Oregonian natives, only a few characteristics can be pointed out by which they differ from the other Indians of North America. The Indian is more dependent

<sup>\*</sup>Contributions to North Amer. Ethnology. 111, 252, 253. By Shastika he means the Shasti Indians of middle Klamath River, California.

on nature, physically and mentally, than we are. What distinguishes the civilized man from the primitive man of our days and of prehistoric ages is his greater faculty of turning to account the patent and the hidden powers of nature, or the invention of handicrafts, arts, and sciences. In this the savage man lags far behind the man of culture, and although we often have to admire the ingenuity and shrewdness displayed by the American native in his hunting and fishing implements and practices, the art of agriculture, without which there can be no real human culture, has never been pursued to any considerable extent by the Indians living north of the thirtieth parallel of latitude.

The climate of their home compels the Máklaks Indians to lead an active and laborious life. Except in the coldest days of winter they are almost always engaged in some outdoor work, either hunting, fishing, or cutting wood, gathering vegetal food, or traveling on horseback. Pursuits like these and the pure, bracing air of the highlands render their constitutions hardy and healthy, their minds active, wide awake, and intelligent. They are quick-sighted and quick in their acts, but slow in expressing delight, wonder, astonishment, or disgust at anything they see. Often they do not grasp the meaning of what they observe being done by the white people, and thus appear to us indifferent to many of the highest attainments of modern culture. Children and adults are prone to reject or slow to adopt the blessings of civilization, because many of these are of no practical use to a hunting and fishing people, and others are past their understanding.

The first things they generally adopt from the white people are the citizen's dress and handy articles of manufacture, as beads, tobacco, knives, gnns, steel traps; also wagons and other vehicles; for when in possession of these last the horses, which they had obtained long before, can be put to better account. They are also quick in adopting English baptismal names, sometimes discarding but oftener retaining their descriptive or burlesque nomenclature from the Klamath language. Gradually they adopt also with the money of the white man the elements of arithmetic, and learn to compute days and months according to his calendar. After another lapse of time they introduce some of the white man's laws, discard polygamy and slavery,

bury their dead instead of cremating them, and commence to acquire a smattering of English. Indian superstitions, conjurers' practices are not abandoned before the white man's ways have wrought a thorough change in their minds; and a regular school attendance by children can not be expected before this stage of progress has been reached.

In his moral aspects the Klamath Indian is more coarse and outspoken than the white man, but in fact he is not better and not worse. He has attacked and enslaved by annual raids the defenseless California Indian simply because he was more aggressive, strong, and cunning than his victim; his family relations would be a disgrace to any cultured people, as would also be the method by which the chiefs rule the community. But the passions are not restrained among savages as they are or ought to be among us, and the force of example exhibited by Indians of other tribes is too strong for them to resist.

The character of men in the hunter stage depicts itself admirably well in the mythic and legendary stories of both chieftaincies. Low cunning and treacherous disposition manifest themselves side by side with a few traits of magnanimity hardly to be expected of a people formerly merged in a sort of zoolatric fetichism. There is, however, a considerable power of imagination and invention exhibited in these simple stories, and many of the ferocious beasts are sketched in a truly humorous vein.

Man's morals are the product of circumstances, and the white man who judges Indian morals from the Christian standard knows nothing of human nature or of ethnologic science. The moral ideas of every nation differ from those of neighboring peoples, and among us the moral system of every century differs from that of the preceding one. The fact that the Modocs showed themselves more aggressive and murderous towards the white element than the Klamath Lake Indians may thus be explained by the different position of their homes. The latter being more secluded have not molested Americans sensibly, whereas the annals of the Modocs, who lived in an open country, are filled with bloody deeds. They are of a more secretive and churlish disposition, and what Stephen Powers, who saw them shortly after the Modoc war, says of them is, in some respects, true: "On the whole,

they are rather a cloddish, indolent, ordinarily good-natured race, but treacherous at bottom, sullen when angered, notorious for keeping Punic faith. But their bravery nobody can deny."\*

## THE PREHISTORIC PERIOD.

Before the middle of the nineteenth century the Máklaks people was unknown to mankind except to the nearest neighbors in Oregon and California. We are therefore justified in beginning its period of documentary history at that time, and in relegating to the domain of prehistorics all that is known of their previous condition. The information upon these points is furnished by three factors: tradition, archæologic remains, and language.

#### A. TRADITION BEARING UPON HISTORY.

Traditional folk-lore, when of the mythic order, generally dates from an earlier epoch of fixation than historic traditions. The remote origin of genuine mythic folk-lore is sufficiently evidenced by the archaic terms embodied with it, by the repetition of the same phraseology for ages, and by the circumstance that all nations tend to preserve their religious ideas in an unchanged form. I am laying peculiar stress upon the term genuine, for Indians have often mixed recent ideas and fictions with archaic, original folk-lore and with ancient mythic ideas, the whole forming now one inextricable conglomerate which has the appearance of aboriginal poetic prose.

The Klamath people possess no historic traditions going further back in time than a century, for the simple reason that there was a strict law prohibiting the mention of the person or acts of a deceased individual by using his name. This law was rigidly observed among the Californians no less than among the Oregonians, and on its transgression the death penalty could be inflicted. This is certainly enough to suppress all historic knowledge within a people. How can history be written without names?

Many times I attempted to obtain a list of the former head chiefs of the two chieftaincies. I succeeded only in learning the names of two chiefs recently deceased, and no biographic details were obtainable.

This people belongs to the autochthonic nations of America, called so because they have lost all remembrances of earlier habitats or of migrations.

<sup>\*</sup> Contributions to Amer. Ethnology, III, p. 253.

As a result of their seclusion, all their geogonic and creation myths are acting around the headwaters of Klamath River and in Lost River Valley, and the first man is said to have been created by their national deity, K'mukámtchiksh, at the base of the lofty Cascade Range, upon the prairie drained by Wood River. I have obtained no myth disclosing any knowledge of the ocean, which is scarcely one hundred and fifty miles distant in an air line from their seats. They have no flood or inundation myths that are not imported from abroad; and what is of special importance here, their terms for salt (ā'dak, shō'lt) are not their own, but are derived from foreign languages.

There is an animal story embodied in the Texts, page 131, forming No. II of the "Spell of the Laughing Raven," containing the sentence: "Hereupon the Klamath Lake people began fighting the Northerners." I believed at first that this contained a historic reminiscence of some intertribal war, but now am rather doubtful about it. The song 192; 1 was supposed by some Indians to be a very old reminiscence, while others referred it to the presence of the Warm Spring scouts in the Modoc war.

I conclude from the foregoing facts that historic traditions do not exist among these mountaineer Indians. If there are any, I was mable to obtain them. The racial qualities of the Modocs, and still more those of the É-ukshikni, indicate a closer resemblance with Oregonians and Columbia River tribes than with Shoshonians and Californians.

#### B. ARCHÆOLOGIC REMAINS.

The Klainath people have not evinced any more propensity for erecting monuments of any kind than they have for perpetuating the memory of their ancestors in song or tradition. In fact, structures the probable age of which exceeds one hundred years are very few. Among these may be particularized the three ceremonial sweat-lodges and perhaps some of the river-barrages, intended to facilitate the catch of fish, if they should turn out to be of artificial and not of natural origin. In the Lost River Valley is a well, claimed by Modocs to be Aishish's gift—probably one of the large natural springs or wélwash which are seen bubbling up in so many places upon the reservation Stephen Powers reports that near the

shores of Goose Lake, chiefly at Davis Creek, a number of stone mortars are found, fashioned with a sharp point to be inserted into the ground, and that in former times Modoc, Payute, and Pit River Indians contended in many bloody battles for the possession of this thickly inhabited country, though none of them could obtain any permanent advantage.\* Since the manufacture of this kind of mortars can not be ascribed with certainty to the Modocs, we are not entitled to consider them as antiquarian relics of this special people. The three sudatories and the river barrages are regarded as the gifts of Kmukámtch, a fact which testifies to their remote antiquity. Excavations (wásh) forming groups are found on many of the more level spots on the Reservation, near springs or brooks. They prove the existence of former dug-out lodges and camps.

#### C. LINGUISTIC AFFINITIES.

Anthropologic researches upon the origin of a people do not always lead to decisive results as to the qualities of the primitive race of that people, for the majority of all known peoples are compounds from different races, and thus the characteristics of them must be those of a medley race. As to antiquity, language is second to race only, and much more ancient than anything we know of a people's religion, laws, customs, dress, implements, or style of art. Medley languages are not by any means so frequent as medley races, and less frequent still in America than in the eastern hemisphere; for in this western world the nations have remained longer in a state of isolation than in Asia and Europe, owing to the hunting and fishing pursuits to which the natives were addicted—pursuits which favor isolation and are antagonistic to the formation of large communities and states. explains why we possess in America a relatively larger number of linguistic families than the Old World when compared to the areas of the respective It also explains why races coincide here more closely with linguistic families than anywhere else on the surface of the globe. Instances when conquering races have prevailed upon other nations to abandon their

<sup>•</sup> Contributions to North Amer. Ethnology, III, p. 252. Davis Creek enters Goose Lake from the southeast. The U. S. Geological Survey map marks "Old Indian Villages" in latitude 41° 37' and longitude 120° 36', to the southwest of that basin.

own languages are scarcely heard of on this hemisphere, but the annals of the eastern parts of the globe make mention of such.

Whenever it is shown that the language of some American people is akin to the language of another, so that both are dialects of a common linguistic family, a more cogent proof of their common genealogic origin is furnished than lies in a similarity of laws, customs, myths, or religion. To decide the question of affinity between two languages is generally an easy, but sometimes a very difficult task. When a relatively large number of roots and affixes having the same function coincide in both, this argues in favor of affinity. The coincidence of single terms in them is never fortuitous, but we have to find out whether such terms are loan words or belong to the stock of words of the languages under process of investigation. Other terms show an external resemblance which is not based on real identity of their radicals, but only on a deceptive likeness of signification.

From all this the reader will perceive that we can not expect to steer clear of shoals and breakers in determining by the aid of language the affinities of our Klamath Indians. But the inquiries below, whether successful or not, will at least aid future somatologists in solving the problem whether linguistic areas coincide or not with racial areas upon the Pacific coast between the Columbia River and the Bay of San Francisco. In making these investigations we must constantly bear in mind that the track of the migrations was from north to south, parallel to the Pacific coast, which is sufficiently evidenced by the progress of some Selish, Tinné, Sahaptin, and Shoshoni tribes in a direction that deviates but inconsiderably from a meridional one.

To establish a solid basis for these researches, a list of the Pacific coast linguistic families is submitted, which will assist any reader to judge of the distances over which certain loan words have traveled to reach their present abodes. The country from which a loan word has spread over a number of other family areas is often difficult to determine, because these languages have not all been sufficiently explored. The families below are enumerated according to the latest results of investigation. Some of them may in the future be found to be dialects of other stocks. The Californian tribes have been mapped and described in Stephen Powers's "Tribes of California"; Contributions to North American Ethnology, Vol. III.

The Shoshoni family extends through eastern Oregon, Nevada, southern Idaho, Utah, parts of Wyoming and California, and embodies the tribes of the Snake Indians, the Shoshoni, from whom the Comanches separated centuries ago, the Paviótso and Bannok (Panaíti), the Pai-uta, Uta, Móki, and the Kawúya branch of California. This family occupies an area almost as large as the Selish stock, but the population is very thinly scattered over the vast territory of the inland basin.

Washo Indians, near Carson, Nevada, inclosed on all sides except on the west by Shoshoni tribes.

Selish Indians occupy Washington, portions of the Oregon coast and of Vancouver Island, northern Idaho (from which they extend into Montana), the Fraser River Valley, and the adjoining coast of British Columbia. Some dialects of this family are remarkable through a profusion of consonantic clusters. Chinook dialects show many Selish affinities.

Sahaptin family, dwelling around middle Columbia and Lower Snake River. An offshoot of it—the Warm Spring Indians—settled in Des Chutes Valley, Oregon.

Wayiletpu is a Sahaptin name given to the Kayuse people on the Yumatilla Reservation, which has abandoned its former tongue, called the "Old Kayuse," to adopt the Yumatilla dialect of Sahaptin. Molale is related to old Kayuse; its former area was east of Oregon City.

Tinné or Athapaskan tribes, wherever they appear near the Pacific coast, are intruders from the northern plains around Mackenzie River and the headwaters of the upper Yukon. Those still existing on the Pacific coast are the Umpqua and Rogue River, the Húpa and Wailáki Indians, whereas the Tlatskanai and Kwalhioqua have disappeared.

The following three families on and near the Oregon coast were explored by Rev. Owen J. Dorsey in 1884 (Amer. Antiquarian, 1885, pp. 41, 42):

Yákwina, subdivided into Alsī', Yakwina on the bay of the same name, Kú-itch on the Lower Umpqua River, and Sayusla.

Kus, Coos Indians on Coos Bay and Múlluk on Lower Coquille River.

Takılma or Takelma Indians, south of the Kus, on middle course of Rogue River.

The Kalapuya Indians once occupied the entire Willámet River Valley save its southeastern portions. Its best studied dialect is Atfálati, also called Tuálati and Wápatu Lake.

On the lower Klamath River, California, and in its vicinity, there are four tribes of small areas speaking languages which require further investigations to decide upon their affinities. At present their languages are regarded as representing distinct families, as follows:

Ara, Ara-ara or Karok, on both sides of Klamath River.

Alikwa or Yurok, at the mouth of Klamath River.

Wishosk or Wiyot, on Humboldt Bay.

Chimariko or Chimalákwe, on Trinity River and environs.

The *Pomo* dialects are spoken along the California coast and along its water-courses from 39° 30′ to 38° 15′ latitude.

Yuki dialects were spoken in the mountains of the Californian Coast Range upon two distinct areas.

Wintún (from witú, wintú man, Indian) is spoken in many dialects upon a wide area west of Sacramento River from its mouth up to Shasta Butte.

Noja, spoken near Round Mountain, Sacramento Valley.

Maidu (from maídu man, Indian) dialects are heard upon the east side of Sacramento River from Fort Redding to the Cósumnes River and up to the water-shed of the Sierra Nevada.

Shasti dialects properly belong to the middle course of Klamath River and to the adjoining parts of Oregon; the language of Pit River or Achomawi, southeast of the Shasti area, is cognate with it.

Mutsun dialects, north and south of San Francisco Bay, are cognate with the Miwok dialects, which are heard from the San Joaquin River up to the heights of the Sierra Nevada. The littoral family of the Esselen is inclosed upon all sides by the Mutsun dialects. We have vocabularies from the eighteenth century, but its existence as a separate family has been put in evidence but lately by H. W. Henshaw in American Anthropologist, 1890, pp. 45-50.

# RADICALS WHICH KLAMATH HOLDS IN COMMON WITH OTHER FAMILIES.

A number of radical syllables occur in the same or in cognate significations in several linguistic families of the Northwest, and some of them extend even to the stocks east of the Rocky Mountains and of the Mississippi River. This fact is of great significance, as it proves certain early connections between these Indians, either loose or intimate. If the number of such common radices should be increased considerably by further research, the present attempt of classifying Pacific languages into stocks would become subject to serious doubts. From the quotations below I have carefully excluded all roots (and other terms) of onomatopoetic origin. I have made no distinction between pronominal and predicative roots, for a radical syllable used predicatively in one stock may have a pronominal function in another family

-im, -ēm, -am, -m frequently occurs as a suffix for the possessive case in the Pacific coast languages. Thus in Klamath -am is the usual suffix of that case, -lam being found after some vowels only; cf. Grammar, pages 317 et seq., and suffix -m, page 355; also pages 474-476. On page 475 I have called attention to the fact that -am occurs as marking the possessive case in the Pit River language; itóshexam yánim deer's foot-prints; -am, -im in Molale: pshkaínshim, possessive of pshkaínsh beard. The Sahaptin dialects use -nmi, -mi, etc., to designate this case.

ka occurs in many languages as a demonstrative radix, though it often assumes an interrogative and relative signification and changes its vocalization. In Apache-Tinné dialects it is interrogative: χáte who? in Návajo; in the Creek ka is the relative particle, a substitute for our relative pronoun who. In Yuki kau is this and there; in Yókat (California) ka- occurs in kahama this, kawío here, yokaú there. East of Mississippi River we have it in Iroquois dialects: kĕ'n in kĕ'nt'ho here (t'ho place); in Tuskarora: kyä' that or this one (pointing at it), kyä' nän this one; t'ho i-käñ that one is.\* In the Klamath of Oregon this root composes kánk so much, káni somebody,

<sup>•</sup> My authority for quotations from Iroquois dialects is Mr. J. N. B. Hewitt, of the Tuskarora tribe.

kaní! who! and kat who, pron. rel. As a suffix -ka, -ga is forming factitive verbs and is of great frequency (cf. Part I, pp. 341, 342); ka-á, ká-a, kā is adverb: greatly, strongly, very.

**ká-i** and similar forms are serving to deny statements and to form negative and privative compounds. In Shoshoni dialects g'ai, ka, kats, karu-u, etc., stand for no! in Zuñi kwa is the real negative particle, like akaí! no! in Tonkawē. In Kwakiutl no! is kets and kie; in Pani káki; it also occurs in some northern dialects of Algonkin as kā, kawine etc. In Klamath ká-i is no! and not; it composes kíya to lie and such words as are mentioned in Grammar, p. 633; cf. also p. 644. In some of the Maskoki dialects -kō, -gō, -ku is the privative particle in adjectives and verbs.

mi is a pronominal demonstrative radix, like nu, ni, and also serves to express personal and possessive pronouns. In Creek ma that points to distant objects and also forms istä mat who (interrogative). In many western families it expresses the second person: in Mutsun dialects men is thou, in Miwok mi; in Wintún mi, me is thou, met thine, thy; in Maidu mi is thou, mimem ye, mō'm, mú-um that one; in Yuki meh, mi is thou and in Pomo ma is ye (me this); in Ara and Sahaptin mi is transposed into im, thou. Shasti has may and Pit River mil, mi for thou; Sahaptin im, imk thou, ima, imak ye. In Klamath mi stands for thy, thine, mish for thee, to thee, but i for thou; -ma is a verbal suffix, q. v. There are languages where mi, ma makes up the radix for the first person and not for the second, as Sioux and Hidatsa of the Dakotan family; while in the Shoshoni dialects thou is omi, umi, um, em, etc., and in Yuma ma-a, mā. In the Nez Percé of Sahaptin ma is the interrogative pronoun who? and which? and also forms plurals when suffixed to nouns.

náka, the Kl. term for cinnamon bear, probably related to nákish sole, as the bears are Plantigradæ, has many parallels in American languages. The Yuma dialects have nagóa bear in Huálapai, nakatya, nogudia in Tonto; Yókat has nohóho bear, Alíkwa níkwiχ grizzly bear. If the yáka of Sahaptin is from nyáka, it belongs here also. East of Mississippi River there is only one species of the bear, the black bear. The radix nak-, nok- occurs in the Tonica language nókushi, and in the Maskoki dialects: nók'husi in Creek, nóχusi in Hitchiti, but níkta in Alibamu.

nkól, nkú'l, nxól in Klamath designates the gray white-tailed rabbit, and the same radix appears in kō'lta, kólta fish otter and in kû'lsh badger. In the San Antonio language of Southern California the radix is represented by kôl hare (rabbit is map), in Kasuá (Sa. Barbara dialect) by kú'n, in Tonto by akolá, kulá, in Hualapai by gula. Even in the Inuit dialects we find for rabbit: ukalik (Hudson Bay), kwélluk (Kotzebue Sound).

nu or ni. A pronominal demonstrative radix n- followed by almost any vowel (na, nu, ni, etc.) is of great frequency in America as well as in the eastern hemisphere, where it often becomes nasalized: nga, ngi, etc. In American languages it forms personal possessive and demonstrative pronouns, prefixes and suffixes of nouns and verbs. In South America nu, nû designates the pronoun I or me so frequently that the explorer K. von der Steinen was prompted to call Nu-languages a large group of languages north and south of Amazon River, including Carib dialects. In America nu, ni designates more frequently the first person of the singular and plural (I, we) than the second thou, ye. It stands for the first person in Quichhua, Moxo, Tsoneka, in Nahuatl, the "Sonora" and Shoshoni languages, in Otomi, Yuma, the Tehua and Kera (no in hi-no-me I) dialects of New Mexico; in Wintún, Maidu, Wayíletpu, Sahaptin, and the numerous Algonkin dialects. For the second person it stands in Yakwina, Tonkawe, Atakapa, and in Dakota and Tinné dialects. As a demonstrative pronoun we find it used in many languages, e.g., in the Onondaga of Iroquois, where na'ye' means that, that it is, and nä'n (ä long) this. In Klamatlı nû, nî is I, nútoks myself, nish me, to me; nat, na we, nalam ours; -na is case suffix and transitional verbal suffix; n- prefix refers to objects level, flat, sheet- or string-like, or extending towards the horizon.

shúm, súm is the Klamath term for mouth of persons, of animals, and of rivers. Forms parallel to this are disseminated through many of the Pacific coast languages. In Kayuse it is súmzaksh, in Molale shímilk, in Nishinam and other Maidu dialects sim, in Yokat sama, shemah.\* Intimately connected with mouth are the terms for beard: shú, shó, shwó in Sahaptin dialects, shimkémush in Kayuse, and for tooth: shí in the

<sup>•</sup> It occurs even in South America: 'sími in Kechua is mouth and word; shúm in the Patagón of Brazil, lip; Martius, Beiträge, II, 211.

Wintún dialects, süz in Yuki, sit, si-it in Mutsun (coast dialects), sa in Santa Barbara, tcháwa in some dialects of Maidu. It is justifiable to regard Kl. shúm as an ancient possessive case of the sí, sa tooth of Central Californian languages; cf. what is said concerning the suffix -im.

tút tooth appears related to tuχt tooth of Sayusla, a dialect of Yakwina and also to tit of the Sahaptin dialects; ititi "his tooth" in Walawála.

tchi-, tsi- is a radical often used on the Pacific coast referring to water or liquids, their motions, and the acts performed with or within the watery element. While in Klamath it figures as a prefix only, q. v., other tongues make use of it as a radical. Tchí is water in Yákwina, in Takílma, and in the Yuchi of the Savannah River; in Zuñi 'tcháwe is water ('t alveolar) in Nója tchúdshe. The Sahaptin dialects show it in Warm Spring tchū'sh water, atá-tchash ocean; in Klikatat tcháwas water, atá-tchis ocean, tcháwat to drink; while in Nez-Percé tchū'sh changes to kúsh. Chinook has 'ltchúkwa water, Ch. J. salt-tchuk ocean, but the Selish languages employ a radix se-u'l, si-u'l, shá-u instead to designate any liquid.

wá to exist, live, to be within, and to grow or generate is a radix to be traced in many of the Western tongues. In Klamath we refer to wá and its numerous derivatives, as wawápka to sit or be on the ground, wá-ish productive, wá-ishi, wéwanuish, wē'k arm and limb of tree, lit. "what is growing upon," wē'ka offspring, wékala, wásh hole to live in, wā'shla (a) to dig a burrow, (b) ground squirrel, and many others. In Kwákiutl wāts, wátsa is dog, but originally "living being, animal," and is represented in Klamath by wāsh prairie-wolf, wátch horse, watchága dog, lit. "little animal." the idea of "domesticated" or "belonging to man" to be supplied. In Chinook the suffix -uks (for -waks) points to living beings also. The Sahaptin languages show this root in wásh to be, exist, in Nez Percé wáχosh alive, wátash place, field, earth, in Yákima wakχash living, and in other terms.

#### AFFINITIES IN WESTERN LANGUAGES.

Many of the Western families exhibit but little or no affinity in their lexicon with the Klamath language, the reason being undoubtedly that they are but little explored. Thus in *Mutsun* a single term only was found to correspond: tcháya shallow basket in the dialect of Soledad; cf tchála and

tchákěla, by which two kinds of root baskets are specified in Klamath. The Sayúsla tséokwa leg answers to tchū'ks, Mod tchókash leg and to shō'ksh, Mod tchě-ō'ksh erane, this bird being called after its long legs. The Shoshoni stock, with its extensive array of dialects, spoken in the closest vicinity of the Klamath people, is almost devoid of any resemblances; cf. ká-i not, and nápal egg, compared with nobáve in Payute, nobávh Chemehuevi, nópavh Shoshoni. This probably rests on no real affinity. In the Noja language, spoken near Redding, California, putsi humming-bird corresponds to Kl pî'shash, and tcháshina, tcháshi, a small skunk species, to Kl. tcháshish. For Wintún may be compared Kl. pán to eat with ba, bah; kálo sky (from kálkali, round, globiform) with k'áltse sky.

From Selish saíga field the Kl. saíga, saíka prairie, field, meadow was certainly borrowed, and t'táze grasshopper of Kalispelm reappears here in ta'htá-ash and in Mod. kamtáta. Kaúkawak yellow of Chinook is kauká-uli, kevkévli brown of Kl.; and ténas young, recent reappears in Kl. té-ini new, young, te-iniwá-ash young woman; cf. ténāse infant in Aht dialect of Vancouver Island. The long array of words which Klamath has borrowed from Chinook jargon are enumerated in Grammar, pages 220–222.

Maidu.—An uncommon number of affinities are found to exist between Klamath and the Maidu dialects east of the Sacramento River. Of these terms some are not loan words, but appear to be derived from some common stock.

halá slope of mountain; Kl. lála, hlála to slope downwards.

kála hot-water basket; Maídu, kóllo cup-basket.

káwe eel; Maídu, kowó.

ngúlu, kúlu, kúlo female animal; Maídu dialects: kü'le, kü'lle, kúla, woman, wife, and female animal. This word also composes the terms father and child, and hence means "to generate"

pán to eat: Maídu, d. pen, pap, pā, pepe to eat; pán to smoke in Maídu, corresponds to Kl. páka; páni, pan is tobacco in Maídu.

pēn, pä'n again, a second time; Maídu, pēne two.

vulal, ulal cottonwood tree; Maídu, wilili.

From the Shasti language Modoc has borrowed more than Klamath Lake, and the terms as far as known are all mentioned in the Dictionary.

They are spō, ipshúna, etchmū'nna, ā'dak, hápush (cf. also hápa kangaroo rat and striped squirrel in Noja) and probably also kála hot-water basket, mádna sunflower.

Its southeastern or Pit River dialect shows a number of terms probably not loaned, but resting upon some indefinite common affinity. Thus édshash milk, breast, udder is in Pit River ídshit female breast (cf. Ara: útchis milk), wán silver fox, dim. wánaga, in Pit River kwán silver fox and wan- in wanekpúsha fox; käíla earth is in Pit River kéla, taktákli red is taxtáxe, tídshi good is tússi, túshi, kō'sh pine tree is kashú.

The only families in which a considerable number of terms possibly rests upon a real and not fancied kinship are those of Wayiletpu and Sahaptin.

## WAYÍLETPU DIALECTS.

Waytletpu, of which two dialects only are known or accessible to us, Kayuse and Molale, shows the following affinities:

Kl. gî to be, to exist, Molale, gîsht he is, gíshlai he will be. Compare to this in Maídu: bishi alive and dwelling place; Wintún: bim to be (present tense).

Kl. kē, kēk this; Kayuse, ka, ke, kai this, this one.

Kl. gu, kū, kunē that; Kayuse, ku, kâ, ku yúwant that man, káppik they.

Kl. ína, d. yána downward, yaína mountain; Molale, yángint elevation.

Kl. lák forehead; Molale, lakunui face.

Kl. lā'pi, lāp two; Molale, lápka two, lápitka seven; Kayuse, lipúyi, líplint two; líplil twins.

Kl. lúkua to be hot, warm, lókuash warm, hot, and heat, lúluks fire; Kayuse lokoyai warm, hot.

Kl. mukmúkli cinnamon-complexioned (originally "downy"), tch'múka to be dark (as night); Molale, móka dark, mukimuki dark complexioned; múkimuk'-waí "black man," negro.

Kl. mpáto, páto cheek, cf. patpátli; Molale, páktit cheek.

Kl. nā'dsh one; Kayuse, na one; Molale, nánga one, composes nápitka six.

Kl. nánuk all, nánka some, a part of; Kayuse, náng, nangina-a all; Molale, nángkai all.

Kl. nápal egg; Kayuse, lúpil, laupen egg.

Kl. pán to eat; Kayuse, pitánga; Molale, pá-ast to eat.

Kl. páwatch tongue; Kayuse, púsh; Molale, apá-us.

Kl. pä'xtgi to dawn, the dawn; Molale, pakast morning.

Kl. píla on one's body, on the bare skin; Kayuse, pí'li meat; Molale pí'l body.

Kl. shuaí black-tailed deer; Molale, suaí deer and white-tailed deer.

Kl. túmi many, much; Molale, tám many.

Kl. waíta to pass a day and night, or a day, waítash day; Kayuse, ewé-iu or uwâya, wéya day, u-áwish, huéwish sun; Molale, wásh day and sun, wásam summer-time.

Kl. wáko white pine; Molale, wákant, wákint, wákunt log.

Kl. wēk limb of tree; Kayuse, pasiwä'ku limb of tree.

Kl. wekétash green frog; Molale, wákatinsh frog.

In the morphologic part we also detect a number of close analogies between the two families:

hash-, hish-, is a prefix forming a sort of causative verbs by anathesis in Molale. like h-sh of Klamath; e. g., ishi he said, hishashi he replied.

-gála, ·kála, a Molale case-suffix to, toward, corresponds to -tála toward of Klamath.

-im, -am forms the possessive case in Waysleptu; am in Klamath.

p- is prefix in terms of relationship in both families, and -p also occurs as suffix in these and other terms; cf. Sahaptin.

Distributive forms are made by syllabic reduplication in Kayuse exactly in the same manner as in Klamath: yámua great, d. yiyímu; laháyis old, d. lalháyis; luástu bad, d. laluástu; suáyu good, d. sasuáyu.

### SAHAPTIN DIALECTS.

The Sahaptin dialects coincide with Klamath just as strikingly in some of the words and grammatic forms as do those of Wayiletpu, and it is singular that in a number of these all three mutually agree, as in lúkua, mukmúkli, and two numerals.

Kl. ka-uká-uli, kevkévli, ke-uké-uli brown; Nez-Percé, ka-uxká-ux drab, light yellow, dark cream.

Kl ke, kēk this; Nez-Percé, ki, pl. kima this; adv. kina here, kimtam near.

Kl. kitchkani little, adv. kítcha, kétcha; kuskus, Nez Percé, small, little; ikkes, Yákima; kískis, Warm Spring.

Kl. ktá-i rock, stone; ktä't hard, Yakima.

Kl. lā'pi, lāp two; lápit, lépīt two, Nez Percé; napit, Walawála; nä'pt, Warm Spring.

Kl. lúkua to be warm, hot, lókuash and lushlúshli warm; lúluks fire; luóχuts warm, Nez Percé; ilúksha fire in Nez Percé and Walawala; ílksh, Warm Spring; elusha to burn, lókautch cinders, Yakima; láχuiχ, láhoiχ warm, Yakima; láχwai, Warm Spring.

Kl. mukmúkli, makmákli cinnamon-colored; mázsmazs, Nez Percé, yellow; mázsh, Yakima and Warm Spring (also as múksh blonde, auburn, Warm Spring).

Kl. mû'lk worm, maggot, mank, fly; muxlimuxli fly, Warm Spring.

Kl. múshmush cattle, cow, originally meant "lowing like cattle," from the Sahaptin mú cattle; cf. Texts, Note to 13, 13.

Kl. nā'dsh one; nā'zs, lā'zs, Yakima; nä'zsh, Warm Spring.

Kl. nánka some, a portion of; nánka some in several Sahaptin dialects.

Kl. páwatch tongue; páwish, Nez Percé.

Kl. pé-ip daughter; pap, Nez Percé, Warm Spring, daughter (not one's own).

Kl. pí he, she, p'na, m'na him, her; pína self, oneself, himself, etc., Nez Percé; píni he, this one, Warm Spring.

Kl. taktákli level, even, flat; tíkai flat, Yakima; cf. tä-i'h bottom land.

Kl. tatáksni *children*; (na)títait *man*, Yakima; titókan *people*, Nez Percé.

Kl. tchěmúka, tsmúka to be dark, cf. mukmúkli; tsěmúztsěmuz dark brown (prieto), of dark complexion, black, Nez Percé; shmúk, Yakima; tchmū'k, Warm Spring, dark; shmukakúsha to blacken, Yakima.

Kl. vû'nsh, u-únsh boat, canoe, dug-out; wássas boat, Yakima, Warm Spring.

Of agreements in the morphologic part of grammar we notice considerable analogy in the inflection of the Sahaptin substantive with its numerous case forms:

Reduplication for inflectional purposes is syllabic also, but not so generally in use as in Klamath; Nez Percé táyits good, abbr. ta'hs; plur. tita'hs.

Kl. -kni, ending of adj. "coming from;" -pkinih, subst. case, from; init house, initpkinih from a house, in Nez Percé.

p- prefix forms most names of relationship: pika mother, piap elder brother, pet sister; -p as suffix appears in Nez Percé as ap younger brother, asip sister (isip Walawala). The prefix pi- forms reciprocal verbs; hak-, hah-, radix of verb to see, forms pihaksih to see each other.

Kl. -na is transitional case-suffix; cf. Nez Percé kína here, from pron. ki this.

#### CONCLUSIONS.

The conclusions which can be drawn with some degree of safety from the above linguistic data and some mythologic facts, concerning the prehistoric condition of the people which occupies our attention, are not unimportant, and may be expressed as follows:

Although it is often a difficult matter to distinguish the loan words in the above lists from the words resting upon ancient affinity, the table shows that the real loan-words of the Máklaks were borrowed from vicinal tribes only, as the Shasti, and that those which they hold in common with other tribes more probably rest on a stock of words common to both, as the pronominal roots. . The affinity with Maidu appears more considerable than that with other Californian tribes only because the Maidu dialects have been studied more thoroughly. Scarcely any affinity is traceable with the coast dialects of Oregon and California, and none with the Tinné dialects, though the Umpkwa and Rogue River Indians lived in settlements almost conterminous with those of the Máklaks. The latter were acquainted with the Pacific Ocean only by hearsay, for they have no original word for salt or tide, nor for any of the larger salt-water fish or mammals, and their term for sea is a compound and not a simple word: muni é-ush "great water-sheet," just as the Peruvians of the mountains call the ocean "mother-lake," mama= cocha. The scanty knowledge of the sea, which was scarcely one hundred

and fifty miles distant from the mountain homes of the Klamath people, proves more than anything else their protracted isolation from other tribes and also their absence from the sea-coast during their stay about the headwaters of the Klamath River.

No connection is traceable between the languages of the Klamath and the Shoshoni Indians, both immediate neighbors, nor with the Kalapuya, Chinook, and Selish dialects north of them. They must have remained strangers to each other as far back as language can give any clue to prehistoric conditions. The Sahaptin and Waysletpu families are the only ones with whom a distant kinship is not altogether out of the question. Some of the terms common to these languages could have been acquired by the Máklaks through their frequent visits at the Dalles, the great rendezvous and market-place of the Oregonian and of many Selish tribes. Friendly intercourse with the Warm Spring Indians (Lókuashtkni) existed long ago and exists now; friendly connections of this kind are frequently brought about by racial and linguistic affinity, just as inveterate enmity is often founded upon disparity of race and language.\*

The resemblances in the lexical part of the three families are not unimportant, but in view of the small knowledge we have of either and of the large number of words in these languages showing neither affinity nor resemblance, we have to maintain the classification prevailing at present and to regard their dialects as pertaining to three linguistic families. Sahaptin shows more likeness in phonetics and in morphology with Waysletpu than with Klamath.

Nowhere is syllabic reduplication so well developed in Oregon and about Columbia River as in the three families above mentioned and in Selish, the distributive as well as the iterative. The latter exists in every language, but of the former no traces could be detected in the Kalapuya and Northern Californian languages, and but few in Shoshoni dialects, though in Mexico it is frequent. This point will prove very important in tracing ancient migrations.

<sup>•</sup> We may compare the long-lasting friendly relations once existing between the lænápe and Sháwano, the Shoshoni and Bannock (Panaíti), the Chicasa and the Kasí'hta (a Creek tribe), the Illinois and the Miami Indians.

The numeration system of a people is a relic of a remote age, and therefore of importance for tracing the ancient connections of tribes. The quinary system is the most frequent counting method in America, and often combines with the vigesimal. The pure quinary system prevails in Ara, in the Chimaríko, Yuki, and in the Shasti-Pit River family, in Sahaptin and Wayíletpu, and it is also the system found in Klamath. Curiously enough, the Maidu Indians count by fifteens, and the decimal system forms the basis of the Wintún, Mutsun, and Selish dialects. The mystic or "sacred" number occurring hundreds of times in mythologic stories is five among all the Oregonian tribes.

To sum up the result of the above linguistic inquiry, it may be stated that our present knowledge does not allow us to connect the Klamath language genealogically with any of the other languages compared, but that it stands as a linguistic family for itself. It has adopted elements from the tongues spoken in its neighborhood; and a common element, chiefly pronominal, underlies several of these and the American languages in general.

## THE HISTORIC PERIOD.

'Εκ δὲ τοῦ καὶ πιστὰ πάντα κἀπίελπτα γίγνεται.

On account of the superstition previously alluded to, the traditional historic lore which forms so attractive a feature in the unwritten literature of the nations east of the Rocky Mountains and of Mexico is wanting entirely among the Máklaks, and we have to rely upon the meager reports of travelers and Government agents for accounts of the condition of the tribes in the earlier part of this century. Such notices of historic events are as follows:

According to a tradition recorded by Stephen Powers, an epidemic of small-pox broke out among the Modoc Indians in 1847, by which one hundred and fifty individuals perished.

The earliest historic conflict which can be ascertained with some chronological accuracy is the massacre of eighteen immigrants to Oregon by individuals of the Modoc tribe, and Ben Wright's massacre, consequent upon that bloody deed. The massacre of the immigrants occurred at a place on Tule or Rhett Lake, since called Bloody Point. Undoubtedly this was only one in a series of similar butcheries. Apparently it occurred in 1852, and the particulars are all given in Texts, pages 13 and 14.

One of the earliest reports upon these tribes made to the Bureau of Indian Affairs at Washington is that of Joel Palmer, Superintendent of Indian Affairs for Oregon, dated Dayton, Oregon, September 11, 1854. Palmer states that the lands of the Klamath Indians extend upon the eastern base of the Cascade range for about thirty miles east, and that east of them live the "Mo-docks," who speak the same language as the Klamaths; and east of these again, extending farther south, are the "Mo-e-twas" (Pit River Indians). These two last-named tribes have always evinced a deadly hostility to the whites, and the Modocs boasted of having within the last four years murdered thirty-six whites. Palmer entered into an agreement with the Klamath Indians to keep the peace with the white people, and also sent messengers to the Modocs and Pit Rivers, believing that henceforth the immigrants would be spared from their attacks. The Klamath Lakes were then enfeebled by wars with the surrounding tribes and by conflicts among themselves, and were said to number but four hundred and fifteen He counted seven villages on Upper Klamath Lake, two on Pliock Creek (P'laíkni or Sprague River), three on Toqua Lake (Túkua), and one on Coasto (Koliáshti) Lake.\* The Indians had some guns, horses, camp equipage, and the aboriginal war-club and "elk-skin shield" (kaknō'lsh). Little Klamath Lake he calls An-coose, a corruption of Agáwesh.

Neither Klaniath Lake nor Modoc Indians have taken any part in the great Oregon war of 1854-'56, although their sympathies were of course strongly in favor of the aboriginal cause.

For the year 1854 Powers records a battle fought by Captain Judy against Modoc and Shasti Indians on the Klamath River, north of Yreka, in which some women of the Shasti were killed.

The Report of 1859 speaks of continued hostilities on the side of the Modocs against passing immigrants and of the murdering of a party of five white men in Jackson County, Oregon. Two of the murderers belonged to the tribe of Chief Lelékash, and three of the perpetrators were seized and killed by the Klamath Indians (page 392).

<sup>\*</sup> This would make only six, not seven, villages.

Alexander S. Taylor has the following passage in his "California Farmer" of June 22, 1860: "Cumtukus, Lalacks, Schonches, and Tertupkark are names of chiefs among Klamath Lake Indians of the Oukskenah tribe. The big Klamath Lake is called Toakwa." Except the first, the above head-men were all identified in the Dictionary with the well-known names of Lelékash, Skóntchish (a Modoc chief) and Tatápkaksh. Cumtukni, who died about 1866, is mentioned by Stephen Powers as a great orator, prophet, and rain-maker.†

Whether the two incursions made upon the Klamath Lake people by the Rogue River Indians of Tinné lineage, across the Cascade range, of which detailed accounts were furnished in our Texts by Dave Hill, took place about 1855 or earlier I have not the means of ascertaining. The Lake tribe were not slow in inflicting vengeance upon the attacking party, for they crossed the mountain pass and fell upon the camps of their enemies, making sad havoc among them.

Frequent disputes and encounters occurred between the two chieftaincies and the Shasti Indians around Yreka, California; but the warlike qualities of the latter were often too strong for the aggressors, and the conflicts were not very bloody.† With the Pit River or Móatwash tribe the matter was different. They were not, like the Shasti, possessed of the warrior spirit, and therefore had to suffer terribly from the annual raids perpetrated upon them. In April and May the Klamath Lakes and Modocs would surround the camps, kill the men, and abduct the women and children to their homes, or sell them into slavery at the international bartering place at The Dalles. Some of these raids were provoked by horse-stealing, others by greed for gain and plunder, and the aggressors never suffered heavily thereby. When they began is not known, but the treaty of 1864 put an end to them. The recitals in the Texts, pages 19-27 and 54, 55,

<sup>•</sup> Overland Monthly, 1873, June number, page 540. His appearance had something fascinating for the Indians, and some are said to have traveled two hundred miles to consult him. His name appears to be Kúmětakni="coming from a cave," or "living in a cave."

<sup>†</sup>One of these fights took place between the Shasti, Modoc, and Trinity River Indians for the possession o an obsidian quarry north of Shasta Butte, mentioned by B. B. Redding in American Naturalist, XIII, p. 668, et seq., and Archiv f. Anthropologie, XIV, p. 425.

give us graphic sketches of these intertribal broils. Some of the eastern Pit Rivers seem to have lived on friendly terms with the Modocs; but the bands farther south, especially the Hot Spring and Big Valley Indians, were the principal sufferers by these incursions. In a raid of 1857 fifty-six of their women and children were enslaved and sold on the Columbia River for Cayuse ponies, one squaw being rated at five or six horses and a boy one horse.\*

The Pit River-Indians were a predatory tribe also, and very dangerous to the immigrants passing through their country to northwestern Oregon. Their continued depredations made it a duty of the Government to inflict upon them a heavy chastisement, and Maj. Gen. George Crook, commanding the Colorado Department of the United States Army, was intrusted with its execution. This campaign of 1867 is described by him as follows:†

I continued the campaign into the Pit River country with Company H, First Cavalry, Lieutenant Parnelle; Company D, Twenty-third Infantry, Lieutenant Madigan, First Cavalry, commanding; and Archie McIntosh, with his twenty Fort Boisé Indian sconts. We found on Pit River a party of warriors in camp. They fled. The next day we discovered a large party of warriors in the bluffs on the river. We had a severe fight, lasting two days and nights. They effected their escape by means of holes and crevices in the ground. A great many were killed, among whom were some of note; how many could not be ascertained. Our loss was Lieutenant Madigan and three men killed, and eight soldiers and one citizen wounded.

The more unruly portion of these Indians were subsequently removed to the Round Valley Reservation, California, and about two hundred are still in their old homes.

Between the Klamaths and the neighboring Snake tribes there was always a sort of disaffection, based upon difference of race, language, and habits; but whether their earlier relations were always those of open hostility or not is past finding out.<sup>‡</sup> The wording of the treaty makes it probable that the hunting grounds north and east of their present seats on Sprague River were shared in common by both, and that the Snake Indians frequently

<sup>\*</sup>Alex. S. Taylor, "California Farmer," May, 1859.

<sup>†</sup> Report of the Secretary of War, 1868-'69, Part I, p. 69, dated August 22, 1867. Stephen Powers refers to this fight in Contributions III, p. 268.

<sup>‡</sup> One of the Texts, p. 28, shows that the Snakes in one instance attacked and massacred in a very cowardly way some women near the outlet of Williamson River.

changed their settlements, as hunting nations are in the habit of doing. Thus Pauline Marsh, near Silver Lake, and Pauline Lake, on one of the head springs of Des Chutes River, were both named after the Snake chief Panaína of our Texts. The bands established upon the Reservation since the treaty was concluded are called Walpapi and Yahushkin. At first they ran off and committed depredations in the vicinity, whereupon the Government was compelled to force them back. General Crook made several expeditions in the execution of the task. These campaigns were short and decisive, and the Klamath Lake scouts engaged in them did good service, as evidenced by General Crook's reports \* and Dave Hill's Text, pages 28–33. Upon the defeat and killing of Panaína, the Walpapi chief, the tribe finally quieted down and remained neutral in the commotion caused by the Modoc war of 1872–'73.

No indications are at hand of the number of Indians formerly inhabiting the headwaters of the Klamath River. Before the first census was taken estimates deserving no credence were made, varying from one thousand to two thousand Indians. In those times the scourges of small-pox, syphilis, and whisky did not inflict such terrible ravages as they do now among the Indians; but instead of these the continual tribal quarrels, family vengeance, the ordeals of witchcraft, dearth of food, and the inhuman treatment of the females must have claimed many more victims than at present. Emigration and intermarriages with other tribes were rather the exception than the rule, and are so even now.

## THE TREATY OF 1864.

During the ten years following Wright's massacre the country began to assume a somewhat different aspect through the agricultural and stock-raising settlements of white people that sprung up in Lost River Valley, around Little Klamath Lake and in other places. The cession of lands to the "Oregon Central Military Road Company" from Eugene City, in Willamet Valley, through the Cascade range, across the Klamath Marsh, to

<sup>\*</sup>Contained in the Report of the Secretary of War, 1868-'69, Part I, pp 69, 70, dated September 2, 1867, and March 19, 1868. The troops killed twenty-four Snake Indians in the expedition of 1867. See also Texts, Note to 28, 14.

Warner Lake, and thence to the boundary of Idaho, with its "six miles limit" grants on both sides, took place before the conclusion of the treaty.

In order to subject the troublesome Snake and Modoc tribes to a stricter control, and to secure more protection to settlers and the immigrants traveling through Oregon, Fort Klamath was established north of Upper Klamath Lake, in Lake County, and garrisoned with several companies, who were of great service in preserving order in these sparsely inhabited tracts. The Klamath Lake Indians were more inclined to keep up friendship with the white people than the other tribes, nevertheless some turbulent characters among them necessitated military restraint.

The Superintendent of Indian Affairs of the Northern District of California, Judge E. Steele, adjusted some grave difficulties between the Shasti and the Máklaks Indians, which threatened to break out into a terrible war of devastation against the Shasti and the white settlers alike. Some of the Máklaks "braves" had been killed upon the lands of white settlers, and the injured Indians had begun retaliation already. Colonel Drew, stationed at Fort Klamath (who fought marauding bands of Shoshoni and Bannocks during the summer of 1864), had arrested and executed "Captain" George, a Klamath Lake chief, for criminal acts, and killed an Indian commonly known as Skukum John. The chiefs and some representative Indians of the contending tribes met Judge Steele near Yreka, California, on February 14, 1864, and for some trifling consideration agreed to forego all further hostilities among themselves, to allow free passage to anybody traveling through their territories, and to maintain terms of friendship with all whites, negroes, and Chinese. The Modocs also made the special promise to harass no longer the Pit River Indians by annual raids. It also appears from Mr. Steele's allocution to the Indians that they had been selling to whites and others Indian children of their own and of other tribes, and also squaws, the latter mainly for the purpose of prostitution.\*

The establishment of Fort Klamath, the increase of white men's settlements, the possibility of Indian outbreaks on account of the greater vicinity of the farms to the Indian villages, and the desire of the Indians themselves to obtain rations, supplies, and annuities brought the opportunity of a

<sup>\*</sup> Report of the Commissioner of Indian Affairs for 1864, pp. 84, 85 and 108-110.

treaty with these Indians more forcibly before the Government than ever before. In compliance with instructions from Indian Commissioner William P. Dole, Superintendent J. W. Perit Huntington, accompanied by Agent Logan, went through the Des Chutes Valley to Fort Klamath, and found there a large number of Indians of both sexes assembled, seven hundred and ten of whom were Klamath Lake, three hundred and thirty-nine Modoc people, and twenty-two of the Yahuskin band of Snake Indians. They unanimously concurred in the desire that Lindsey Applegate, a settler of Jackson County, Oregon, be appointed as their agent. The treaty was concluded on the 14th of October, 1864, and duly signed by the contracting parties, including twenty-six chiefs and principal men of the tribes. Huntington's estimate of funds necessary for fulfilling treaty stipulations and subsisting the Indians the first year amounted to a total of \$69,400. The text of the treaty being too long for insertion entire, I restrict myself here to the contents of the principal paragraphs:

Article 1 stipulates the cession of the territory described above (p. xvi), and sets apart as a reservation for the tribes referred to the tract included within the limits following: Beginning upon the Point of Rocks, about twelve miles south of the mouth of Williamson River,\* the boundary follows the eastern shore north to the mouth of Wood River; thence up Wood River to a point one mile north of the bridge at Fort Klamath; thence du? east to the summit of the ridge which divides the upper and middle Klauuath Lakes (now called Klamath Marsh and Upper Klamath Lake); thence along said ridge to a point due east of the north end of the upper lake; thence due east, passing the said north end of the upper lake to the summit of the mountains on the east side of the lake; thence along said mountain to the point where Sprague's River is intersected by the Ish-tish-ea-wax Creek (probably Meryl Creek); then in a southerly direction to the summit of the mountain, the extremity of which forms the Point of Rocks; thence along said mountain to the place of beginning. The tribes will remove to this reservation immediately after the ratification of the treaty and remain thereon. No whites, except employés and officers of the United States Government, are allowed to reside upon this tract, and the Indians have

<sup>\*</sup>At the foot of Nílakshi Mountain.

the exclusive right of taking fish and gathering edible roots, seeds, and berries within the reservation. Provision is made by which the right of way for public roads and railroads across said reservation is reserved to citizens of the United States.

Article 2. As a payment for the ceded lands the Indians shall receive \$8,000 per annum for a period of five years, \$5,000 per annum for the next five years, and the sum of \$3,000 per annum for the five years next succeeding.

Article 3 provides for the payment of \$35,000 for removing the Indians to the reservation, subsisting them during the first year, and providing them with clothing, teams, tools, seeds, etc.

Articles 4 and 5 provide for the establishment of a saw-mill, a flouring-mill, a manual-labor school, and hospital buildings, all to be maintained and sapplied with working material at the expense of the United States for the period of twenty years. Employés for running these establishments shall be paid and housed by the Government also.

Article 6 reserves the right to the Government to provide each Indian family with lands in severalty to the extent of forty to one hundred and twenty acres, and to guarantee possession to them. Indians are not allowed to alienate these lands.

Article 9. The Indians acknowledge their dependence upon the Government of the United States, and pledge themselves to be friendly with all citizens thereof, to commit no depredations upon the persons or property of said citizens, and to refrain from carrying on any war upon other Indian tribes.

Article 10 prohibits the sale and use of liquors upon the Reservation, and Article 11 permits the Government to locate other Indian tribes thereon, the parties to this treaty not losing any rights thereby.

The treaty was proclaimed February 17, 1870.

Like most of the treaties concluded between the United States Government and the Indian tribes, this compact was made much more to the advantage of the white man than of his red brother. Not only were the stipulated annuities rather small for a body of Indians, which was then considered to number about two thousand people, but these annuities were

to be paid only after the ratification of the treaty by the President and the Senate, which did not take place till five years after the conclusion, viz, February 17, 1870. Meanwhile the Indians were always subject to the possibility of being removed from the homes of their ancestors by the stroke of a pen. The bungling composition of the document appears from the fact that a grave mistake was committed by inserting the term "east" instead of west (italicized in our text above), and by not mentioning the land grant made to the Oregon Central Military Wagon Road Company before 1864, which, when insisted upon, would, with its twelve-mile limits, take away the best parts of the Reserve, the Sprague River Valley, for instance. At the time when I visited the country, in the autumn of 1877, the Klamath Lake Indians showed much animosity against the settlers establishing themselves within their domain. The company having left many portions of their projected wagon road unfinished, Congress, by act approved March 2, 1889, directed the Attorney-General to cause suits to be brought within six months from that date, in the name of the United States, in the United States Circuit Court for Oregon, to try the questions, among others, of the seasonable and proper completion of said road, and to obtain judgments, which the court was authorized to render, declaring forfeited to the United States all lands lying conterminous with those parts of the road which were not constructed in accordance with the requirements of the granting act. (Cf. on this subject Ex. Doc. 131, House of Representatives, Forty-ninth Congress, first session, and Ex. Doc. 124, Senate, Fiftieth Congress.)

The first representative of the Government, Subagent Lindsey Applegate, erected some buildings at the northwest point of Upper Klamath Lake, called Skohuáshki (abbr. Koháshti); but as early as 1866 he called attention to the fact that the place had no suitable water-power, but that three miles above the little creek at Beetle's Rest was a most excellent motor for driving a saw-mill and a grist-mill, and, being on the edge of the pine woods, was a well-fitted and shady place for the agency buildings. This advice was followed in 1868, two years before the ratification of the treaty. In the same year the old practice of cremating dead bodies was abandoned and inhumation introduced. The grave-yard was established around the ash-pile of cremation, still visible in 1877, and in 1878 a second

cemetery was inaugurated between the Williamson River and Modoc Point, one mile and a half south of the bridge.

President U. S. Grant's peace policy in regard to the Indians was inaugurated by act of Congress dated April 10, 1869. The supervision of the Indian agencies was placed in the hands of the authorities of religious denominations, a board of commissioners appointed,\* and the spiritual interests of that reservation turned over to the Methodist Church.

# SCIENTIFIC RESEARCHES ON THESE INDIANS.

The study of the ethnography of a tribe usually precedes that of its language; sometimes both are pursued simultaneously, and this is undoubtedly the correct method. In the case of the Máklaks, Horatio Hale,† the linguist of Ch. Wilkes's United States Exploring Expedition (1838–1842), and still holding forth as a pioneer in his lines of research, took down a vocabulary from a Klamath Lake Indian whom he met on the Columbia River in 1841. No ethnographic remarks upon the tribe accompany this vocabulary, probably because information obtained from interpreters, who speak the Chinook jargon only, is notoriously unreliable.

Next in time follow the extensive explorations of John Charles Frémont; of the interior basin west of the Rocky Mountains and of the Pacific coast from 1843 to 1844, and again from 1845 to 1846, during which the Klamath Lakes and Klamath Marsh were visited and explored. His reports contain graphic sketches of all that was seen and observed by his parties; but scientific accuracy is often wanting, and many countries are described without giving the Indian local names, which are indispensable to identification.

The acquisition of the Pacific coast by the United States (California in 1846, Oregon in 1848) naturally suggested projects of connecting the two oceans by a transcontinental railroad, starting from the Mississippi River and reaching to the Bay of San Francisco. The Central Govern-

<sup>\*</sup> Cf. Revised Statutes of the United States, second edition, 1878, p. 359.

<sup>†</sup>Born in Newport, New Hampshire, in 1817.

<sup>‡</sup> Born at Savannah, Georgia, January 21, 1813; candidate for the Presidency of the United States in 1856; died in New York City, July 13, 1890.

ment sent out in different directions army officers and engineers to survey the proposed routes, and to publish the results in a series of volumes.\* For this purpose the Thirty-second Congress appropriated, by an act passed May 3, 1853, the sum of \$150,000, which was by two later appropriations in 1854 increased to a total of \$340,000. A branch of this railroad was to run up the Sacramento Valley to the Columbia River. In this portion the Klamath headwaters were principally concerned, and it is that which was surveyed by Lieut. Robert Stockton Williamson,† assisted by Lieut. Henry Larcom Abbot, both of the Corps of Topographical Engineers. Their joint report, together with the reports of specialists on zoölogy, botany, geology, etc., is contained in Vol. VI (1855) † These reports are valuable and on a level with the condition of science as it was in those days; but the use of the volumes is inconvenient when reference has to be made to the bulky maps, all of which are contained in other volumes than the reports them-Lieutenant Williamson, assisted by Lieutenant Crook, when on the selves. border of Klamath Marsh (August 22, 1855), obtained one hundred and two terms of the Klamath Lake dialect, which are published in Vol. VI, Part I, pp. 71, 72. This vocabulary is brimful of mistakes, not through any want of attention of these officers, but because they questioned their interpreter through the imperfect mediums of gestures and the Chinook jargon.

The vocabulary taken in 1864 by Dr. William M. Gabb at Koháshti shows the same defects, and was obtained through the "jargon" also; other collections were made by Dr. Washington Matthews, W. C. Clark, and Lewis F. Hadley. The words of Modoc as quoted in the publications of A. B. Meacham are misspelt almost without exception. From Stephen Powers we possess a short Modoc vocabulary, as yet unpublished.

Whosoever inspects these word collections will see at once that the study of the Klamath language had never gone beyond the vocabulary

<sup>\*</sup>Reports of explorations and surveys to ascer ain the most practicable and economical route for a railroad from the Mississippi River to the Pacific Ocean, made in 1853 and years following. Washington, 1855-1860. Quarto; illustr. with plates and maps. Thirteen volumes.

<sup>†</sup> Williamson was born 1824 in New York, and died 1882 in San Francisco. Abbot, a native of Beverly, Massachusetts, was born in 1831.

<sup>†</sup> The first part of Vol. VI contains Abbot's report, and is chiefly topographical.

stage before the publication of the present volume. Even the author experienced considerable difficulties before he could pass beyond that limit. When he reached the reservation agency he found not over three or four individuals who were able to speak a tolerable English, and the knowledge of this tongue is absolutely necessary to any one who aspires to the position of an interpreter of his own language in those parts. The Indians were nearly all pure bloods, and most of them knew scarcely more than a dozen English terms. Many could converse in Chinook jargon, but the majority, especially the females, were not acquainted even with this precarious means of intercourse. Indeed, these people must be slow in acquiring an Aryan language like English, for it presents so many characteristics entirely opposite to those of Klamath. English is not provided with reduplication, prefixes of form, nor with the multiple suffixes of Klamath; it differs from it also by its more complex syntactic structure, its imperfect nominal inflection, by its distinctive form for the nominal plural, the gradation of the adjective and adverb effected by suffixation, its personal inflection of the verb, and a long array of irregular and auxiliary verbs.

Thus it will be easily perceived that the obtaining of correct and reliable ethnographic and linguistic information in such a tribe is fraught with many difficulties. Sometimes it is practicable to get the terms for visible objects by making gesture signs or by pointing at the objects, but it just as often misleads; and if the investigator has to do with people who know no other language than their own, he must revise his notes with many of them before he can place any trust in what he has written down from dictation. The Indians and mixed bloods who have made some progress in the acquisition of English pronounce f as p, v as b, r as l—are modeling English after their own language, using he for our he, she, it, they, him, her, them; all this being hû'k, hû't, hû'nk for them. They do not know how to use our conjunctions, a defect which makes all the tales, myths, and other textual information unintelligible. The only means of obtaining results is to pick out the best people from the crowd and to train them for awhile for the purpose wanted, until they are brought so far as to feel or understand the scope of the investigator. Women will be found more useful than men to inform him about myths, animal stories, the gathering of vegetable food, household affairs, and terms referring to colors; men more appropriate than women in instructing him about their hunts, fishing, travels, their legal customs, wars and raids, house-building, and similar work. Omit asking them about the deceased, for it makes them angry and sullen. They do not as a rule willfully lead the investigator into error when they see that he is in earnest. Errors often originate in preconceived notions or theories and inappropriate questions of the investigator, sometimes also in the want of abstract terms in the interpreter's language. To insure correctness in an Indian myth, animal story, or any relation whatever, it should first be taken down in Indian, and of this a verbatim translation secured.

Ethnographic sketches of both tribes, but chiefly of the Modocs, were published in the newspapers of the Pacific coast at the time of Ben Wright's massacre, but they were not accessible to me; more circumstantial were those written at the time of the Modoc war (1872-73), and specimens of these may be seen in A. B. Meacham's publications, in the "Overland Monthly" of San Francisco, and in Stephen Powers's "The Modok," in Contributions III, pp. 252-262.

Ethnographic objects manufactured by and in actual use among both tribes were purchased at different periods by collectors. The National Museum in Washington owns several of them; but the most complete collection is probably the one made in 1882 by the Swiss naturalist, Alphons Forrer, a native of St. Gall, which was partly sold to the Ethnographic Museum of St. Gall, partly (eighty five articles) to that of Berne, the capital of Switzerland. Forrer lived several months among the Klamaths, and thus was enabled to secure the best specimens. There are two hänäsish or "magic arrows," an implement which has probably become very scarce now. The majority of these objects are manufactured from wood, furskin, and basket material. There is no suitable clay found in the Klamath River Highlands, hence these Indians never made any pottery.

The report of Lieutenants Williamson and Abbot contains a large array of astronomic positions and of meteorologic observations made during the expedition, which will prove useful to later observers. The zoölogic, botanic, and geologic reports made by different scientists were considered of high value at the time they were first published. It will be remembered

that these explorations were the starting-point of all further researches upon the Pacific coast, and as such they are creditable to the men with whom and the epoch at which they originated.

The topographic map of the Klamath headwaters is now being prepared by the U. S. Geological Survey. It is laid out upon a scale of 1 to 250,000, with contour intervals of 200 feet, the rivers and water sheets in blue. The sheets are named as follows: Ashland, Klamath,\* Shasta, Modoc Lava Bed, Akturas—the last three belonging to California. The surveys were made from 1883 to 1887 by Henry Gannett, chief geographer, A. H. Thompson, geographer in charge; triangulation by the George M. Wheeler survey, by Mark B. Kerr; and topography, by Eugene Ricksecker and partly by Mark B. Kerr.

# THE MODOC WAR OF 1872-1873.

The well-known maxim, "it is cheaper to feed the Indians than to fight them," has forced itself upon the governments of all American countries in such indelible characters that it has become a rule for them to conclude treaties with the different "nations" to keep them at peace, feed them by rations or annuities, and confine them within the limits of certain terri-The treaty of 1864 was not attended by all the favorable results expected. The Snake Indians ran off from the Reservation during April, 1866, the Modocs in 1865. The latter tribe were not compelled to leave their old domain, now ceded to the United States, till 1869. Moreover, it always takes several years to gather straying Indians upon a reservation after a treaty has become an accomplished fact. The Superintendent of Indian Affairs in Oregon, Mr. Meachani, on December 30, 1869, after a long and excited "talk," succeeded in bringing two hundred and fifty-eight Modocs to Modoc Point, upon the reservation allotted to them. On April 26, 1870, the supply of rations was exhausted, and the more obstinate half of the tribe left the Reservation again for the old domain upon Lost River and the lakes, whereas the other half, under Skontchish, went to Yáneks, on Sprague River, where the Superintendent located them. All Modocs

<sup>\*</sup> The name for the sheet east of Klamath has not yet been determined.

had become disgusted at the close neighborhood and secret enmity of the Klamath Lake Indians, their congeners.

The presence of the Modocs in their "old country," though contrary to the letter of the treaty, was tolerated by the Government until the autumn of 1872, when the complaints of the white settlers against the Indians became too frequent and serious to be further disregarded. A struggle to secure the enforcement of the treaty could no longer be postponed. The Modocs' open defiance to the authorities could no longer be endured, and this brought on the Modoc war.

Space does not permit me to give more than an outline sketch of this bloody contest of a small, sturdy people of mountaineers against the regular army and a large body of volunteers; but many references in detail have been made to it in the Texts and Notes, to which the reader may refer. A monograph of the Modoc war doing full justice to the importance of this event and to its ethnographic features would alone fill a volume of considerable size. Here, as well as in all other Indian wars, the result was that the strong conquered the weak, which is always the case in the end, especially when the former has the law on his side.

According to the war chronicle obtained by me in the Modoc dialect from the Riddle family the war originated in a petition sent by the settlers to the President to have the Indians removed from their old homes to the Reservation, in fulfillment of the treaty stipulations. The President agreed to this, and sent an order to the commander at Fort Klamath to have them removed-"peaceably if you can; forcibly if you must!" In the morning of November 29, 1872, Major Jackson surrounded the Modoc camp upon Lost River, near its mouth. When he tried to disarm and capture the men they escaped to the hills. The soldiers and the settlers of the neighborhood then fired upon the unprotected women and children of another Modoc camp farther north, for which brutal act the Modoc men retaliated in the afternoon by killing fourteen settlers upon their farms. Hereupon the Modocs retreated with their families to the Lava Beds, south of Tule Lake, the home of the Kúmbătwash, and there they strengthened some select positions, already strong by nature, through the erection of stone walls and earth-works. Kintpuash or Captain Jack, who now was not the

chief only but also the military leader of the Modocs, selected for his headquarters the spacious cavern called Ben Wright's Cave, and there the tribe remained, unattacked and unharmed, until the 17th of January of the year ensning.

The wintry season and the difficult condition of the roads, or rather trails, in these mountainous tracts delayed the concentration of the troops and provisions to the Lava Beds for nearly two months. On the day above mentioned Colonel Frank Wheaton, then in command, resolved to attack from two sides the seventy\* sturdy warriors in their stronghold. Many of the troops were fresh from Arizona, and had fought against Apaches armed with bows and lances only. The Modocs carried the old octagonal small-bore Kentucky rifle with the greased patch and small ball, which within its limited range had a very flat trajectory, and consequently a large dangerous space.† The fog was so thick that men could not see their right or left hand comrades, but in spite of this the commander ordered the attack. Scarface Charley, a leader possessed of the best military and engineering capacity in this war, claimed that he held his station, with three squaws to load, against a platoon of cavalry. The troops counted in all about four hundred men. One corps had to attack from the north, viz, the shore of Tule Lake, the other from the west, and without connecting both by a field telegraph the commander ordered them to unite upon the top of the hills after storming the Indian positions. The fog annihilated these plans entirely, and the decimated troops were in the evening withdrawn to Van Bremer's farm, west of the Lava Beds.

After this signal discomfiture another officer, General Alvin C. Gillem, was assigned to the command, and the troops were reinforced by four companies of the Fourth Artillery from San Francisco. Instead of attacking the Modocs again on a clear day and bombarding their positions, it was deemed proper to negotiate with them for peace. There was a party of extremists for war in the Modoc camp and another inclined to listen to peace overtures, and upon the latter the body of the Peace Commissioners;

<sup>\*</sup> For the later period of the war, beginning April 16, Frank kiddle states the number of the Modoc warriors to have been fifty one; 42, 20.

<sup>†</sup>Captain Fields, "The Modoc War."

<sup>‡</sup> Appointed by the Secretary of the Interior, C. Delano. The particulars in Texts; note to 38, 1, page 48.

principally relied. Several attempts at parleying were unsuccessful, but finally the parties were appointed to convene on April 11, 1873. The capture of Kintpush's ponies by the troops, in spite of General Cauby's promise of a total suspension of hostilities, had exasperated the chief to such a degree that he and his aids resolved upon murder by treachery. The dark deed was successfully perpetrated upon two members of the Peace Commission. The others fled, and henceforth, after the dastardly murder of General Canby, a new plan was adopted for a speedy termination of the war.

Wright's Cave and surroundings were bombarded with heavy shells on April 16, 17, and 18, and attacks made by the troops simultaneously. By this time about ninety Indian scouts had joined the Army, two-thirds of whom were Warm Spring, one-third Wasco Indians, all under the command of Donald McKay. The Modocs vacated the cave on April 19, and were met by a detachment of regulars and thirty scouts at Sand Hill, four miles from the cave, on April 26. This engagement was more disastrous to the troops than to the Modocs; but at the Dry Lake fight, May 10, the latter were forced to retreat. This was the beginning of the dissolution of the Modoc forces; their provisions commenced to give out, and one portion of the warriors became dissatisfied with Kintphash's leadership. This party surrendered May 25 to the commander-in-chief, General Jefferson C. Davis, who had on May 2 relieved Colonel Gillem, the intermediate commander. Soon after this, on June 1, Kintpuash, with the few men who had remained true to him, gave himself up to a sconting party of cavalry, led to his hiding place by the treacherous Steamboat Frank,\* who, it must be acknowledged notwithstanding, had been one of the most valiant defenders of the Modoc cause.

The captured Modocs, numbering with their women and children about one hundred and forty-five persons, were for awhile fed at the expense of the Government, and then brought to the northeastern corner of the Indian Territory, where their remnants live at the present time. Before their departure a number of them, while being conveyed in a wagon to some place near Tule Lake, were fired upon and some females killed by the revengeful settlers. The marderers of General Canby and Dr. Thomas

could not remain unpunished. Brought before a jury at Fort Klamath, Kíntpuash, Chief Skóntchish, Black or Húka Jim, and Boston Charley were condemned to the gallows and hung at the Fort October 3, 1873, while two accessories to the deed—Bántcho and Slû'lks (now George Denny)—were condemned to incarceration at Fort Alcatraz, San Francisco Bay.\*

Thus ended the long-contested struggle of the little Modoc band against the Oregon and California volunteers and the regular troops of the United States Army. Certainly the heroism and ingenuity displayed by the Modocs would have been worthy of a better cause, and would have passed down to posterity in the brightest colors of patriotism had not the murderous "entreacte" and Canby's death deprived the struggle of its heroic luster. The unworthy termination of this war is well typified by the fact that the skeleton of the Modoc captain is now dangling as an anatomical specimen in the museum of the Surgeon-General's Office. at Washington, District of Columbia.

## STATISTICS.

From the end of the Modoc war to the present year the condition of affairs has not changed much in the Klamath Highlands. The reports of the United States agent repeat the same story of progress towards civilization every year; but in view of the difficulty of bringing a hunter tribe into the high road of Christian culture and industrial progress we can not attach much credence to such reports so long as they are couched in generalities and do not contain special facts attesting mental improvement by schooling.

In agriculture success is possible only in the Sprague River Valley, but pasturing will succeed almost on every spot of the Reservation. The report of 1888, compared with that of 1880, shows a considerable improvement in this direction. The 2,500 horses and mules counted in 1880 had increased to 4,532 in 1888; the 200 head of cattle to 2,201. In the latter year the number of swine figured 208, of domestic fowl, 1,000. Of the 20,000 tillable acres of land 1,400 were cultivated by the Indians in

<sup>\*</sup>Slû'lks was released, and stays now at the Modoc Reservation, Indian Territory, with Scarface Charley and some other warriors of that war.

1888 and 500 broken by them; 10,000 acres were inclosed by fences. The crops of 1888 amounted to 8,000 bushels of wheat, 4,000 of oats and barley, 1,000 bushels of vegetables, 3,000 tons of hay; and 500 pounds of butter were manufactured. Of lumber 100,000 feet were sawed. The Indians transported with their own teams 500 tons of freight, and thereby earned \$1,500. The two boarding-schools, one at the Klamath Agency and the other at Yáneks, in the same year boarded 215 pupils at a cost to the Government of \$18,764—about \$10.40 a month per capita.

The number of acres contained within the Klamath Reservation is 1,056,000, and of these only about 20,000 acres are considered to be tillable land. The rest is occupied by woods, marshes, rocks, and other hindrances to cultivation.

The school and church interests are in the hands of the Methodist Episcopal Church, which also has a vote in the appointment of the United States agent.

The statistics of population have furnished reliable data only from the time when annuities were first distributed among these Indians. This necessitated an annual count of each family, giving the number of the individuals belonging to each. One of these was made during my presence on the reserve on October 30, 1877, before the winter supplies were dealt out to the tribe. The summary is as follows:

•	· · · · · · · · · · · · · · · · · · ·
David Hill, chief, at Agency and on Williamson River	
P'lú, head chief, at the bridge, Williamson River	122
Long John. chief.	
Jack, chief	92
Lílo, chief	23
•	
Total	565

The census taken in the Sprague River Valley, Yaneks subagency, furnished the following figures, Klamath Lake Indians and Modocs being indiscriminately included:

indiscriminately included:	
Littlejohn, chief	14
Skóntchish, chief	18
Modoc Johnson, head chief	
Ben, chief	
Brown, chief.	

Total .....

The Snake Indians were not counted at that time, but were assumed to have the same population as in 1876: 137. This gives a total of Indians for the Reservation of 896. This count included about eight mixed bloods and seven Warm Spring Indians from the Des Chutes River. The boarding-school at the Klamath Agency then had eighteen pupils of both sexes.

The reports of the Indian Commissioner for 1880, 1881, 1882, 1883, and 1884 can not be fully relied on, since they give the same figures for each of these years with an unvarying total of 1,023 Indians—Klamaths, 707; Modocs, 151; Snake Indians, 165.

The report of 1888, Joseph Emery agent, gives 788 Klamath Lake and Modoc Indians and 145 Snake Indians, a total of 933 individuals.

Probably the most reliable data were furnished by the Indian census made in 1881 for the United States Census Bureau, from March to August:

	Klamaths.	Modocs.	Molale.	Snakes.	Totals.
Total of tribes on Reservation	676	122	55	165	1,018
Number of males	286	58	30	80	454
Number of females	390	64	25	85	564
Unmarried at fourteen years and upwards	109	6	9	- 11	135
Number married	286	55	14	65	420
Number of full bloods	664	122	53	165	1,004
Number of mixed bloods	12		2	. <b></b>	. 14
Number below twenty-one years	291	58	35	89	473
Number above twenty-one years	385	64	20	76	545
Supported one half or more by civilized indus- tries	36	6	7		49
Supported one-half or more by Government	38	3		2	43
Number wearing citizens' dress	630	112	55	165	962
Acres under cultivation	2, 249	140	36		2, 425
Number attending school	36	1		3	40

This enumeration is remarkable on account of the large number of Molale Indians mentioned in it, an element of the population which is nowhere else designated as such in the periodical reports made by the agents.

# NATURAL PHILOSOPHY.

In the manner of considering the transcendental world and in viewing the problems of the supernatural we perceive enormous differences among the various races of mankind. These differences mainly arise from the degree of animism and anthropomorphism applied to the deities supposed to represent the powers of nature and to rule the world. The primitive man regards everything showing life or spontaneous motion as animated by a spirit and endowed with certain human faculties; whereas among the more advanced nations these same gods and genii appear more fully anthropomorphized, and their moral and intellectual attributes more accurately defined. In monotheism all the physical and moral powers supposed to rule the universe become unified into one "Supreme Being."

A people's religion always rests upon a basis laid down in remote ages, and faithfully depicts the intellectual and moral qualities of its spiritual leaders at that period. Were they ferocious and cruel, the gods whom they imposed upon the people are barbaric also; were they kind and mildmannered, then their deities show these same mental qualities. Deities act by miracles, and are miracles themselves; for a miracle or act contravening the laws of nature is the only causality which the mind of primitive man is able to imagine to solve the difficult problems of physics, meteorology and other processes of nature. As there is no connected system in any of the savage religions, it is by no means difficult to overthrow the beliefs of a primitive people and to substitute others for it, provided the new ones are resting upon the same fundamental principle of spirits, deities and miracles. Dreams are to the savage man what the Bible is to usthe source of divine revelation, with the important difference that he can produce revelation through dreams at will. The more thoughtful religions of Asia establish a thorough distinction between spirit and matter, and thus dualistically establish idealism as opposite to materialism; but in America no religion goes any further than to attempt such a distinction. The higher Asiatic religious establish priesthoods, idols, ceremonial worship, divine oracles, prayer and sacrifice, and attempt to elevate man's character by moral teachings; here in the western hemisphere ceremony is magic and

witchcraft only, religious feasts are orgies, divine revelation is human hallucination, and the moral element, when present in religion, is not urged upon the community. While in the religions of the white man the gods originally representing nature's powers gradually become teachers or examples of morality and mental improvement, those of the other races remain the stern and remorseless deities of the sky, the atmosphere, and the earth, whose good will has to be propitiated by sacrifice.

As zoodemonism is the most appropriate form of religion for man in the animistic stage, the majority of the mythic characters in American religions are animals, especially quadrupeds; and even the fully anthropomorphized deities sometimes assume, in Oregon and elsewhere, the masks of animals. The earlier Indians firmly believed that such animals as were the prototypes of their own species had human faculties, and talked and thought as men do; in whatever tribe there are totemic gentes or clans the members of these are supposed to have descended from that prototype of a bear, deer, alligator, eagle, or whatever animal a gens is called after. Certain qualities of man, physical and intellectual, found their closest analogies in those of animals, and the animal world is much nearer akin to man in the mind of the Indian than in the white man's mind. Scurrilous and grotesque acts ascribed to so many Indian deities were not intended for derision, as with us, but for faithful portrayings of the habits of typical animals; and zoodemonism-not exactly zoolatry, as in Egypt-is the form of religion existing among the wild Indians of America.

The large amount of mythologic and transcendental material obtained among the Indians requires subdivision into several chapters. I present it under the following subdivisions: a. Elementary deities; b. Spirit deities; c. Animal deities.

Of the mythologic data embodied in the present article the larger part were obtained by myself, but not all. The others were gathered by Messrs. Stephen Powers and Jeremiah Curtin, mainly by the latter, who obtained over one hundred Modoc myths in 1883 and 1884, now forming part of the unpublished collection of the Bureau of Ethnology.

# K'MUKAMTCH.

# THE ELEMENTARY DEITIES.

In the Klamath theology the deities of the elements have preserved almost intact their character as representatives of the powers of nature. Imperfectly anthropomorphized as they are, they appear rather as spirits than as gods; all of them, the Earth perhaps excepted, are of the male sex. Like the animal genii they assume the adjectival suffix -ámtchiksh, abbr. -amtch bygone, ancient, belonging to the past,\* though less among the Modocs than in the northern chieftaincy. The splendor, power, and awe-inspiring qualities of these superhuman beings is not diminished in the least by the grotesque exterior and acts ascribed to some of them. The sky gods were more plastically defined by popular imagination than the subterranean deities, and hence we begin our sketch with the former.

# K'MÚKAMTCH.

Ille mihi par esse deo videtur, Ille, si fas est, superare divos.

The chief deity of the Klamath people, the creator of the world and of mankind, is K'múkamtch, or the "Old Man of the Ancients," the "Primeval Old Man." The full form of the name is K'muk'=ámtchiksh, and Modocs frequently use the shorter form Kěmúsh, K'músh, an abbreviation of k'mútcha, he has grown old, he is old, or of its participle k'mutchátko, old. He is also named P'tísh=amtch málam, our old father. He was also designated P'laitálkni, the one on high, though the term is now used for the God of the Christians. In every way he is analogous to the "old man above" or the "chief in the skies" of the Indians of Central California.

What the Indians say and think of their chief deity I have outlined in the Dictionary, pages 138-140, and what follows here will substantiate the data given there. Though K'múkanitch is reputed to have created the earth, what is really meant is only the small portion of the globe known to and inhabited by this mountaineer tribe, and not the immense terrestrial globe, with its seas and continents. Neither have these Indians an idea of what the universe really is when they call him the creator and

<sup>•</sup> In Nahuati we may compare the reverential suffix -tzin, and in Shoshoni dialects the parallel one of -pitch, -bits; e. g., múbu oul in Bannock is mû'mbits oul in the Shoshoni of Idaho.

maintainer of the universe. The Indians do not claim that he created the world with all in it by one single and simultaneous act, but when he is creating, metamorphosing, or destroying, his acts are always special, directed towards certain objects only. After making the earth, the lakes, islands, prairies, and mountains he gave a name to each locality (p. 142, 1 sqq.). Some of these names must be regarded as giving indications as to the earliest places inhabited by these Indians, especially when they designate fishtraps and ceremonial sudatories. Thus on Upper Klamath Lake we find Kû'mbat, Túkwa, Tulísh, Koháshti as fishing places, Ktá-i-Tupáksi and Yulalóna as fish-traps, the special gifts of the deity to the people. Other places of this kind are Shuyakē'kish and Ktá-i-Tupáksi. In the old Modoc country, on Lower Klamath Lake, there is a rock shaped like a crescent and called Shapashzē'ni, because "sun and moon once lived there." On Sprague River there is a hill called "at K'ımukamtch's Lodge"—K'ımutcham Látsashkshi. Other legendary residences of the deity were at Yámsi, "Northwind's residence," a high mountain east of Klamath Marsh; others on Tule Lake, at Nílakshi Mountain; and finally K'múkamtch was changed into the rock Ktá-iti, which stands in the Williamson River (q. v.). The old people of both chieftaincies remember many localities alleged to have been the theater of his miraculous deeds.

K'múkamtch creates the Indians from the purplish berry of the service-tree or shad-bush (Amelanchier canadensis, in Kl. tchák), and the color of both has evidently suggested this idea. He also provides for man's sustenance by supplying him with game and fish and the means to capture them; also with the necessary vegetal products. Objects noticeable through their peculiar shape are called after him, e. g., the thistle, the piercer of K'ınú-kamtch, K'mukámtcham kä'k. A peculiar haze sometimes perceptible in the west or northwest, shuúish, is regarded as his precursor or that of his son Aíshish.

Although but a passing mention is made of a wife or wives of his, K'múkamtch has a family. The myths speak\* of a father, of a daughter, and of Aíshish, his son "by adoption," as members of it. The name of his

<sup>\*</sup> Cf. Texts, pg. 100, 2: skäkî'sh p'tís-lûlsham. Mention is made of one-eyed wives of Ské'l and of Tcháshkai.

daughter is not given, but she represents the clouded or mottled evening sky. When she leads him to the under-world they meet there a vast crowd of spirits, who for five nights dance in a large circle around a fire, and on each of the intervening days are changed into dry bones. K'múkamtch takes with him some of these in a bag, and when reaching the horizon at daybreak throws the bones around the world in pairs and creates tribes from them, the Modoc tribe being the last of these. Then he travels in the path of the sun till he reaches the zenith, builds his lodge, and lives there now with his daughter.

K'múkamtch also figures as the culture-hero of his people; but since he does so only in one of the myths which came to our knowledge, this myth may be borrowed from some neighboring tribe. In that myth the primitive arts and practices, as hunting and bow-and-arrow making, are taught by him to men, as was done also by Quetzalcoatl, by Botchika, and in Oregon by the Flint-Boy of the Kalapuyas, in whom the sun's rays were personified.

What the national myths relate of him is not of a nature to make him an object of divine veneration. He resembles men in every particular, is born and dies, acts like other Indians, travels about with companions, starts on gambling jaunts, is indigent and often in want, and experiences more misery throughout his eventful career than Zeus ever did on account of his illicit love-making. Like the chief gods of other Indian nations, he is the great deceiver and trickster for all those that have dealings with him, is attacked and drubbed repeatedly for his meanness and crimes; but after coming out "second best" or being killed over and over he recuperates and comes to life again just as if nothing had occurred to disturb him. Compared with other fictions representing powers of nature, he is fully the equal of such characters as Nanabozho and Gluskap, or of the Kayowē demiurge Sínti, "the Deceiver." Some of the most attractive fictions describe the various tricks and stratagems by which K'múkamtch allures his son Aíslish into perilous situations, from which rescue seems impossible. Prompted by him to climb a tall pine-tree, he would have perished on it by hunger had not his charitable wives, the butterflies, succored him in time. The general conflagration by which the earth and its inhabitants

were consumed through a rain of burning pitch was also brought about by K'múkamtch's hatred for his son. Aíshish escapes from this inhuman persecution, and subsequently seeks to revenge himself upon his father. Aíshish's son jerks off the glowing tobacco-pipe from his grandfather's neck and throws it into the fire; Aíshish pushes it farther into the flames until burnt, and thereby K'múkamtch's death is brought about.

It is singular that when he and his son Aíshish are expected to join social or gambling parties the other participants always experience some difficulty in recognizing the one from the other. The camp-fire which K'múkamtch made on approaching the meeting-place was burning badly, the smoke seeming almost to stifle the flames; but that of his son, purple-blue in color, sent the smoke straight up, while the fire of Silver Fox, the companion of K'múkamtch, was yellow. When shooting at the mark, Aíshish's arrow hit it every time, but the arrow of K'múkamtch struck the ground short of the mark. While gambling, Aíshish became the winner of all his companion's stakes.

Assuming the mask of the Marten (Skē'l, Skē'lamtch), K'múkamtch sends out his younger brother, Weasel (Tcháshkai), to look out for one-eyed women and to bring them home as wives (Texts, pp. 107-118). Both try to stop the Northwind and the Southwind at the very orifice whence they are blowing. Weasel loses his life in the attempt, but Marten kills both winds. After Weasel has come to life again, both proceed to the lodge of the five brothers, the Thunders. When inside of the lodge Marten puts on the head-cover of the dead Northwind, and the Thunders feel his gigantic power. At night an internecine fight takes place between the brothers, and while their lodge is on fire their hearts explode in succession.

From the almost infinite wealth of Klamath folklore many more particulars about this chief deity could be adduced, but what stands above is amply sufficient to indicate the powers of nature which he represents. The facts that Wán or Wanáka, the sun-halo, is his constant companion\* and that the seat in the sky which he constantly holds is that of the sun at

<sup>•</sup> The sun-halo is an important factor in some Indian mythologies. The Zuñi Indians say that when a storm is brewing the sun retreats into his house, which he built for his safety, and after the storm he leaves it again. Among the Zuñis the sun is the principal deity also.

noontime, would alone suffice to show that he represents the sun, the most potent, we may say unique factor in giving life, nourishment, and health to living organisms, the most important of the sky-gods, and the great center of myth production among all nations of the world. In one of the Modoc myths it is stated that "at the call of the morning star K'músh sprang from the ashes (of the fiery sky or aurora) as hale and as bright as ever, and so will he continue to live as long as the (solar) disk and the morning star shall last, for the morning star is the 'medicine' (múluash?) of the disk." In other myths he appears in the form of the golden or bright Disk, inhabiting the higher mountain ridges and becoming the suitor of females afterwards deified. Thus, like Hor, Ra, and Atum, he appears sometimes as the morning sun, at other times as the noonday and evening sun, and in the myths referring to weather he is either the summer or the winter sun. The burning pipe which Aíshish's son takes from his grandfather and destroys in the camp-fire represents the sun setting in a glowing red evening sky. As the summer sun with his gigantic power he brings on a conflagration of the world and as a cloud-gatherer he causes an inun-In the warm season he appears wrapt up in haze and fogs, which the myth in its imagery represents as "a smoky camp-fire," almost impenetrable to the sun-rays: "his arrows fall to the ground before they reach the mark." To typify his sagacity and omniscience, K'múkanitch appears under the symbolic mask of a quadruped, the pine-marten or Ske'l, in Modoc Tchke'l, which changes its black winter fur to a brown coating in the hot months of the year, and thereby became a sort of portent to the Indian. Similar changes occur with all the fur animals, but with the marten the difference in the color appears to be greater than with others. Ske I sends his brother Tcháshgai, or Weasel, to obtain one-eyed women for both, these being sun and moon, which the Eskimos also represent as one-eyed, deified persons.† The North wind, which is blowing in alternation with the South wind, is attacked and killed by Ske'l. Here Ske'l represents the sun of the summer months, for the summer's heat defeats the cold blasts of the wintry

<sup>•</sup> Texts, pp. 99, 4 (shláyaks ak), and 5.

<sup>†</sup> Cf. the Maidu myth of Kodo-Yampē in Stephen Powers's "California Tribes;" Contributions to North American Ethnology, III, 293.

and equinoctial seasons; when he places the North wind's hat upon his head he puts an end to the noise of the Thunder brothers and then represents the wintry sun.

The attitude which K'múkamtch observes toward his son Aíshish will be spoken of under the next heading. It is necessary to add that the former's position is by no means restricted to that of a solar deity; several of his attributes make him also a god of the sky, or at least of the clouds, for clouds and the weather's changes are due to the sun's agency. When the sun is environed by lamb-clouds, or a mottled sky, this is figuratively expressed by: "K'múkamtch has taken the beaded garments of Aíshish and dressed himself in them." A peculiar red smoke or haze appearing in the northwestern or western sky, shnúish, announces his arrival; he is also recognizable by his bulky posteriors, or, as the Modocs say of him: "K'múkamtch múnish kutúlish gítko." By this they evidently refer to the white and heavy, mountain-shaped summer clouds.

Greek mythology depicts the fecundation of the earth by rain showers and thunder storms as the illicit amours of the sky-god Zeus with the wives and daughters of mortal men. Exactly in the same manner K'múkamtch, as sky-god, seeks to approach illicitly the numerous wives of Aíshish, of whom the majority refuse him, though he has by some stratagem previously removed their husband from the scene.

In the aboriginal mind the creation of organisms, vegetal and animal, seems to be in connection with the fecundation of the earth, whereas the creation of the earth, world, or universe implies an act entirely different. All the names of Klamath localities are said to come from K'mukamtch. The manner in which he created plants and animals was, as we are told in one Modoc myth, by thinking and by wishing, this probably implying that after forming an idea of some creature he made that idea a reality by the strong energy of his will. Many creatures, especially birds and quadrupeds—even men—the myths tell us, were brought forth by him in this manner. The moral qualities ascribed to this deity are in keeping with what is known of his physical and intellectual powers. He provides for mankind, which he has created, but does not tolerate any contravention of his will; for he punishes bad characters by changing them into rocks or by

burning them. Our ideas of justice, equity, protection, or love towards men do not and can not enter into the spiritual range of a god whose prototype is constituted of physical powers only.

# Afshish.

Φαίνεταί μοι κήνος ίδος θεοϊδιν.

Aishish, or Aishishamtch, the second in importance among the Klamath deities, and certainly the most popular of all, is the son of the world-creator, K'múkamtch, and also his companion and rival. He is beautiful in appearance, beloved and admired by men, and is the husband of many wives, selected by him among the birds, butterflies, and the smaller quadrupeds. His name signifies the one secreted or concealed, and was given him at the time of his birth; and since "The Birth of Aíshish" myth explains the nature and position of this deity better than any other myth, I translate it in full from the Indian text obtained from a Modoc woman at the Modoc Reservation, Indian Territory.\* The name of Aíshish's mythic mother, as other natives informed me, is Le-tkakáwash. This is an Oregonian bird of the size of the tchō'kshash, or blackbird, with a brilliant red or yellow plumage, colors rarely found in birds of that western State. Ornithologists identify it with the Louisiana tanager: Pyranga ludoviciana. Thus the bird is an appropriate symbol of the bright sky at moonrise or sunrise, which phenomenon Aishish's mother is representing. The myth runs as follows:

In order to cremate the body of an old sorceress, Le-tkakawash gathered wood while carrying her baby son on the back, piled up the wood and set up the ceremonial mourning wail. Proposing to leap into the fire herself, she was uncertain what to do with her son. She fastened him tightly to her back, and when she had applied the fire K'mukamtch perceived that she was in tears and ready to leap into the burning pile. "What on earth is this pretty woman going to do?" said he to himself; and when he saw her retreat more than once before accomplishing the dangerous leap he approached, intending to reach her in time to restrain her; but she rushed

The myth of Aíshish's birth forms a portion of a long cyclus of related myths, with the title: Aíshisham shapkalä' ash winlamnúlashti. I obtained them from Lucy Faithful, wife of Stutílatko, or "Faithful William;" cf. Dictionary, p. 412.

into the fire, and K'múkamtch, regretting to have arrived too late, managed, however, to withdraw from her back the baby, and to rescue it. He wept as he carried the child off in his arms. But where should he place it? If he placed it on his forehead it would look quite ugly, thought he; therefore he placed it on his knee and went home. He complained that he had an ulcer upon his knee, and asked his daughter to open it, for it pained him excruciatingly. She spread a sheet under the knee and another over it, to squeeze the ulcer open He exclaimed: "It hurts me terribly! Go easy! Be careful!" Then she replied: "What is the matter with you? Something like hair comes out in a bunch from the core. Why does it look like hair?" And when the baby appeared on the surface and began to cry she said: "What have you, been doing? I have suspected you for quite a while before!" And the babe cried and cried, until the "father" proposed to give a name to him. None was found to answer, for the child cried on and Then he proposed to call it Aishilam'nash ("the one secreted about the body"). This stopped its cries somewhat, but not entirely; so he proposed the name Aishish, and then it became restful and quiet. So the child grew up with this name, then lived in the company of K'múkamtch, became an expert in making shirts, and when gambling won all the stakes, even from his father, who became jealous on account of his superiority.\*

This is the extent of the myth so far as needed for our purpose. The jealousy of the grim and demoniac K'múkamtch against his more popular son forms the subject of a considerable number of Aíshish myths, which are highly imaginative and interesting. By various stratagems based on low cunning he brings his son into perilous positions, from which he is rescued only with the utmost difficulty by others, or is perishing in the attempt to save himself. Meantime he is robbed of his garments by his "father." These constant persecutions finally force Aíshish to revenge himself upon his father, who is killed by him repeatedly, but not by any means so often as he is killed himself.

The connection of the mythic pyre of self-sacrifice with the dawn is not only based on similarity of nature, but also on etymological grounds; for the verb nī'lka, it dawns, with slight vocalic change turns into nélka, nélya, to be on fire. Cf. the Latin aurora, which is a derivative of urere, to burn, and Appendix VI to Grammar, pp. 706. 707.

Aíshish's camp fire is of a clear, bright purplish-blue color (yámnash-ptchi); he makes his shirts with his own hands and ornaments these and his leggings with all sorts of beads. As a marksman he excels all his companions, whose arrows do not even strike the target (Texts, pag. 99, 4-6). According to the Modoc story his wives are Mole, Badger, Porcupine, Bitch, Crane, Mallard, two Maídiktak-birds, Wren, Tchektiti-bird, Yaulíliks or Snowbird, Butterfly, and a host of others; the Klamath Lake myth (Texts, p. 99, 9. 10) names five: Coot, Long-tailed Squirrel, Crane, Mallard, Chaffinch. Tcháshkai or Weasel, the younger brother of Skē'l, scmetimes plays the part of Aíshish, but he is not found in this quality so constantly as his brother Skē'l is in that of K'múkamtch.

The various attributes ascribed to this deity by the myths show Aíshish to be in many respects similar to Quetzalcoatl of Nahuatl mythology, who has been made alternately the genius of the morning star, of the calendar and of the atmospheric changes. As to Aíshish and the personal beauty invariably ascribed to him, it may appear doubtful, in view of so many other complex attributes, which idea was the starting-point that created this mythic figure, and subsequently gathered other but less material attributes about this son of the sun. He could represent originally the morning star, or the rainbow or the moon, but after mature reflection upon his complex attitudes I now believe him to be a lunar deity. The splendor of the full moon is of a yellow hue, like Aíshish's camp fire (käkä'kli) and the shadow of the famished Aíshish, as seen from below through the pine-trees of the forest, is the narrow crescent of the waxing moon following its disappearance at the new moon period. At the new or "dead" moon Aishish is famished or dead, to revive again on the days following, and this, like other phases of the moon, which result from her changeable position in regard to the sun, are represented to be the result of the jealousy and enmity of K'múkamtch against Aíshish—and whenever Aíshish succeeds in killing his father, this implies the decrease of sun-heat during the winter season. No myth shows a more striking analogy to the "Birth of Aíshish" than that of the birth of Bacchus from the thigh of Zeus after the destruction of his mother Semele by a thunder-stroke caused by Zeus, the Sky-god.

The moon is the originator of the months, and the progress of the

months brings on the seasons with the new life seen sprouting up everywhere during spring and summer. So the quadrupeds and birds which are the first to appear after the long winter months are considered as the wives of Aishish, and the flowers of summer vegetation are the beads of his garments. He enjoys more popularity than his father, for the moon's light is mild, not burning nor offensive, nor does it dry up vegetation and make men and beasts drowsy like the rays of the midday sun. Many nations also believe that the changes of weather are partly due to the phases of the moon. Although the "Birth of Aishish" myth obtained by me represents Aíshish rather as the adopted than as the real son of K'múkamtch, other myths state him to be his son resulting from the union of the sun-disk to the red sky of the morning or evening, symbolized by the woman Le-tkakáwash. We must recall to mind that the term for father, p'tíshap, in Modoc t'shishap, is really the nourisher, feeder, and not the progenitor, for it is a derivative from t'shin to grow.\* Most other mythologies consider the relation of sun to moon as that of man to wife, or of wife to man (cf. Deus Lunus), but here the thing is different. There are no female characters of importance in Klamath mythology, nor does the language distinguish grammatically between the sexes.

The difficulty which we experience to distinguish solar and lunar deities from each other in some of the American religions is caused by the circumstance that in many languages of this western hemisphere the term for sun and for moon is the same. In such languages both orbs are distinguished from each other by being called day-luminary, or night-sun, night-luminary, and with some tribes the belief has been found, that both are actually the same celestial body, one being merely the image or shadow of the other. In the Maskoki languages hási answers for both, but the moon is commonly called ní'li hási or "night sun." In the Tonica language táx-tchiksh, abbrev. táxtchi stands for sun, moon, and star, but the moon is usually named lá-u táxtchi "night luminary," the stars táxtchi tipulá, while the sun is either áxshukun táxtchi, "day luminary" or simply táx-tchi. Of the Tinné languages many have tsā, sā, of the Algonkin languages kísis or parallel forms for both celestial bodies, separate distinctions being

<sup>\*</sup> Cf. the Grammar, in Appendix VI, p. 710.

added for "day" and "night." In the Tsimsián and in some of the Selish dialects the terms for both also agree, but in the Shoshonian and Pueblo languages they differ entirely. In Utah and other Shoshonian dialects the term for moon shows the archaic or reverential suffix -pits, -pits previously noticed (ma-atáwa-pits in Utah), which closely corresponds to  $\pi\alpha\lambda\alpha i\varphi\alpha\tau os$  as used in the Homeric poems.

While the sun divides time into days, seasons, and years, our sections of time called weeks (quarters of the moon) and months (lunations, moons) are due to the revolutions of the moon. This is what caused the Klamath Indians to call both orbs by the same name: shápash the one who tells, which signifies: "which tells the time," or "time measurer." For the moon a parallel form exists in the Timucua, once spoken in Florida: acushiba star which tells, viz: "star measuring the time" and in the name of the Egyptian moon-god Tehuti, called Thoth by the Greeks,\* also in our Germanic mân, English: moon, Germ. Mond, "the measurer."

Here as elsewhere the moon appears under different names, for in Klamath she is also called ukaúχōsh "the one broken to pieces." This term never applies to the sun, but only to the moon in the four phases, as a changeable body.† Originally this was only an epithet of the moon, but in course of time it gave origin to a separate deity, for Ukaúχōsh distinctly appears as moon-god in a myth, which relates his marriage to Wekétash, a frog-woman living with ten beautiful sisters on the west side of Upper Klamath Lake. Ukaúχōsh now carries her, the frog, in his heart, and this is what we are wont to call "the man in the moon." Should only a little bit be left of him when in the bear's mouth (referring to eclipse), she would be able to bring him to life again.

#### LEMÉ-ISH OR THUNDER.

All elementary deities in the Klamath religion, except K'múkamtch and Aíshish, are mysterious, shadowy beings, not sufficiently anthropomor-

<sup>\*</sup> Various functions are assigned to Tehnti; his symbol is the *ibis-crane*, whose long, pacing steps evidently suggested to the myth-makers of Egypt the idea, that he was measuring the earth. The name Tehnti is derived from the Egyptian verb texu to be full, for the measuring of liquids, grains, etc., is effected by filling vases possessed of certain cubic dimensions.

<sup>†</sup> Derived from nká-ukna to knock to pieces.

phized and too dimly defined to deserve the name "gods." Those among them that are most frequently mentioned in myths and popular stories are the genii of the Thunder and of the Winds.

The genius of the Thunder, Lěmé-ish, is sometimes mentioned as a single person, or abstract mythic being, but more frequently as a company of five brothers, the Thunders or Lěmelěmé-ish. At times they make themselves formidable, for their terrible weapon is the lightning or thunderbolt; they cleave the mountains, rocks, and trees, kill, roast, and devour human beings, in which character they are called máklaks-papísh. The interior of their lodge is dark, for a sky obscured by a thunderstorm is lacking the full daylight. K'múkamtch entering the lodge, disguised as the "strong man" under the mask of Skē'l or pine-marten, annihilates them, for the winter sky with its cold blasts is antagonistic to the display of celestial electricity. The eldest of the Thunders is married to Skúle, the meadow lark, who is the sister of pine marten. After having made themselves thoroughly odious upon the earth, they were, as the myth tells us, relegated to the faroff skies, where they can frighten the people by their noise only and do no further harm.

The parents of the Thunders are supposed to live in a small hut or kayáta, and in their stead two dogs are often mentioned as accompanying the Thunders. Of these there are five, because the thunder rolling along the mountains is heard in repeated peals, and these peals are in the myths likened to repeated explosions of the Thunders' hearts. The shooting up of lightnings from the earth to the skies gave rise to the idea that their home is underground, and that the lightnings coming down from the skies are simply the Thunders returning to their homes. As the spirit of the Thunder Yayayá-ash is mentioned in a mythic tale.

The *Thunder-bird*, which plays so prominent a part in the myths of the Eastern and Northwestern tribes, does not appear here under this name, but is represented in some stories by the Raven or  $\underline{K} \underline{\acute{a}} \underline{k}.*$ 

<sup>•</sup> The belief in the Thunder-bird is found more frequently among Northern than among Southern Indians. Cf. "The Thunder-bird amongst the Algonkius," by A. F. Chamberlain, Amer. Anthropologist, Jan., 1890, pp. 51-54; and my "Migration Legend of the Creek Indians," vol. 2, 49.

#### VÁMASH AND MÚASH.

North wind (Yámash) and South wind (Múash) are more important to the inhabitants of the Klamath highlands than any of the other winds, and therefore are mentioned more frequently. Winds always appear in connection with K'múkamtch or his representative among the animals, Skē'l. Thus when Skē'l visits his sister, Meadow Lark, who is married to the oldest of the Thunders, he is accompanied by Kák (the Raven, or stormbird), Yámash, Tchákinksh, Yéwash, Múash, Tkálamash, and Gû'pashtish. The Thunder receives and feeds them with the blood of the people slain by him.

The conflict between Skē'l and Tcháshkai on one side and the Winds on the other is related on page 111 of the Texts and is purely meteorological. The South Wind obscures by clouds the face of the moon, and thus kills him temporarily; but when the summer sun appears in the form of Skē'l both winds disappear at once to make room to an unclouded sky. The hat of the dead Yámash afterwards serves to frighten the Thunders, as related on the same page. Which was the southern home of Múash is not pointed out in the myths, but that of Yámash was Yámsi Mountain, which is called after him. Yámash corresponds to some extent to the Kabibonokka or Northwind of the Ojibwē Indians, and is as much an object of folklore as he is. In other mythologies of America the winds are the blasts of monsters or big beasts; for the animism prevailing in all the ancient myths requires them to be the manifestation of some living being.

#### KÄÍLA OR THE EARTH.

The Earth is regarded by these Indians as a mysterious, shadowy power of incalculable energies and influences, rather mischievous and wicked than beneficial to mankind. The Indians ascribe anger and other passions to it, but never personify it in clearer outlines than the ancients did their " $E\rho\alpha$  and Tellus; and it never appears as an active deity in the numerous mythic tales gathered by Mr. Curtin for the collection of the Bureau of Ethnology. I know of it only through the song-lines gathered by myself from individuals of both tribes.

Among all nations of the world we find the idea, which is real as well

as poetical, that the Earth is our common mother. "She is dealing out her bountiful gifts to her children, the human beings, without envy or restraint, in the shape of corn, fruits, and esculent roots. Her eyes are the lakes and ponds disseminated over the green surface of the plains, her breasts are the hills and hillocks; and the rivulets and brooks irrigating the valleys are the milk flowing from her breasts." This is the poetical imagery in use among the Eastern Indians when the Earth is mentioned to them.\* The idea that earthquakes and unaccountable tremors or noises within the body of the earth, also the malarial fevers, are the utterances of threat or displeasure at the misdoings of mankind, is as general among Indians as among other nations, and a consequence of the animistic tendency of primitive nations. The Indian prophet Smuzale at Priest Rapids, on Middle Columbia River, and his numerous followers, called the "Dreamers," from the implicit faith these Saliaptin sectarians place in dreams, dissuade their adherents from tilling the ground, as the white man does; "for it is a sin to wound or cut, tear up or scratch our common mother by agricultural pursuits; she will revenge herself on the whites and on the Indians following their example by opening her bosom and engulfing such malefactors for their misdeeds." This advice was probably caused by the common observation that ground recently broken up exhales miasmas deleterious to all people dwelling near.

That the Earth was regarded as an animate if not personified being is shown by the form käílash of the objective case (125, 1), this case being formed in -ash only in terms applied to man and quadrupeds. Their myth of the earth's creation of course does not refer to the whole globe, but only to the small part of North America known to these Indians. The earth's interior is also the home of the Thunders, because lightnings are often observed to shoot up from the earth into the skies.

Special songs referring to the Earth are contained in 175; 16: käíla nû shuinálla; 176; 3 käíla ai nû wálta; 158; 48 käílanti nû shílshila—

<sup>•</sup> After Tecumseh had delivered a speech to Governor Harrison at Vincennes, in 1811, he was offered a chair by the interpreter, who said to him: "Your father requests you to take a chair." To this Tecumseh made, with great dignity of expression, an answer which has since become classical: "The sun is my father, and the earth is my mother; and on her bosom will I repose," and immediately seated himself, in the Indian manner, upon the ground.

the two latter alluding to rumblings below the earth's surface. In the song 192; 3 the term hämóla should be changed to t'hämóla, temóla, was covered with haze or mist, a phenomenon often producing malarial and other fevers, and therefore regarded by these Indians as of bad augury. Other passages mentioning the Earth, personified or not, are quoted in Dictionary, p. 123; in one of these, K'múkamtch is threatening to "whirl the earth around" in a dance, and probably this song forms part of some mythic story. (Texts, pg. 192; 9.)

#### MUNATÁLKNI.

Besides the Earth there is another chthonic deity known to the Klamath people, Munatálkni or the Genius of the Underworld. I have met his name in one story only, which is that of the creation and first sojourn of the people around Wood River, between Fort Klamath and the Upper Klamath Lake. English-speaking Indians readily identify him with our devil; but no wicked or immoral qualities are ascribed to him, as morals enter into the religious ideas of the hunter tribes but sporadically. There is something of the aboriginal in him, and he is also called Lěmunákni, the signification of both names being analogous.

He appears in the following tale: When K'mikamtch created this world, he made one man, and one woman intended to be the man's sister. The creator placed them in a garden (háshuash) studded with trees producing sweet fruits and built a house for them. The adjoining stable contained domestic animals for their use. All this was upon the prairie watered by Wood River. Man and woman were both blind, and had to remain so until the fruits would be ripe. K'múkamtch told them he would visit them on a Sunday and would knock at the top of their house. Should anybody knock at the door, the knocks would be those of Munatálkni and they must not open. Munatálkni came and knocked at the door, informing them that the fruits were ripe and that he brought them all kinds of berries. The woman said to the man: "Open the door, K'múkamtch is here!" but the man said: "Don't open; it is not K'múkamteh who stands at the door!" The woman opened; Munatálkni put one sweet berry in her mouth and she He was wearing a long head-dress of feathers tied to the top of his hair, his emblem as conjurer, and this string of feathers was so long as to touch the ground. He then stole all the fruits in the garden and went with them to his underground abode.

Then K'múkamtch, who had observed all this from a distance, arrived and knocked at the top of the house. This time it was the man who opened. When asked what had become of the fruits he excused himself by stating that Munatálkni had taken all of them. This put K'múkamtch into such a rage that he threw the woman out of the house and whipped her to death. Then he cut open the eyelids of both, which previously had been fastened together, and the man said: "I can see the sun." K'múkamtch then instructed the man how to make his livelihood by using the bow and arrow, and how to manufacture sinew-strings and obsidian arrow-heads. Upon this he brought the man's sister into life again and both went into the mountains to hunt, for they had nothing to eat. Ever after this K'múkamtch remained angry with them.

This is but the commencement of a long tale designed to show the miraculous growth of the family which sprang from the first man and woman, and their progress in the life-sustaining arts and manufactures. There is no doubt that the above is a singular distortion of the Bible tale concerning Adam and Eve in paradise. The question which remains to be solved is this, whether or not Munatálkni himself is borrowed also from the Jewish story. If he is, then in connection with him we may recall Aíshish, who, according to some Modocs, is nobody else but Jesus Christ, who two thousand years ago passed through Lost River Valley and dug a deep well there which he presented to the Modocs—all this on account of a phonetic similarity between the names Aíshish and Jesus.

The remainder of the story is exactly like what other Oregonian myths relate concerning the origin of mankind and is incontestably of Indian origin. No further mention is made in it of Munatálkni.

#### SHU'KASH OR WHIRLWIND.

Another of the numerous elementary deities is the Whirlwind or Shū'kash. An interesting mythic tale about it, which I have obtained among the Modocs in the Indian Territory, makes of the Shū'kash an engine brought into play from time to time with tremendous effect by the

Belly;" he is represented to be an old man whose vigor of life is on the decrease. When he leaves his lodge, his appearance embodies the rain-laden, dark-hued, thick nimbus clouds overhanging the earth. When his engine\* comes into action, he attracts by it all the objects within reach, he oppresses the earth with his weight, and forces wayfarers to walk in other paths than they intended to travel lest they may incur danger to life. When he has spent his force by this wanton display, he is rent by a stroke of lightning or a strong gust of wind; he is dissolved into atoms, and the bones filling his big paunch, which had produced the rattling noise attending the course of whirlwinds, fall down to the ground. Tsáskai, the Weasel, the brother of Marten, wrestling with the old man and conquering him after a hard struggle, is the mythic agent who brings about his final discomfiture.

#### SPIRIT DEITIES.

'Εκτέταμαι φοβεράν φρένα, δείματι πάλλων.

No people has ever been discovered that did not believe in the return of human souls after death to their former homes in the form of ghosts. Ghosts or spirits hovering through space are invisible and may inflict damage to anybody without danger of being recognized; therefore they usually inspire awe and terror, and wherever the existence of these fanciful beings is recognized imagination fills the earth, the atmosphere, and the waters with such spooks. Not all of these are necessarily supposed to be the souls of the deceased, but they may also represent the souls of animals, the spirits of mountains, winds, the celestial bodies, and so forth, for animism has its widest sway in this sort of superstition. Very different qualities are ascribed to each of these hobgoblins or spooks. They are either gigantic or dwarfish in size, powerful or weak in body, attractive or repulsive, of beneficial or wicked influence. They chiefly appear at night or in stormy weather; some are seen single, others in crowds, and a few of their number

<sup>\*</sup>Shū'kash is the substantive of sh'hū'ka to whirl about, this being the medial distributive form of húka to run about: sh'hnhóka, sh'hū'oka, sh'hū'ka "to run about by itself in various directions."

can be perceived only by the trained eye of such as are initiated into the conjurer's profession.

The classes of specters mentioned more frequently than others in mythology are the spirits of the dead, and giants, dwarfs, and fairies.

The Skō'ks, or spirits of the deceased, occupy an important place in the psychologic marvels of the Klamath Indian, and are objects of dread and abomination, feelings which are increased by a belief in their omnipresence and invisibility. The popular idea of a ghost is suggested in all climates and historic epochs by that of a shadow of somebody's former self, and in several Indian languages the same word is used for shadow, soul, and ghost.\* The proper signification of skō'ks, shkū'ksh is "what comes out of;" like skó'hs, skó spring of the year; it is derived from skóa to come out of, to emerge from, sprout up.

In the mind of the Indian the appearance of a skō'ks comes pretty near the popular idea of a witch or spook as held by the uneducated classes of our population. The soul of a man becomes a skúks as soon as the corpse has been buried or consumed by fire. It hovers in the air around its former home or the wigwams of the neighbors and at night-time only. Its legs hang down and produce a rattling noise, and the whole appears in a white or a black shade of color. Usually nobody sees them, they do not harm anybody, nor do they produce any dreams; they appear to the senses and sight of the living only when they come to presage death to them. They undergo no metempsychosis into animals or plants; after hovering awhile around their former homes they retire to the spirit-land in the sky, "somewhere near K'nıúkamtch." Their arrival there is afterwards revealed by dreams to the surviving relatives, who express in songs what they have seen during their slumbers.

<sup>\*</sup> In the Tonika or Túnizka-language of Lonisiana télia or télia'htch signify shadow, soul, and reflection in the water; in the Cha'hta, State of Mississippi, shilámbish is shadow and soul, while a ghost is shilup. The Egyptian ka and the Greek εἴδωλον, the soul after death, really signify image, and to this we may compare the nse made of the Latin imago. The Cherokees, as Mr. James Mooney informs me, distinguish between adántâ soul in the living being, nºdall' secondary soul of an animal killed once before, and asgina an ordinary specter, ghost of malevolent disposition, which last term served the missionaries for transcribing the word "devil."

The common belief of the Oregonians is that after death the soul travels the path traveled by the sun, which is the westward path; there it joins in the spirit-land (ē'ni) the innumerable souls which have gone the same way before.\* If the deceased was a chief, commander, or man of note, his "heart" can be seen going west in the form of a shooting star. The Egyptian belief was that the soul of the dead was following Atum, the sinking sun, to the west; and since then innumerable nations and tribes have adhered to the same belief.

From the Texts obtained from Dave Hill, pp. 129, 130, we learn that other abodes of dead men's spirits are the bodies of living fish. Perhaps Hill learned of this belief among the maritime and river Indians with whom he lived on the Columbia River, where the idea of fish eating corpses could suggest itself more readily than upon the lakes of the Klamath highlands. The Notes which I added to these curious texts give all the explanations which it is at present possible to give. It appears from them that such spirits can enter the bodies of "spirit-fish," that one skúks can see another, and that Indians, not white men, sometimes see the skúks, but at the peril of their lives. A distinction is also made between good and bad skúks, the latter being probably those who render the Indian's sleep uncomfortable by unpleasant dreams.

Some natural phenomena often appear to these Indians in the form of specters or hobgoblins, as clouds, water-spouts, snow-storms, columns of dust, etc. Noisily and rapidly they pursue their lonely path, and their gigantic, terrific frames reach up to the skies; whoever meets them unawares is knocked down senseless or killed outright, or must exchange his body for another. Some of these specters look dark on one side and light on the other.

In northern latitudes, where polar lights are frequently visible, they are supposed by the Indians to represent the dance of the dead, and whenever Christianity is introduced among them they identify this beautiful spectacle with the last judgment, when the spirits of the deceased move about in the expectation of the coming Christ.

<sup>\*</sup> Cf. Dictionary, sub voce ē'ni and Grammar, Appendix VI, p. 702. The Warm Spring Indians call the spirit-land: ayayani. See also Texts, p. 174; 11.

From a Klamath myth we gather the information that there is a guardian over the spirits wafting through the sky, called Wásh k'músh, or the gray fox. This name is evidently borrowed from the coloring of the sky, as it appears before or during a polar light, and must be compared with another beast name, the wán or wanáka, the red fox, which is the symbol of the sun-halo.

Another class of spirits embodies the spirits of those animals which have to be consulted by the kíuks or conjurer when he is called to treat a case of disease. Such persons only who have been trained during five years for the profession of conjurers can see these spirits, but by them they are seen as clearly as we see the objects around us. To see them they have to go to the home of a deceased conjurer, and at night only. He is then led by a spirit called Yayayá-ash appearing in the form of a one-legged man towards the spot where the animal-spirits live; this specter presides over them; there the conjurer notices that each appears different from the other, and is at liberty to consult them about the patient's case. Yayayá-ash means "the frightener," and by the myth-tellers is regarded as the Thunder or its spirit.

Giants.—The imagination of every primitive people has been busy in producing monsters of all qualities and shapes, human and animal, even walking mountains and trees. What we call giants are generally personifications of irresistible powers of nature, which are supposed to perform feats impossible for man's utmost strength; by dwarfs are symbolized powers of nature which achieve great and wonderful things by steady and gradual work unnoticed by the generality of human beings.

Giants are often the originators of geological revolutions of the earth's crust. Thus the giant Léwa represents the circular, lofty island lying within the waters of Crater Lake or Gíwash. He went by an underground passage (fissure?) from his seat over to Yámsi Mountain to wrestle with Skē'l, the all-powerful pine-marten, whose home is at Yámsi. After conquering him, he carried him through the same passage again to Crater Lake for the purpose of feeding him to his children, and his daughter, Léwam pé-ip, struck him with a heavy flint-stone.

Like the walls of that lake and the whole Cascade range, the island in

question is of volcanic origin. The natives avoid going near the lake or even ascending the surrounding heights.\* Earthquakes are often ascribed by foreign nations to giants stretched out below, who are shifting their underground position. Giants often appear also as ravishers, ogres, and man-eaters, like the Scandinavian Yättur, and two giant-women of the Elip tilikum or "Primeval People," were changed into two columns of sandstone, near the Yákima country, on Middle Columbia River, for having preyed upon the human race.†

Dwarfs.—A miraculous dwarf is mentioned under the name of na'hnias, whose foot-prints, as small as those of a child, are sometimes seen upon the snow-clad slopes of the Cascade Range by the natives. But the dwarfish creatures who make them can be seen only by those initiated into the mysteries of witchcraft, who by such spirit-like beings are inspired with a superior kind of knowledge, especially in their treatment of disease. The name is derived either from néna to swing the body from one to the other side, or from naináya to shiver, tremble

Another dwarf genius, about four feet high, Gwinwin, lived on Williamson River, where he habitually sat on the top of his winter lodge and killed many people with his black flint hat. He is now a bird.

The Klamaths appear to know about certain spirits having bodies of a diminutive size, but the characteristics of such are not distinct enough to permit identification with the fairies, Erdmännchen or Kabeiroi of European mythologies.

#### ANIMAL DEITIES.

The deification of animals in the primitive forms of religion is highly instructive, and instances are so numerous that it would take a series of volumes to comprehend its details. Animal stories and shamanism are

Among the summits of the San Juan Mountains, New Mexico, there is to day a lake bounded by precipitous walls, and there is a little island in the center of the lake with a hole in it, and something sticks out of the hole that looks like the top of a ladder, and "this is the place through which our ancestors emerged from the fourth into the fifth or present world." The Návajos never approach near to it, but they stand on high summits around, and view from afar their natal waters. (From Návajo Creation Myth, Am. Antiquarian, V, 1883, p. 213.)

t G. Gibbs in Pacific Railroad Reports, 1, 411.

chapters of ethnology which afford us the deepest insight into the thoughts which guide the untutored reasoning of the so-called savages.

Wherever we find deities in the stage of imperfect anthropomorphism we are likely to find also deified animals in the stage of zoodemonism and not in that of zootheism or zoolatry. Where gods and goddesses have reached a fully anthropomorphic shape, which occurred in a few American nations only, there we also find priests, temples, ceremonies, oracles, sacrifices, and prayers; but where deities remain in the undeveloped condition of spirits and demons, propitious or malevolent to mankind, we may expect to see the natives deifying quadrupeds, birds, or snakes, instead of giving their gods the human form, which is the most perfect form of this world's creatures. For in many physical qualities animals surpass the human being. This excites the admiration of man in his ruder stages; he wonders at their cunning and shrewdness, and thinks them his equals in more than one respect. Why should he not express such feelings as these by reverencing them and including them in his unpolished and naïve, but pictorial and candid folklore stories?

It would be a mistake to assume that the animals which the folklore of the Indian in the hunter stage chiefly celebrates are game animals or such as are of material advantage to him. Folklore selects for its purpose such beasts which the hunting and fishing Indian, with his great practical knowledge of animate creation, admires above others for such qualities as their surprising sagacity, their wonderful agility, the love for their offspring, the help afforded by them by discovering the hidden causes of disease, the beauty of their skin or other covering, and the change in the coloring of their fur-skins wrought by the alternation of the seasons—or such animals as he dreads on account of their ferocity, their nightly habits, their power of bringing about storms, thunder, or rain-fall, and last, but not least, for their demoniac power of presaging future events, especially war, disease, and death. The great scarcity of certain animals is also a sufficient cause for introducing them into the popular stories.

The animals which form the subject of mythic stories and beast tales are pretty much the same as those mentioned in the magic songs of the medical practitioners, of which I have brought together a considerable collection in Texts, pp. 153-181. The birds get an unusually large share in

these curious song lines; the loon (taplal) is noticed there for being the best diving bird of these upland waters; the yellow-hammer, or tché-ush, a woodpecker, for its beautiful red plumage; the kilíwash, another woodpecker, for its precious scalp. The ducks are well remembered in these songs on account of their ubiquity, their numerous species, the elegance of their exterior. Birds renowned for their influence upon the weather are the wihuash and the tsiutsiwäsh, who can produce snow-fall; the  $k\bar{a}$ 'ls or  $k\dot{a}$ lzalsh, who possesses the power of making fogs (166; 22.23).

The amphibians, insects and the organisms standing below these in the zoogenetic scale, are also reputed to possess magic powers; the songs of the toad and of the spider are supposed to be especially effective. That the plants did not impress the mental capacity of these Indians to such a point as to make them objects of reverence can not be wondered at, as the mind of the Indian in cold climates is not turned in this direction. Plants in which the Klamaths were interested are all mentioned, p. 180; 19, and the pond-lily, with its seeds, stands at the head of them. Even among the totem names of Eastern tribes only a few plant names are represented, maize being the most frequent among these; but in tropical countries, with their luxuriant vegetal growth, many trees, bushes, and stalks become objects of worship, like the copal and the ceïba tree of Central America.

The deified animals of Klamath mythology are all capable of assuming the predicate ámtchiksh, abbr. -ámtch, -amts primeval, of which mention has been made previously, and many also appear collectively, as five (or ten) brothers or five sisters, sometimes with their old parents (titchka-ága). This is the case only with gregarious animals, and also applies to the Thunders. Many of the larger quadrupeds appear constantly with two young only.

The personified animals which receive the most frequent attention in Klamath Lake and Modoc myths are the marten, the weasel and the prairiewolf or coyote.

Marten or Skē'l, Skē'lamtch always appears in connection with Weasel or Tcháshkai. Weasel is reputed to be the younger brother (tápiap) of Skē'l and acts as his servant and errand-boy. In the execution of the dangerous errands he is intrusted with, Weasel is often killed, and Skē'l

sometimes also, but they manage to revive again and to revenge themselves on their enemies. What brought these two beasts into mutual connection in the popular mind has been already pointed out: both change their furs, more than other animals, from a darker hue in summer to a lighter one in winter, when the weasel's fur becomes white. They are both supposed to live at Yámsi, "Northwind's Home," a high peak east of Klamath Marsh. To act like Skē'lamtch is to do something not meaning to do it apparently. Skē'l is a great wrestler, and like K'múkamtch has the faculty of changing himself into a bird, beast, dog, old woman, etc., at will. To a certain extent he is the counterpart of K'múkamtch and performs the same deeds as he does, it appearing as if K'múkamtch acted under the mask of Marten and Tcháskai under that of Aíshish, in whom we recognize a lunar deity. But there are other acts by which the two pairs differ considerably, and where Marten and his brother appear to represent the wintry season only and the rough weather attending it.

Another deity of the same type, and far-famed over all the Pacific coast, is the prairie-wolf, little wolf, or covote. This quadruped belongs rather to the genus jackal than to the wolves, looks as smart as a fox, carries a beautiful fur, and does not attack people unless united in packs of a dozen or more. His habit of living in earth holes, and his doleful, human-like, whining ululation, heard especially during moonlit nights were probably what set him up in the esteem of certain Indians, like the Eastern Selish and the Central Californians, so high as to make of him the creator of the world and of man. In Modoc stories he appears more frequently than in Klamath Lake folklore, and at present there are but few of these animals left on the headwaters of Klamath River. Wash, or Washanitch as the Klaniaths call him, always appears in sun and moon stories, and is, like Skē'l and Tcháshgai, a substitute for the sun-and-moon deities. When he ran a race with the clouds he thought at first that there were two of him, for he always saw another person, his shadow, going by his side. When he stayed in the lodge of the Firedrill brothers he took the fire-sticks of these in his hands and they all blazed up. In the lodge of the ten Hot-Water Basket brothers he was burnt terribly by the inmates, and when repairing to the Ants' lodge the inmates punished him fearfully by their

savage bites. Once when caught in the act of "stealing" a woman, he was captured by the two husbands of the same, who skinned him and hung up the skin to dry, after which the woman was abducted by the five Bear brothers. The female prairie wolf also appears in folklore with her progeny, e. g., in the tale of the "Creation of the Moons," page 105, which exists in several variations. Such stories and others represent the coyote-wolf as a being which has many points of contact with K'mukamtch, but is distinct from him. Both are regarded simultaneously as sky-gods and as funny clowns. As traits distinguishing the one from the other, we notice that the wolf's body is believed to harbor wicked spirits (Texts, page 128, 4) and that his lugubrious voice is the presager of war, misfortune, and death (133, 1 2). A distinction has to be made throughout between the coyote as an animal and the coyote as representing powers of nature in a deified, abstract form

Of the three varieties of the bear species, the grizzly bear is the most popular, but also more dreaded than the others on account of his enormous physical force. What makes him popular is a peculiar bonhomie which he exhibits in his behavior, and which forms a peculiar contrast to his bodily strength. In the myths he, or rather the female bear, is called Lúk, Lúkamtch, Sháshapanitch, Sháshapsh, and her two young Shashápka, the latter name probably referring to the fact that this beast was at one time more than other quadrupeds made the subject of mythic and folk-lore tales (shapkéa, shapke-ía, shashapkaléa to narrate a story, shapkaléash, distr. shashapkěléash legend, tale). The tale of the "Bear and the Antelope" is perhaps the most attractive of our collection of Texts. Generally the bear is the aggressive party in these stories, and he also gets generally worsted whenever a fight occurs or a stratagem is played on him. Sometimes there are five bear brothers acting in unison. In the "old yarn," narrated p. 131, this bear is killed by Gray Wolf near Modoc Point, and in his magic song (157; 46) he is made to say that he has five springs which are all dried up. He is often mentioned in the song-lines, but always under the name Lúk, not as Sháshapamtch.

Gray Wolf or Ké-ntchish, Ké-utchiamtch is another of the carnivores which sometimes appear prominently in folklore stories. Gray Wolf is

reputed to be a relative (shá-amoksh) of Marten, and consequently of K'múkamtch; he stayed at the lodge of the five Thunders at the time when it was burnt down, pp. 112. 113. One of his residences is at Mount Shasta.

Other quadrupeds frequently mentioned in these stories are the skunk (tchashash), the three different kinds of deer, the antelope (tché-u), the elk (vū'n), the mole (mû'nk, Mod. mû-úe). Men or Indians appear but incidentally in beast stories, as pshe-utíwash, a plural noun, and are engaged only as a passive element in every occurrence where they are mentioned.

Among the birds the most prominent part is assigned to the raven (Kák, Kákamtch), for he is Fate personified, and his office is to punish by death all those who act antagonistically to his or his allies' interests. This is done by changing them into rocks. In all nations the croaking, doleful cries of the raven leave a deep impression on the human mind, and hence in mythology the raven fulfills the function of a soothsayer and messenger of woe. In British Columbia and farther to the northwest he is (as Yehl) considered the creator of all organisms, and almost all the folklore centers around him as the main figure.

The golden eagle or the one "floating in the skies" (Plaiwash) is in the Klamath lore mentioned as often as the raven, either alone or as a family of five brothers, but does not command so much respect as the raven does.

The water birds, as cranes, ducks, geese, coots, form the light infantry of the mythologic make-up, and mostly figure in crowds of five or ten, the coot representing the Ojibwē Shíngibis so well known through Longfellow's Hiawatha. Some of the lower organisms rise to an unexpected dignity, like the woodtick or shkō'ks, which becomes the wife of the tricky Marten, and a caterpillar of beautiful colors, whose exterior makes him the rival or "master of the sun" (shápsam ptchíwip). Aíshish counts among his plural wives two butterflies of the gayest colors.

# PRINCIPLES OF MYTHIFICATION.

The idea that every phenomenon and every change observed in nature and mind is caused by some spirit, ghost, genius, god, or other mysterious, generally invisible agent, embodies what we call animism, and forms the foundation of all religions of the world, however abstract they may have become in course of time. The working of animism can best be traced in polytheism and polydemonism, in the shamanistic ideas as well as in the religious. The principles traceable in the myth-making of the Klamath Indians, which differs in some points from those of other Indians, may be summed up as follows:

The sky-gods, as sun, moon, winds, thunder, etc., here as elsewhere surpass in importance and strength the other deified powers of nature, for "theology is meteorology." Some of these chief gods assume the mask of animate beings and inanimate things when they appear among men.

Creation myths do not generally mention the material from which or the mode by which objects were created, but simply state that K'múkamtch produced them by his thinking and will power.

The spirit, life, or heart of a deity is made distinct from the deity itself and can live at a distance from it. Cf. the pipe of K'múkamtch burnt in the fire, which in another myth figures as a small ball (ké-iks) and is his spirit or life.

The burlesque element, which the religions of Asia and Europe have banished almost entirely, appears here as an almost integral attribute of a god or genius. This appears to form an offset for the dire cruelties ascribed to the same demons, and is also characteristic of the religions studied east of Mississippi River.

The element of obscenity is only incidental to the burlesque element, but is sometimes very pronounced, especially in the beast stories. It was added to cause merriment only, and not for such immoral purposes as we see it applied to in the Decameron of Boccaccio and other products of a corrupt age.

The deified beings of a lower order, as animals, etc., appear sometimes as one person, but just as often in the mystic number of five, if not of ten. Fire, waters, springs, and plants are not deified, but lakes are sometimes. Clouds do not appear here deified as witches, as they do among the Eastern Indians.

Certain miracles are here achieved by bodily contact and symbolic acts; so dead animals are brought to life again by jumping three or five

times over them or by blowing at them, an act which is supposed to impart life.

# CONCLUDING WORDS.

The limited space allowed for this ethnographic sketch forces me to suppress the larger part of the matter for the present and to relegate it to a future volume. A few points characteristic of the two tribes may, however, be added on the last page of this Report.

The Klamath Indians are absolutely ignorant of the gentile or clan system as prevalent among the Haida, Tlingit, and the Eastern Indians of North America. Matriarchate is also unknown among them; every one is free to marry within or without the tribe, and the children inherit from the father. Although polygamy is now abolished, the marriage tie is a rather loose one. This tribe is the southernmost one of those that flatten their infants' skulls, this practice continuing about one year only after birth.

Cremation of the dead has been abolished since 1868, though during the Modoc war these Indians burned several of their dead. The custom of suppressing the personal names of the dead is rigidly kept up at the present time. Art never had any encouragement or votaries among the Klamaths, and the only objects seen that could be regarded as art products were a few rock paintings and a head-board on a grave near the Agency buildings, which was painted in the Haida style and represented a human face flattened out to the right and left. Some baskets are artistically formed. As there is no clay to be found on or near the reservation, pottery could never become an art among these Indians. Their songs and poetry are also artless, but nevertheless instructive, and several songs have beautiful tunes that should be preserved. The musical and sonorous character of the language fits it well for poetic composition; but a national poetry, to be of success, would not have to adopt the rhyme as a metrical factor. Alliteration, assonance, or the prosody of the ancients would be more suitable to this upland language, with its arsis and thesis, than the artificial schemes which poets are devising for the modern European tongues. Who will be the first to teach the Muses the Klamath language?

# TEXTS OF THE KLAMATH LANGUAGE,

WITH EXPLANATORY NOTES.

evii

# THE KLAMATH INDIANS OF OREGON.

#### BY ALBERT S. GATSCHET.

# INTRODUCTION TO THE TEXTS.

The most important and valuable monument of itself which a people can transmit to posterity is a national literature. But to answer the requirements fully, the literature of a people must possess a certain degree of completeness in portraying the national peculiarities. It should embrace not only sketches of contemporaneous history, of national habits, customs, and laws laid down in the native idiom, but we expect from it also a truthful rendering of the spiritual side of national life, of its physical and metaphysical speculations as we find them embodied in its myths, beliefs, superstitions and conjurers' practices, and of speeches and discourses of its representative men held on solemn occasions. The most fragrant flowers in any national literature are certainly the poetic productions, if a full account of their origin and purport is added to make them easily comprehensible.

While cultured nations are constantly engaged in perpetuating the memory of their thoughts and achievements by means of some alphabetic or syllabic system of writing, the uncivilized hunting or fishing tribes possess none, or only the most imperfect means of recording their affairs. All of them possess mythic tales, traditional history, and songs for various incidents of life; not a few are even originators of didactic folklore, of proverbs, and of versified rhythmic poetry. Many of these mental productions are remarkable for artistic beauty, others for a most interesting variety of detail; but all of them will, if collected with accuracy and sound

judgment, throw a profusion of light upon the physical and mental characteristics of the natives and on their past and present condition.

The task and care of fixing the unwritten mental productions of uncultured races and tribes thus devolves upon the white man. It is by no means an easy undertaking, and success can be attained only when the investigator is favored by circumstances. Ethnologic texts taken from an uncivilized people are of much intrinsic value only when the scientific collector is lucky enough to secure the services of intelligent and well-informed individuals whose veracity is above suspicion, and who have constantly resided among their own people.

Considerations of this nature guided me when I endeavored to commit to writing the strange mythology of Oregonian tribes, replete with the most fantastic stories of their elementary deities and tricksy animal daimons; and when the weird and unearthly strains of their war-whoops and dance-yells first struck my ear, I considered even these worthy of notation. I have not hesitated to assign the first and foremost place in this linguistic volume on the Klamath language to the "Texts" obtained from trustworthy Indians of the Klamath Lake and Modoc tribes, for I know that they faithfully portray the characteristic features and idiosyncrasies of these dusky denizens of a secluded upland region. These literary specimens are the foundation and basis upon which I have rested my investigations.

The language of these specimens, as the organ of transmission of the national ideas, had to be carefully sifted and overhauled before it could become the basis of linguistic and ethnologic investigation. Numerous revisals and comparisons were needed to eliminate involuntary mistakes of Indian informants, who never elevate themselves above a purely empiric mastery of their native idiom. That an accurate grammar can be composed upon the solid foundation of faultless texts only, nobody will contest. Neither will it be doubted that the more copious the specimens are the safer the conclusions of the linguist will be concerning the principles governing the forms of speech.

Literary productions enlarging upon national and ethnologic matters are of much greater importance for the scientific study of the language in which they may be composed than any other texts. How poor and frag-

mentary would our knowledge of Latin and Greek be, if the poets, orators, and historians who wrote their compositions in these sonorous idioms were lost, and if nothing in them had come down to our age but versions of foreign books and reproductions of foreign speculations and ideas! A writer or informant is most capable of acquainting us with matters concerning his own people, country, and epoch, because he feels more interested in these topics than in any others, and he will select from the national stock of words the proper term for each object or idea he desires to express. Investigators will therefore, when they address themselves to intelligent natives for national, tangible and concrete topics of every-day life, generally obtain correct and trustworthy information on their objects of research, but will meet with disappointment when inquiring for equivalents of terms or ideas totally foreign to the simple understanding of the native population.

An experience of short duration will convince any linguistic investigator that a multitude of characteristic, quaint, and unfrequent expressions, idioms, phrases, and inflectional forms can never be obtained by mere questioning. The natives must be allowed to speak out their own free minds, without bias or trammelling; after a short acquaintance they can easily be induced to recount popular stories, myths, incidents of history, or intertribal wars, to reproduce speeches and national songs from their own reminiscences, and thus they will spontaneously use peculiar forms of language which often yield a deeper insight into the genius of their vernacular idiom than pages of information gathered after the usual method of the scholarly lexicographer or the pedantic verbal translator.

Legends, myths, and lyric productions, when obtained in their original shape from unsophisticated relators, furnish us with the best material for inquiries into a far remote antiquity, even when the historic horizon of the informant's tribe does not exceed the limit of two generations. If facts and dates do not, words and radical syllables will tell us a tale, and may enable us to trace ancient migrations or intertribal connections, teach us the origin of certain customs, habits, or national ideas, and inform us of the shaping, the material, or uses of old implements. In some instances they will guide us into remoter periods than prehistoric archaeology can, and supply us with

more useful dates and facts. Such results as these may be confidently looked for when several dialects of one linguistic family can be compared; and a careful comparison of one language with others spoken in the vicinity, belonging to the same or a different family, will always be attended with beneficial results for the increase of our scientific knowledge.

The aboriginal literary monuments printed below are authentic national records of a brave and industrious mountain tribe of Indians. Ethnologic notices have at a comparatively early period been gathered concerning the Modocs and Klamath Lake Indians, but most of them were of doubtful scientific value, because the information was gathered from them in the English language, which they understood but very imperfectly. Even now, the dates and facts recounted by them, as well as by Indians of many other tribes, in English, are so extremely confused, that only texts written in their own language can give us a clear insight into their traditions, myths, and mode of thinking.

No Indian tribe possesses a history of itself reaching back further than two or three generations, unless it has been recorded by whites at an early date, and what goes beyond this limit is tradition, on which we must be careful not to place any implicit reliance. But mythology records in a certain sense the intellectual history as well as the metaphysical ideas of a people, and thus by the gathering of the numerous mythic tales and legends of the Máklaks a start at least is made for the investigation of their intellectual development. A very moderate estimate puts at several hundred the more generally circulated myths of the Klamath Lake or É-ukshikni alone, and the number of their popular song-lines, so interesting and unique in many respects, may be called infinite, for their number is increased every day by new ones. The bulk of their mythic folklore is of great poetic beauty, freshness, and originality, and, like that of other tribes, full of childlike "naïveté." This latter characteristic forms one of their greatest attractions, and the animal myths of every uncultured people will prove attractive, because they were invented for religious or poetic and not for didactic purposes. To some of the myths given below we may confidently ascribe an antiquity of over three centuries, for their archaic terms

 $\zeta$ 

and locutions, repeated from generation to generation, are not always understood at the present day by the young people, who most attentively listen to the aged rhapsodists, when they expound these miraculous stories in the lurid glare of the nocturnal campfire. Nothing in them indicates a migration of these upland tribes from any part of the country into their present homes, and hence the Máklaks must have had undisturbed possession of the headwaters of Klamath River for some centuries prior to the advent of the white population.

The various texts obtained clearly exhibit the character of the language actually spoken and the difference existing between the two dialects, but they do not all possess the same linguistic value. The texts of Dave Hill and others are worded in the conversational language of the tribe, which in many particulars differs from the more elaborate and circumstantial mode of speech which appears in the mythic tales given by Minnie Froben. The "Modoc War" and some of the shorter pieces could be obtained only by putting down the English first and then getting sentence for sentence in the dialect, whereas the best worded stories and specimens were written in continuous dictation. All texts obtained were carefully revised first with the informants, then with other natives, and all the necessary explanations added at the time.

From a purely linguistic view the popular songs or song-lines are the most valuable contributions. The melodies of some of their number deserve to be called pretty, according to our musical taste. To the natives all of them appear harmonious; but when the Western Indian calls some melody "pretty," guided by his musical principles, he very frequently does so in opposition to what our ear tells us to call by this predicate.

The Klamath Lake dialect was spoken by the majority of the contributors to my linguistic anthology. I obtained these specimens, with the exclusion of the Modoc texts, in the autumn of 1877, at the Klamath Reservation, Lake County, Oregon. Though many of these natives speak the Chinook jargon more fluently than English, I never availed myself, for obtaining any information whatever, of that imperfect and hybrid medium, through which the Indians of the Northwest carry on so much of their intercourse.

The following is a list of the most important contributors:

1. The Riddle family, consisting of Frank Tazewell Riddle, a native of Kentucky, born about 1836; his wife Toby, a pure-blood Modoc woman, who was, as stated in her biographic notice, born in 1842, and their son Jeff. C. Davis Riddle, born about 1862. Among several texts of linguistic importance I obtained from them a circumstantial chronistic account of the Modoc war of 1873, in which Mr. and Mrs. Riddle had served as interpreters of the Peace Commission. Having been introduced to them in December, 1875, in New York City, by Mr. A. B. Meacham, late Superintendent of Indian Affairs in Oregon, when they travelled with him in the eastern States in connection with the Meacham Lecturing Company, I took down the contents first in English from Mr. Frank Riddle, then added the translation from the other members of the family. Mr. Riddle had no intention of giving a full and authentic account of that desperate struggle, but merely wished to render his own impressions, and to relate in the plainest words the events witnessed by himself. Here we have the opportunity of hearing also the Modoc side of the contest.

The wording of the other Modoc texts was the almost exclusive work of the boy Riddle, who speaks the language perfectly well, and only in the more difficult portions was he assisted by his mother. From the Riddles I obtained also several hundred sentences, over sixty songs, and about two thousand three hundred vocables, which were twice revised with their assistance in New York City, and twice again with the efficient help of such natives at the Klamath Lake Agency as were conversant with the Modoc dialect.

2. Dave Hill, a dusky, pure-blood Indian, subchief of the Klamath Lake tribe and interpreter, born about 1840. Having been a prominent warrior of his tribe up to the treaty of 1864 and a scout in subsequent expeditions against hostile Indians, he has also seen much of the white man's ways by staying for years in Northwestern Oregon and by traveling East with Mr. A B. Meacham on his lecturing tour in 1875. How he was then kidnapped in New York City, confined in a cellar, restored to liberty, and how he worked his way home, is related with full particulars in Meacham's Winema, pages 95-102. In the Modoc war (1872-73) he was put in command of the auxiliary forces of his chieftaincy, which were detailed to observe the

belligerent Modocs and to check any dangerous movements which they might have undertaken against the settlers or the Indian Reservation. Hill's father, Skaítitko, or the "Left-Handed", was for some time a guide to General Frémont on one of his expeditions through Oregon, Nevada, and California.

Readers of Hill's texts will notice that his diction is very concise, pregnant and to the point, and so is the speech of these Indians generally. But since that conversational language, or popular jargon, as we may not improperly call it, moves along in contractions, elisions, metatheses and ellipses, I have had to revise his texts many times with him and other Indians before I could make them practically available. In the myths, Dave Hill is not so pictorial and graphic as Minnie Froben, but in narrating his feats of war he readily furnished all the points that could be expected. Concerning the conjurers' practices and national beliefs, he was more communicative than the majority of the Klamath Indians, whom superstitious awe still deters from revealing all that the investigator desires to know. Hill's list of topographic names is a very important addition to aboriginal topography, since he has added the correct etymology to the majority of these local designations.

3. Minnie Froben, born about 1860, the daughter of a pure-blood Klamath woman, who lives on the Williamson River, and of a (deceased) French settler Froben or Frobine, was, at the time of my visit, the assistant of Mrs. Nickerson, the matron of the boarding-school for native children at the Agency. She and the subchief Hill were the most important contributors to my mythic and other ethnologic anthology, and the pieces dictated by her excel all the others in completeness and perspicuity. Moreover, I obtained from her a multitude of popular songs, the names and uses of esculent roots and plants, the Klamath degrees of relationship, a large number of words and sentences, a good deal of grammatic information, and revised, with her assistance, the whole of the Modoc contributions, as well as the majority of Klamath Lake texts.

If any further books should be composed in or about the Klamath Lake dialect, her assistance would perhaps be preferable to any other native help to be found at present in the tribe; for during her stay with white people

she has succeeded in acquiring more mental training than Indians usually acquire on reservations.

- 4. Charles Preston, a pure-blood Klamath Lake Indian, born about 1840, is now stationed as interpreter at the subagency of Yaíneks. Preston had previously sojourned five years at Oregon City on the Willámet River and vicinity, and there he learned to converse in English quite fluently, acquiring also the idiom of the Wasco Indians, of which he has furnished me over three hundred of the most usual terms. During a stay of three weeks which he made at the Klamath Lake Agency, I obtained from him valuable grammatic and lexical information, texts, popular songs, and proper names, and revised with him the Modoc dictionary.
- 5. Sergeant Morgan, a pure-blood Indian, living at Koháshti, born about 1830, and jocosely called "Sergeant" on account of his wearing an old sergeant's uniform which he had obtained from soldiers at Fort Klamath. From this good-natured, intelligent old Indian I obtained a few short texts and some ethnologic information especially relating to mythologic and shar anic subjects.
- 6. "The Captain" or "Captain Jim", a pure-blood Indian, living at the junction of Sprague and Williamson Rivers, about five miles from the Agency buildings. When I saw him he was about fifty years old, and as he spoke but Klaniath and Chinook jargon, all the mythology which he remembered was obtained through Minnie Froben. He received his nickname "Captain" from having been a help on a steamboat plying on the Willámet River, Oregon.
- 7-11. Other informants of whose assistance I have availed myself are mentioned at the head of the texts. They were Johnson, the head chief of the Modocs at Yaíneks; the conjurer Kákash or Doctor John; and several young Indians then scarcely over twenty-five years of age: Pete, Frank, and Long John's Ben. All of them are pure-blood Indians.

To facilitate the study of the Klamath language, and to increase the popular interest in the acquisition of Indian languages in general, I have inserted with the texts an interlinear translation, and subjoined to them a variety of commenting notes of linguistic, ethnographic, and historic import. The large majority of the Indian words could be rendered in their literal meaning; but in some instances, where literal translation was nearly

impossible, the sense of the word or phrase was reproduced as faithfully as could be done within the narrow space allotted. Words in brackets were inserted only to render the sentence complete.

But to the student striving after a thorough understanding of the texts all these helps will prove of partial assistance only. A thorough study of the Grammar ought in fact to precede their perusal, and reference to all the three portions of the work will frequently be necessary.

The material portion of a language can be faithfully conveyed to our understanding only by the correct pronunciation of its words, sentences or texts. Hence all that is said of Klamath phonetics must be studied first, and more especially the alternating processes, the proclisis and enclisis, the sounds not occurring in English (as the linguals, the aspirate  $\chi$ , the vowel  $\ddot{u}$ ), and first of all the pronouncing list of alphabetic sounds, which is subjoined. To initiate readers into the distinction, empirically obtained from the mouths of the natives, between the clear vowels a, e, i, u, and the dumb or deep-sounding  $\mathring{a}$ ,  $\check{e}$ ,  $\mathring{i}$ ,  $\mathring{u}$ , the earlier pages of the texts contain more indications than are given in the later. In certain terms long vowels can turn into short, and short into long ones. Special attention must be paid also to the study of elisions, apocopes, metatheses, etc.

In the morphologic part of the Grammar, the verbal and nominal paradigms are particularly recommended to the student's attention, and a previous knowledge of the mode of forming the distributive reduplication from the absolute form is indispensable to the reader of my Texts, not only for their full comprehension, but even for the use of the Dictionary. The suffix of the future tense is written -uapka, to distinguish it from a homonymous form -wapka, of different signification. The apocopes occurring in the conversational style of language will soon be recognized as such by the reader; for example, -tk for -tko, -ks for -kshi, dropping of -a, -ash, etc.

To make the study of the Texts too easy by a flood of notes would be as obnoxious to the true interests of science, as to present unsolved too heavy grammatic difficulties to intellects yet untrained in the modes of Indian speech. Scholars may decide to what degree I have succeeded in avoiding both extremes.

# LIST OF SOUNDS OCCURRING IN THE KLAMATH LANGUAGE.

- as in alarm, wash; German, Mann, hat; French, pas, gras, flanc.
- a longer sound of a, as in far, father, smart, tart; German, schaden, lahm, Fahne.
- as in law, all, fall, tall, taught.
- ä as in hat, man, fat, ass, slash.
- b as in blab, bold; German, beben; French, barbe.
- d as in dread, did; German, das, dürfen; French, de, darder.
- dsh as in judge, julep, George, dudgeon.
- e as in then, swell, met; German, schwebt; French, belle, selle.
- ă as in last syllable of preacher, butler, tippler; German, Bücher; French, le, je, me.
- ē as in they, fade, jade, shade; German, stehlen; French, chaire, maire.
- g as in gig, gull; German, gross; French, gros, grand, orgueil.
- g lingual guttural produced by bending the tip of the tongue backward, resting it against the palate, and when in this position trying to pronounce g in gag, gamble, again.
- h as in hag, haul, hoot; German, haben, Hals
- i as in marine; German, richten; French, ici, patrie.
- I longer sound of i, as in bee, glee, reef; German, spiegeln, Stiefel.
- as in still, rim, whim, split; German, finster, schlimm, Wille; when long, it is i in German ihn, schielen.
- y as in year, yolk; German, Jahr; French, yeux; not used as a vowel.
- k as in kick, kernel; German, Kamm, Kork; French, soc, coque, quand; Spanish, quedar, quizá.
- k lingual guttural produced like g by bending the tip of the tongue backward, holding it against the palate, and then trying to pronounce k, c, in kindness, killing, cool, craft. The tongue must be placed more firmly against the fore portion of the palate than in the g, in order to allow less breath to escape.
- the aspirate guttural in lachen, trachten, Rachen, Sache, as pronounced in Southern Germany; not occurring in English, French, or Italian; Spanish, mujer, dejar; Scotch, loch. It has nothing in common with the English x.

- 1 as in hell, loon, lot; German, Lilie; French, lance.
- m as in madam, mill, mimic, mum; German, Memme.
- mb as in ramble, gamble, nimble. .
- mp as in sample, thumping.
- n as in nun, net, noose; German, nein; French, nuire.
- ng as in ring, bang, singing; German, singen, hangen.
- nk as in prank, rink, spunk; German, Schwank; French, cinquante.
- $n\underline{k}$  a combination of n with  $\underline{k}$ .
- nx a combination of n with  $\chi$ .
- o as in home, lonely, most; German, Molken; French, sotte.
- ō longer sound of o, as in note, rope; German, Floh, Boot, roth; French, sauter.
- ö as in bird, burn, surd; German, blöde, Römer; French, deuil, cœur.
- p as in pipe, papa; German, Puppe; French, pied.
- s as in sad, sale, soul, smell; German, Seele, Sichel; French, sauce, seul.
- sh as in shaft, shingle; German, Schale, schön; French, chercher.
- t as in trot, tell, tiptop; German, Tafel; French, tour.
- tch as in church, chaff, choke; German, hätscheln; Italian, cicerone; Spanish, chaparral, chicha.
- u as in smooth, truth; German, Fuss; French, loup, poutre, outrage.
- to longer sound of u, as in crude, flume, fool; German, Stuhl, Ruhr, Blume; French, lourd, sourd.
- as in full, pull; German, Flucht, Kluft, Russland; Italian, lungo.
- ü not in English; German, kühl, Gefühl; French, lune, puce.
- v as in valve, veer, vestige; German, Wolke, Wasser, weben; French, vautour, veut.
- w the û before vowels; water, waste, wolf, wish, wayward; in German it corresponds nearest to short u, not to w; nearly as French ou in oui, ouate.
- z as in zeal, zone, frozen; German, Hase; French, zèle, rose.

The English x is rendered by gs or ks, the German z by ds or ts, all being compound articulations. The two points on a, o, u ( $\ddot{a}$ ,  $\ddot{o}$ ,  $\ddot{u}$ ) are not signs of diæresis; they mark softened vowels.

The pronunciation of the diphthongs may be easily inferred from their component vowels; it is as follows:

ai	as in	life,	mine,	sly,	die,	dye.
		-2-1	,	~.,,,	,	,7

au as in mouse, loud, arouse.

ei a combination of e and i resembling the vowel sounds in

the word greyish, united into a diphthong.

yu or iu as in pure, few, union.
oi as in loin, groin, alloy.

wa or ua as in watch, wash; French, loi, roi.

wi or ui as in squid, win, switch.

All the diphthongs being of an adulterine character, they can generally be separated into two vowels, and then are hyphenized, as in i-u, o-i, ú-i, a-ú.

## GRAPHIC SIGNS.

- arrested sound: skó-hs, spring time; tchú-ka, to swim up stream.
- apostrophe marking elision of a vowel, of ĕ or any other sound: heshuámp'li for heshuámpĕli, to recover one's health.
- hiatus, separating two vowels as belonging to two different syllables: pála-ash, flour; lěmé-ish, thunder; or two consonants: tsiäls-hä'mi, at salmon-time.
- separates the parts of compound terms: skúks-kiä'm, spirit-fish or letiferous fish.
  - acute; the only accent used for marking emphasized syllables.
- vowel pronounced long: mū'ni, large, great.
- vowel pronounced short, except ĕ, to which a distinct sound is given: yúmāltkā, to return from berry-harvest.

# A Catalog Of SHOREY PUBLICATIONS

## SHOREY PUBLICATIONS IN PRINT

	SHORLY PUBLICATIONS IN PRINT	
1.	Glover, S.L. ORIGIN AND OCCURENCE OF GEM STONES IN WASHINGTON. 1949	1.00
	Mooney, Jas. Ghost Dance Religion: SMOHALLA AND HIS DOCTRINE. 1896	1.50
	Mooney. Ghost Dance Religion: SHAKERS OF PUGET SOUND. 1896	1.50
	DICTIONARY OF CHINOOK JARGON. nd	2.00
	ALASKA RAILROAD TIME TABLES. 1922	.50
7.	Wells, E.H. UP AND DOWN THE YUKON. 1900	1.50
8.	Williams, J.G. REPORT OF ATTORNEY GENERAL, Territory of Alaska, 1949-51.	1.50
9.	Gruening, Ernest. MESSAGE OF THE GOVERNOR OF ALASKA, 1946.	2.00
10.	Gruening. THIRD MESSAGE TO THE PEOPLE OF ALASKA, 1946.	1.50
11.		1.00
12.		2.50
	Leehey, M.D. PUBLIC LAND POLICY OF THE U.S. IN ALASKA. 1912	1.50
15.	NOME TELEPHONE DIRECTORY. 1905 ESTABLISHMENT OF MT. MCKINLEY NATIONAL PARK. 1916	3.00 1.50
	Hooper, Capt. C.L. CRUISE OF THE U.S. REVENUE STEAMER CORWIN IN ARCTIC	1.50
10.	OCEAN, November 1, 1880.	7.50
17.		2.00
18.	· · · · · · · · · · · · · · · · · ·	2.50
19.	Davis, Geo. T. METLAKAHTLA. 1904	3.50
	WORK OF THE BUREAU OF EDUCATION FOR NATIVES OF ALASKA. 1918	5.00
	MacDowell, L.W. ALASKA INDIAN BASKETRY.	1.00
22.	Bells, Rev. Myron. THE TWANA, CHEMAKUM & KLALLAM INDIANS OF WASHINGTON	
	TERRITORY. 1887	4.00
	Grinnell, Joseph. GOLD HUNTING IN ALASKA.	4.00
25.	Swan, James G. INDIANS OF CAPE FLATTERY.	7.50 2.00
	CUSTER'S LAST BATTLE. 1892 Gruening, Sen. INDEPENDENCE DAY ADDRESS. 1959	1.75
	Cadell, H.M. THE KLONDIKE AND YUKON GOLDFIELD IN 1913. 1914	2.50
28.		3.00
29.	Fickett, E.D. METEOROLOGY. From Explorations in Alaska. 1900	
30.	Richardson, W.P. & others. YUKON RIVER EXPLORING EXPEDITION. Expl. in Alas	ka.
	1900	2.00
31.	Ray, P.H., W.P. Richardson. RELIEF OF THE DESTITUTE IN THE GOLDFIELDS.	
	1900	1.75
32.	Shiels, Archie W. LITTLE JOURNEYS INTO THE HISTORY OF RUSSIAN AMERICA AND	
22	PURCHASE OF ALASKA. 1949	7.50
33. 34.	Shiels. STORY OF TWO DREAMS. 1957 Swan, J.G. HAIDAH INDIANS OF QUEEN CHARLOTTE'S ISLAND, B.C. 1874	<b>4.</b> 00 5.00
35.		5.00
,,,,	1892	1.50
36.	Crawford, Lewis F. THE MEDORA-DEADWOOD STAGE LINE. 1925	1.50
37.	Anderson, Eskil. ASRESTOS AND JADE OCCURENCES IN KOBUK RIVER REGION,	
	Alaska. 1945	2.00
	Stewart, B.D. PROSPECTING IN ALASKA. 1949	1.50
39.	J. J	5.00
40.	SEATTLE'S FIRST BUSINESS DIRECTORY. 1876	7.50 1.25
42.	THE WASHBURN YELLOWSTONE EXPEDITION. 1871 Subreports from EXPLORATIONS IN ALASKA. 7 reports: The Tanana, Chickaloon,	
72.	Sushitna, etc. 1900	2.00
43.	Glenn, Capt. E.F. TANANA RIVER EXPLORING EXPEDITION. 1900	2.50
44.	Glenn. COOK'S INLET EXPLORING EXPEDITION. 1900	1.75
45.	WILKESON'S NOTES ON PUGET SOUND (1870?)	2.50
<b>4</b> 6.	(Perry). JOURNAL OF A VOYAGE TO THE ARCTIC REGIONS IN H.M.S. ALEXANDER,	
	1818. (1819?)	6.00
	BIENNIAL MESSAGE OF WM. M. BUNN, Governor of Idaho. 1884	2.00 2.50
48. 49	MACKENZIE'S ROCK. Exploration of Sir Alexander Mackenzie. 1905 Williams, L.R. OUR PACIFIC COUNTY (Wash)	5.00
50.		1.00
	Evans, Elwood. PUGET SOUND: Its Past, Present and Future. 1869	2.50
	Campbell, Robt. TWO JOURNALS, 1808-1853.	15.00
53.	Bernhardi, Madame Charlotte. MEMOIR OF THE CELEBRATED ADM. JOHN de	
	KRUSENSTERN. 1856	5.00
	McWhorter, Lucullus V. CRIME AGAINST THE YAKIMAS. 1931	4.50
	Lupton, Chas T. OIL AND GAS IN THE OLYMPIC PENINSULA. 1913	4.00
	Seward, Wm. H. THE ADMISSION OF KANSAS. A Speech. 1860	1.50
	Stevens, Issac I. PROCLAMATION OF MARTIAL LAW. 1856	.50 . <b>7</b> 5
58. 59.	THE GLACIER - Tlinkit Training Academy, Vol. II. 1887 Hills, Rev. E.P. REV. AARON L. LINDSLEY.	.50
	SWANTON'S HANDBOOK OF NORTH AMERICAN INDIANS, Pt. C: Indians of Alaska &	. 50
	Canada. 1952	5.00
61.	ward, D.B. ACROSS THE PLAINS IN 1853. 1911	3.50
	MacDowell, Lloyd W. ALASKA TOTEM POLES.	1.25
63.		2.00
	MacDowell. ALASKA GLACIERS & ICE FIELDS.	1.25
<b>6</b> 5.	Shaw, Geo. C. THE CHIMOOK JARGON AND HOW TO USE IT. 1909	4.00

```
66. PUGET SOUND COOPERATIVE COLONY. 1890's
                                                                                   2.00
  67. THE HEROES OF BATTLE ROCK, or The Miners' Reward. 1904
                                                                                   1.50
  68. Lampman. Ben Hur. CENTRALIA TRAGEDY AND TRIAL. 1920
                                                                                   4 00
  69. SEAL FISHERY IN THE NORTH PACIFIC. (Correspondence with Russia.) 1895
                                                                                   7 50
  70. Coolican, J.C. (ed.) PORT ANGELES, 1898
                                                                                   4.00
  71. Jordan, D.S. TROUT AND SALMON OF THE PACIFIC COAST. 1906
                                                                                   1.25
  72. COOPERATIVE PLAN FOR SECURING HOMES AT PORT ANGELES, Wash. 1893
                                                                                   7 00
 73. Hidden, Maria L.T. OREGON PIONEERS, 1910
                                                                                   1 00
  74. Stevens, Hazard. FIRST ASCENT OF TAKHOMA. Ext., 1876
                                                                                   1.50
  75. DEMOCRATIC AND REPUBLICAN Ticket For Washington State and King County. 1889
                                                                                   .50
 76. THIRD ANNUAL COMMENCEMENT OF SEATTLE HIGH SCHOOL. 1888
                                                                                    . 35
  77. ASSASSINATION OF PRESIDENT GARFIELD. Newspaper Extra. 1881?
                                                                                    . 50
 78. PHIGET SOUND CATECHISM. 1889
                                                                                   1.00
 79. SEATTLE, KING COUNTY, WASHINGTON TERRITORY. Statistics & descriptive report.
      1001
                                                                                   1.50
80. THE GREAT SEATTLE FIRE OF June 6, 1889.
                                                                                   2.50
 81. USGS Bull. 442-D. MINING IN THE CHITTING DIST., etc. 1910
                                                                                   2 50
 82. Swanton, John R. INDIAN TRIBES OF THE PACIFIC NORTHWEST. Ext., 1952
                                                                                   6 00
 83. Sayre, Alex N. PUGET SOUND. Poem 1883
                                                                                   1 50
 84. Bell. W.S. OLD FORT BENTON, 1909
                                                                                   2.50
 85. Meany, Edmund S. INDIAN GEOGRAPHIC NAMES OF WASHINGTON. 1908
                                                                                   1.00
 86. Swanton, J.R. INDIAN TRIBES OF AMERICAN SOUTHWEST. 1952
                                                                                   6 00
 87. Swanton. INDIANS OF MEXICO. CENTRAL AMERICA AND WEST INDIES. 1952
                                                                                   2.50
 88. USGS Bull. 836. SELECTED LIST OF USGS PUBLICATIONS ON ALASKA. 1930
                                                                                   1.00
 89. Lewis, Wm. S. EARLY DAYS IN THE BIG BEND COUNTRY. 1926
                                                                                   3 50
      Stoney, Geo. M. EXPLORATIONS IN ALASKA. 1899. Ext. from US Naval Inst.
                                                                                   6.00
 91. Lindsley, A.L. SKETCHES OF AN EXCURSION TO SOUTHERN ALASKA. 1881
                                                                                   5.00
 92. Collins, H.B. ARCHEOLOGY OF THE BERING SEA REGION. Ext., 1933
                                                                                   1.50
 93. Ray and Murdoch. A VOCABULARY OF THE ESKIMOS OF POINT BARROW. 1885
                                                                                   1.25
 94. Andrews, C.L. STORY OF SITKA. 1922
                                                                                   5.00
 95. Matthews, Washington, NAVAJO WEAVERS, 1884
                                                                                   2 50
 96. Dawson, Geo. M. THE HAIDAS. 1882
                                                                                   1.00
 97. McClintock, Walter. FOUR DAYS IN A MEDICINE LODGE. 1900
                                                                                   1.00
 98. Barbeau, Marius. MODERN GROWTH OF THE TOTEM POLES ON THE NORTHWEST COAST.
      10 20
                                                                                   1.00
 99. SCRIPTURE SELECTIONS AND HYMNS IN HIDATSA OF GROS VENTURE LANGUAGE. 1906
                                                                                   1.50
      Baker, Marcus. GEOGRAPHIC DICTIONARY OF ALASKA. 1906
                                                                                   3.00
101. Lee, Charles A. ALEUTIAN INDIAN AND ENGLISH DICTIONARY.
                                                                                   1.00
102. Shaw, Geo. C. VANCOUVER'S DISCOVERY OF PUGET SOUND IN 1792. 1933
                                                                                   1 00
103. Seward, Wm. H. SPEECHES in Alaska, Vancouver, and Oregon, 1869.
                                                                                   2.50
                                                                                   5.00
104. Rees, J.E. IDAHO: Chronology, Nomenclature, Biblio. 1918
105. Smith, W.C. THE EVERETT MASSACRE. 1916
                                                                                   8.00
106. PLACER MINING. 1897
                                                                                   4.50
107. Ross, Clyde P. THE VALDEZ CREEK MINING DISTRICT IN ALASKA. 1933
                                                                                   5.00
108. Stevens, Isaac I. TREATY BETWEEN THE U.S. AND THE DWAMISH. SUCUAMISH. & OTHER
      ALLIED AND SUBORDINATE TRIBES OF INDIANS IN WASHINGTON TERRITORY. 1855
                                                                                   2 00
109. Stevens, I.I. TREATY BETWEEN THE U.S. & THE NISQUALLY & OTHER BANDS OF INDIANS.
      1855
110. Stevens. TREATY BETWEEN THE U.S. & THE YAKIMA NATION OF INDIANS. 1855
                                                                                  2 00
111. Stevens. TREATY BETWEEN THE U.S. OF A. & THE MAKAH TRIBE OF INDIANS. 1855 2.00
112. Stevens. TREATY BETWEEN THE U.S. AND THE INDIANS OF THE WILLAMETTE VALLEY.
                                                                                  2 00
113. Densmore, F. STUDY OF INDIAN MUSIC. 1941
                                                                                   1.50
114. Harriman, Job. THE CLASS WAR IN IDAHO.
                                                                                   3.00
115. Ranck, G. PICTURES FROM NORTHWEST HISTORY.
                                                                                  2.00
116. Whitaker. R. OVERLAND TO OREGON. 1906
                                                                                   4.00
117. Krieger, H. INDIAN VILLAGES OF S.E. ALASKA.
                                                                                   2.50
118. Gatschet, A. THE KLAMATH INDIANS OF SOUTHWEST OREGON. 1890
                                                                                   4 50

119. Crane, W. TOTEM TALES. 1952
120. Bate, J. THE SECOND BOOKE TEACHING MOST PLAINLY AND COMPOSING OF ALL MANNER

                                                                                   4.00
      OF FIREWORKS FOR TRYUMPH AND RECREATION. 1635
                                                                                   3.00
121. James, G. PRACTICAL BASKET MAKING. 1917
                                                                                   5.00
122. Whorf, B. MAYA HIEROGLYPHS. 1941
                                                                                  1.25
123. Dall, Wm. MASKS, LABRETS, AND CERTAIN ABORIGINAL CUSTOMS. 1884
                                                                                  8.50
124. McCurdy, J. CAPE FLATTERY AND ITS LIGHT.
                                                                                  1.00
125. Wilhelm, Homer. THE SAN JUAN ISLANDS. 1901
                                                                                   5.00
126. Gaeritu, Jack. BREAD AND ROSES FROM STONE.
                                                                                   4.00
127. Smith, W.C. WAS IT MURDER? (Centralia) 1922
                                                                                   3.50
128. HISTORY OF OWYHEE COUNTY. (Idaho)
                                                                                   8.50
129. Evans, Elwood. WASHINGTON TERRITORY. 1877
130. Delaney, Matilda Sagar. THE WHITMAN MASSACRE. 1920
                                                                                   3.00
                                                                                   3.00
131. Hubback, T.W. TEN THOUSAND MILES TO ALASKA FOR MOOSE AND SHEEP. 1921
                                                                                   4.00
132. Wilson, Katherine. COPPER-TINTS. 1923
                                                                                  3.00
133. Coleman, Edmund T. FIRST ASCENT OF MT. BAKER. Ext. from Harper's Monthly.
      1869
                                                                                  2.50
134. Hodge, L.K. (ed.) MINING IN THE PACIFIC NORTHWEST. 1897
                                                                                  30.00
134a. Hodge. MINI'G IN WESTERN WASHINGTON. Ext from #134
                                                                                 10.00
```

```
134b. Hodge. MINING IN CENTRAL & EASTERN WASHINGTON. Ext. from #134
                                                                                10 00
134c. Hodge. MINING IN SOUTHERN BRITISH COLUMBIA. Ext. from #134
                                                                                10.00
135. Stallard, Bruce, ARCHEOLOGY IN WASHINGTON, 1958
                                                                                 3.00
136. Lockley, Fred. ALASKA'S FIRST FREE MAIL DELIVERY IN 1900.
                                                                                 1.25
137. Strange. JAMES STRANGE'S JOURNAL AND NARRATIVE OF THE COMMERCIAL EXPEDITION
     FROM BOMBAY TO THE NORTHWEST COAST OF AMERICA. 1928
                                                                                 5.00
138. Hathaway, Ella C. BATTLE OF THE BIG HOLE.
                                                                                 2.00
139. Haller, Granville. SAN JUAN & SECESSION.
                                                                                 1.50
140. THE KLONDIKE NEWS. Vol. 1 #1, Dawson Newspaper. 1898 (Alaska's rarest
     newspaper)
                                                                                10 00
141. JOHRNAT, OF MEDOREM CRAWFORD, 1897
                                                                                 2.00
142. OCOSTA! The Ocean Terminus of the Northern Pacific R.R. and Coast City of
     Washington.
                                                                                 2.50
     Sutherland, T.A. HOWARD'S CAMPAIGN AGAINST THE NEZ PERCE INDIANS, 1877.
                                                                                 3.50
     1878
144. Matthews, Mathew. THE CATLIN COLLECTION OF INDIAN PAINTINGS. 1890
                                                                                 3 00
145. Lockley, Fred. TO OREGON BY OX TEAM IN '47.
                                                                                 1.25
146. Lockley. VIGILANTE DAYS IN VIRGINIA CITY.
                                                                                 1.50
147. Judson, Katherine. MYTHS AND LEGENDS OF THE PACIFIC NORTHWEST. 1910
                                                                                 7 50
148. Whiting, Dr. F.B. GRIT, GRIEF AND GOLD.
                                                                                10 00
149. Amundsen. Capt. Roald. TO THE NORTH MAGNETIC POLE AND THROUGH THE NORTHWEST
     PASSAGE.
                                                                                 3.00
150. Butte Businessmen's Assn. BUTTE, MONTANA.
                                                                                 2 00
151. Immigration Aid Society of Washington Terr. NORTHWESTERN WASHINGTON. 1880 3.50
152. Denig, Edwin T. INDIAN TRIBES OF THE UPPER MISSOURI. 1930
                                                                                10 00
153. Buckley, Rev. J.M. TWO WEEKS IN THE YOSEMITE AND VICINITY. 1888
                                                                                 2 50
154. SPEECH OF THE HON. R.C. WINTHROP OF MASS. ON THE PRESIDENT'S MESSAGE (On
      admission of California) 1850
                                                                                 2.00
155. Marshall, Martha. A PRONOUNCING DICTIONARY OF CALIFORNIA NAMES IN ENGLISH
     AND SPANISH.
                                                                                 2.50
                                                                                 7.50
156. Mercer, A.S. BIG HORN COUNTY, WYOMING.
                                                                                 7.50
157. Moorehead, Marren K. PREHISTORIC RELICS.
158. Merrill, Geo. P. NOTES ON THE GEOLOGY AND NATURAL HISTORY OF THE PENIN-
      SULA OF LOWER CALIFORNIA. 1895
                                                                                 2.00
159. Georgeson, C.C. REINDEER & CARIBOU. 1904
                                                                                 1.50
160. Hewett, Edgar L. A GENERAL VIEW OF THE ARCHEOLOGY OF THE PUEBLO REGION.
      1904
161.
     Bennett, Wm. P. THE FIRST BABY IN CAMP.
                                                                                 3.50
                                                                                 3.50
162. Coffman, Noah B. OLD LEWIS COUNTY, Oregon Territory. 1926
                                                                                 7.50
163. Bebbe. Mrs. Iola. THE TRUE LIFE STORY OF SWIFTWATER BILL GATES. 1908
                                                                                10.00
164. Costello. THE SIWASH - THEIR LIFE, LEGENDS AND TALES. 1895
                                                                                10 00
165. Murie, Olaus J. ALASKA-YUKON CARIBOU.
166. Meeker, Ezra. STORY OF THE LOST TRAIL TO OREGON, NO. 2. 1916
                                                                                 2.50
167. Hanna, Rev. J.A. DR. WHITMAN AND HIS RIDE TO SAVE OREGON. 1903
                                                                                 1.25
168. Hadwen, Seymore & Laurence J. Palmer. REINDEER IN ALASKA. 1922
169. Geer, T.T. THE ROMANCE OF ASTORIA. 1911
                                                                                 1.75
                                                                                 7.50
170. Williams, Lewis. CHINOOK BY THE SEA.
171. SAN FERNANDO VALLEY. 1938
                                                                                 2.00
172. PASADENA. 1938
                                                                                 2.00
173. Ingalls, Maj. J.W. HISTORY OF WASHOE COUNTY, NEVADA. 1913
                                                                                 5.00
                                                                                 4.50
174. Reid, J.T. & J.R. Hunter. HUMBOLT COUNTY. 1913
                                                                                 4.50
175. Aston. ESMERALDA COUNTY. 1913
176. London, Jack. THE GOLD HUNTERS OF THE NORTH. Ext., 1903.
177. Wartman-Arland, Flora E. THE STORY OF MONTESANO. 1933
                                                                                 4.00
                                                                                 1.50
178. London. THE ECONOMICS OF THE KLONDIKE.
179. Bishop, Robert Sr. LAND IN THE SKY TOTEM.
180. Webb, John S. & Ed S. Curtis. THE RIVER TRIP TO THE KLONDIKE AND THE RUSH
                                                                                 2.50
      TO THE KLONDIKE OVER THE MOUNTAIN PASS. 1898
                                                                                 6.00
181. Librn. of Bellingham Public Libr. HISTORY OF BELLINGHAM. 1926
                                                                                 2.50
182. VOYAGE OF ALEXANDER MACKENZIE.
183. Chaplin, Ralph. CENTRALIA CONSPIRACY.
                                                                                 4.50
184. Haswell, Robert. ROBERT HASWELL'S JOURNALS. 1788-89.
                                                                                 4.00
                                                                                 4.00
185. Minto, John. RHYME OF EARLY LIFE IN OREGON. (1915?)
186. Collins, Henry B., A.H. Clarke & E.H. Walker. THE ALEUTIAN ISLANDS: Their
                                                                                 7.50
      People & Natural History. 1945
187. Simpson, Brevet Brig. Gen. J.H. CORONADO'S MARCH IN SEARCH OF THE "SEVEN
                                                                                 2.50
     CITIES OF CIBOLA." 1871
                                                                                 5.00
188. Riddle, Geo. W. EARLY DAYS IN OREGON.
189. VILHJALMUR STEFANSON. 1925
                                                                                 2.50
190. Lockley, Fred. ACROSS THE PLAINS BY PRAIRIE SCHOONER.
                                                                                 1.50
                                                                                 7.50
191. MacArthur, Walter. LAST DAYS OF SAIL ON THE WEST COAST. 1929
192. Stuck, Hudson. THE ALASKAN MISSIONS OF THE EPISCOPAL CHURCH. 1920
                                                                                10.00
193. Steffa, Don. TALES OF NOTED FRONTIER CHARACTERS, SOAPY SMITH. 1908
                                                                                 1.75
194. Meeker, E. WASHINGTON TERRITORY 1870
195. Denny, Arthur A. PIONEER DAYS ON PUGET SOUND. 1888
                                                                                 5.00
                                                                                 4.00
196. Rowan, James. THE I.W.W. IN THE LUMBER INDUSTRY.
199. Sayre, J. Willis. THE EARLY WATERFRONT OF SEATTLE, 1937.
                                                                                 2.50
```

204.	Pelly, T.M. DR. MINOR - A SKETCH OF HIS BACKGROUND AND LIFE. 1933	7.50
209.	flandrau, Grace. FRONTIER DAYS ALONG THE UPPER MISSOURI.	3.00
210.	Flandrau. THE LEWIS AND CLARK EXPEDITION.	5.00
211.	Flandrau. A GLANCE AT THE LEWIS AND CLARK EXPEDITION.	3.00
213. 1	Flandrau. THE VERENDRYE OVERLAND QUEST OF THE PACIFIC.	3.50
216.	Harper, Frank B. FORT UNION AND ITS NEIGHBORS ON THE UPPER MISSOURI.	2.50
220.	Burdick, Usher L. MARQUIS de MORES AT WAR IN THE BADLANDS. 1929	2.50
227. (	General Strike Committee. THE SEATTLE GENERAL STRIKE. 1919	5.00
235.	Sayre, J.W. THE ROMANCE OF SECOND AVENUE. DEDICATION AND OPENING OF THE NEW CASCADE TUNNEL. 1929	1.50
239.	Van Olinda, O.S. HISTORY OF VASHON - MAURY ISLAND. 1935	2.00 6.00
241.	Hanford, C.H. SAN JUAN DISPUTE. 1900	2.00
246.	Walgamott, C.S. REMINISCENCES OF EARLY DAYS. 1926	7.50
250.	Wardner, Jim. JIM WARDNER, OF WARDNER IDAHO. 1900	8.00
251.	Brown, Col. W.C. THE SHEEPEATER CAMPAIGN, Idaho - 1879. 1926	2.50
259. 1	Hornaday, Wm. T. EXTERMINATION OF THE AMERICAN BISON. 1887?	10.00
264.	Slauson, Morda C. ONE HUNDRED YEARS ON THE CEDAR.	10.00
265.	Jones, S.C. & M.F. Casady. FROM CABIN TO CUPOLA. County Courthouses in	
6	Washington.	10.00
267. 2	andrews, Clarence L. WRANGELL AND THE GOLD OF THE CASSIAR. 1937	3.50
268. 3	Andrews, Clarence L. THE PIONEERS AND THE NUGGETS OF VERSE. 1937	3.00
	PORT TOWNSEND. 1890	5.00
201.	Gilbert, Kenneth. ALASKAN POKER STORIES. 1958	2.50
202. 7	Moore, James Bernard. SKAGWAY IN DAYS PRIMEVAL.	4.00
284. E	Chase, Cora G. UNTO THE LEAST - A Biographic Sketch of Mother Ryther. 1972 Blankenship, Geo. E. EARLY HISTORY OF THURSTON COUNTY. 1914	6.00 20.00
285. E	rish, Harriet U. PAST AT PRESENT In Issaquah, Wn. 1967	12.50
286. A	illen, Edward W. THE ROLLICKING PACIFIC; A Selection of Poems. 1972	3.00
287. A	illen. DANCING TALES AND OTHER FISHY JINGLES. 1951	4.00
	Chin, Doug & Art. UPHILL - The Settlement & Diffusion of the Chinese	
í	n Seattle.	6.00
292. H	Marpham, Josephine E. DOORWAYS INTO HISTORY - Early Houses & Public	
	Buildings of Oregon.	5.00
<i>SJU</i> 1.	Fig. 10. De 11.0. COURT EDERLY NEW CONTROL STATE 10.00	
SJU 2.	Farlow, Dr. W.G. SOME EDIBLE AND POISONOUS FUNGI. 1897	2.50
SJU 3.	Gurdji, V. ORIENTAL RUG WEAVING. 1901 D'Avenes, E., Prisse & Dr. J.C. Ewart. EGYPTIAN AND ARABIAN HORSES AND	5.00
500 5.	ORIGIN OF HORSES AND PONIES. 1904	2.50
SJU 4.	Freshfield, Douglas W. ON MOUNTAINS AND MANKIND. 1904	1.50
SJU 5.		1.50
SJU 6.		
	PRINTING.	1.50
		1.50
SJU 7.	Liberty, Arthur L. PEWTER AND THE REVIVAL OF ITS USE. 1904	1.50
SJU 8.	Hammell, Wm. PINE NEEDLE BASKETRY.	
SJU 8. SJU 9.	Hammell, Wm. PINE NEEDLE BASKETRY. Frey, Clark, Vietch. HOME TANNING. 1936	1.50 1.50 1.50
SJU 8. SJU 9. SJU 10.	Hammell, Wm. PINE NEEDLE BASKETRY. Frey, Clark, Vietch. HOME TANNING. 1936 Browning, Frank. STEAM PLANT ERRORS	1.50 1.50 1.50 2.00
SJU 8. SJU 9. SJU 10. SJU 18.	Hammell, Wm. PINE NEEDLE BASKETRY. Frey, Clark, Vietch. HOME TANNING. 1936 Browning, Frank. STEAM PLANT ERRORS Burdick, Arthur J. THE PROSPECTOR'S MANUAL. 1905	1.50 1.50 1.50 2.00 7.50
SJU 8. SJU 9. SJU 10. SJU 18. SJU 19.	Hammell, Wm. PINE NEEDLE BASKETRY. Frey, Clark, Vietch. HOME TANNING. 1936 Browning, Frank. STEAM PLANT ERRORS Burdick, Arthur J. THE PROSPECTOR'S MANUAL. 1905 WOODS DUAL POWER. (1902?)	1.50 1.50 1.50 2.00 7.50 1.50
SJU 8. SJU 9. SJU 10. SJU 18. SJU 19. SJU 20.	Hammell, Wm. PINE NEEDLE BASKETRY. Frey, Clark, Vietch. HOME TANNING. 1936 Browning, Frank. STEAM PLANT ERRORS Burdick, Arthur J. THE PROSPECTOR'S MANUAL. 1905 WOODS DUAL POWER. (1902?) Hayward, Charles B. DIRIGIBLE BALLOONS. 1921	1.50 1.50 1.50 2.00 7.50 1.50
SJU 8. SJU 9. SJU 10. SJU 18. SJU 19. SJU 20. SJU 21.	Hammell, Wm. PINE NEEDLE BASKETRY. Frey, Clark, Vietch. HOME TANNING. 1936 Browning, Frank. STEAM PLANT ERRORS Burdick, Arthur J. THE PROSPECTOR'S MANUAL. 1905 WOODS DUAL POWER. (1902?) Hayward, Charles B. DIRIGIBLE BALLOONS. 1921 Osborn, Henry F. THE ELEPHANTS AND MASTEDONS ARRIVE IN AMERICA.	1.50 1.50 2.50 7.50 1.50 5.00
SJU 8. SJU 9. SJU 10. SJU 18. SJU 19. SJU 20. SJU 21. SJU 22.	Hammell, Wm. PINE NEEDLE BASKETRY. Frey, Clark, Vietch. HOME TANNING. 1936 Browning, Frank. STEAM PLANT ERRORS Burdick, Arthur J. THE PROSPECTOR'S MANUAL. 1905 WOODS DUAL POWER. (1902?) Hayward, Charles B. DIRIGIBLE BALLOONS. 1921 Osborn, Henry F. THE ELEPHANTS AND MASTEDONS ARRIVE IN AMERICA. Todd, Mattie Phipps. HAND LOOM WEAVING. 1902	1.50 1.50 2.00 7.50 1.50 5.00 1.50 7.00
SJU 8. SJU 9. SJU 10. SJU 18. SJU 19. SJU 20. SJU 21. SJU 22. SJU 23.	Hammell, Wm. PINE NEEDLE BASKETRY. Frey, Clark, Vietch. HOME TANNING. 1936 Browning, Frank. STEAM PLANT ERRORS Burdick, Arthur J. THE PROSPECTOR'S MANUAL. 1905 WOODS DUAL POWER. (1902?) Hayward, Charles B. DIRIGIBLE BALLOONS. 1921 Osborn, Henry F. THE ELEPHANTS AND MASTEDONS ARRIVE IN AMERICA. Todd, Mattie Phipps. HAND LOOM WEAVING. 1902 Wilbur, C. Martin. HISTORY OF THE CROSSBOW. 1936	1.50 1.50 1.50 2.00 7.50 1.50 5.00 1.50 7.00
SJU 8. SJU 9. SJU 10. SJU 18. SJU 19. SJU 20. SJU 21. SJU 22. SJU 23. SJU 24.	Hammell, Wm. PINE NEEDLE BASKETRY. Frey, Clark, Vietch. HOME TANNING. 1936 Browning, Frank. STEAM PLANT ERRORS Burdick, Arthur J. THE PROSPECTOR'S MANUAL. 1905 WOODS DUAL POWER. (1902?) Hayward, Charles B. DIRIGIBLE BALLOONS. 1921 Osborn, Henry F. THE ELEPHANTS AND MASTEDONS ARRIVE IN AMERICA. Todd, Mattie Phipps. HAND LOOM WEAVING. 1902 Wilbur, C. Martin. HISTORY OF THE CROSSBOW. 1936 Alexander, A.S. HORSE SECRETS. 1913	1.50 1.50 2.00 7.50 1.50 5.00 1.50 7.00 1.50 2.50
SJU 8. SJU 9. SJU 10. SJU 18. SJU 20. SJU 21. SJU 22. SJU 23. SJU 24. SJU 26.	Hammell, Wm. PINE NEEDLE BASKETRY. Frey, Clark, Vietch. HOME TANNING. 1936 Browning, Frank. STEAM PLANT ERRORS Burdick, Arthur J. THE PROSPECTOR'S MANUAL. 1905 WOODS DUAL POWER. (1902?) Hayward, Charles B. DIRIGIBLE BALLOONS. 1921 Osborn, Henry F. THE ELEPHANTS AND MASTEDONS ARRIVE IN AMERICA. Todd, Mattie Phipps. HAND LOOM WEAVING. 1902 Wilbur, C. Martin. HISTORY OF THE CROSSBOW. 1936 Alexander, A.S. HORSE SECRETS. 1913 Clute, Willard Nelson. THE FERN - COLLECTOR'S GUIDE. 1901	1.50 1.50 1.50 2.00 7.50 1.50 5.00 1.50 7.00
SJU 8. SJU 9. SJU 10. SJU 18. SJU 20. SJU 21. SJU 22. SJU 23. SJU 24. SJU 26. SJU 27.	Hammell, Wm. PINE NEEDLE BASKETRY. Frey, Clark, Vietch. HOME TANNING. 1936 Browning, Frank. STEAM PLANT ERRORS Burdick, Arthur J. THE PROSPECTOR'S MANUAL. 1905 WOODS DUAL POWER. (1902?) Hayward, Charles B. DIRIGIBLE BALLOONS. 1921 Osborn, Henry F. THE ELEPHANTS AND MASTEDONS ARRIVE IN AMERICA. Todd, Mattie Phipps. HAND LOOM WEAVING. 1902 Wilbur, C. Martin. HISTORY OF THE CROSSBOW. 1936 Alexander, A.S. HORSE SECRETS. 1913	1.50 1.50 2.00 7.50 1.50 5.00 1.50 7.00 1.50 2.50 3.00
SJU 8. SJU 9. SJU 10. SJU 119. SJU 20. SJU 21. SJU 22. SJU 23. SJU 24. SJU 26. SJU 27. SJU 28.	Hammell, Wm. PINE NEEDLE BASKETRY. Frey, Clark, Vietch. HOME TANNING. 1936 Browning, Frank. STEAM PLANT ERRORS Burdick, Arthur J. THE PROSPECTOR'S MANUAL. 1905 WOODS DUAL POWER. (1902?) Hayward, Charles B. DIRIGIBLE BALLOONS. 1921 Osborn, Henry F. THE ELEPHANTS AND MASTEDONS ARRIVE IN AMERICA. Todd, Mattie Phipps. HAND LOOM WEAVING. 1902 Wilbur, C. Martin. HISTORY OF THE CROSSBOW. 1936 Alexander, A.S. HORSE SECRETS. 1913 Clute, Willard Nelson. THE FERN - COLLECTOR'S GUIDE. 1901 Meeker, E. HOP CULTURE IN THE U.S. 1883	1.50 1.50 2.00 7.50 1.50 5.00 1.50 7.00 1.50 2.50 3.00
SJU 8. SJU 9. SJU 10. SJU 18. SJU 19. SJU 20. SJU 21. SJU 22. SJU 23. SJU 24. SJU 26. SJU 27. SJU 27. SJU 29.	Hammell, Wm. PINE NEEDLE BASKETRY. Frey, Clark, Vietch. HOME TANNING. 1936 Browning, Frank. STEAM PLANT ERRORS Burdick, Arthur J. THE PROSPECTOR'S MANUAL. 1905 WOODS DUAL POWER. (1902?) Hayward, Charles B. DIRIGIBLE BALLOONS. 1921 Osborn, Henry F. THE ELEPHANTS AND MASTEDONS ARRIVE IN AMERICA. Todd, Mattie Phipps. HAND LOOM WEAVING. 1902 Wilbur, C. Martin. HISTORY OF THE CROSSBOW. 1936 Alexander, A.S. HORSE SECRETS. 1913 Clute, Willard Nelson. THE FERN - COLLECTOR'S GUIDE. 1901 Meeker, E. HOP CULTURE IN THE U.S. 1803 Austin-Walker Sales Co. APACHE BEADWORK - Instructions and Designs	1.50 1.50 2.00 7.50 1.50 5.00 1.50 7.00 1.50 2.50 3.00
SJU 8. SJU 9. SJU 10. SJU 18. SJU 20. SJU 21. SJU 22. SJU 23. SJU 24. SJU 26. SJU 27. SJU 28. SJU 29. SJU 30.	Hammell, Wm. PINE NEEDLE BASKETRY. Frey, Clark, Vietch. HOME TANNING. 1936 Browning, Frank. STEAM PLANT ERRORS Burdick, Arthur J. THE PROSPECTOR'S MANUAL. 1905 WOODS DUAL POWER. (1902?) Hayward, Charles B. DIRIGIBLE BALLOONS. 1921 Osborn, Henry F. THE ELEPHANTS AND MASTEDONS ARRIVE IN AMERICA. Todd, Mattie Phipps. HAND LOOM WEAVING. 1902 Wilbur, C. Martin. HISTORY OF THE CROSSBOW. 1936 Alexander, A.S. HORSE SECRETS. 1913 Clute, Willard Nelson. THE FERN - COLLECTOR'S GUIDE. 1901 Meeker, E. HOP CULTURE IN THE U.S. 1883 Austin-Walker Sales Co. APACHE BEADWORK - Instructions and Designs Holmstrom, J.G. SCIENTIFIC HORSE, MULE & OX SHOEING. 1902 Fickes, Clyde P. & W. Ellis Groben. BUILDING WITH LOGS. 1945	1.50 1.50 2.00 7.50 1.50 5.00 1.50 7.00 1.50 2.50 3.00 10.00 2.50 4.00 2.50
SJU 8. SJU 9. SJU 10. SJU 10. SJU 120. SJU 20. SJU 21. SJU 22. SJU 23. SJU 24. SJU 26. SJU 27. SJU 28. SJU 29. SJU 30. SJI 1.	Hammell, Wm. PINE NEEDLE BASKETRY. Frey, Clark, Vietch. HOME TANNING. 1936 Browning, Frank. STEAM PLANT ERRORS Burdick, Arthur J. THE PROSPECTOR'S MANUAL. 1905 WCODS DUAL POWER. (1902?) Hayward, Charles B. DIRIGIBLE BALLOONS. 1921 Osborn, Henry F. THE ELEPHANTS AND MASTEDONS ARRIVE IN AMERICA. Todd, Mattie Phipps. HAND LOOM WEAVING. 1902 Wilbur, C. Martin. HISTORY OF THE CROSSBOW. 1936 Alexander, A.S. HORSE SECRETS. 1913 Clute, Willard Nelson. THE FERN - COLLECTOR'S GUIDE. 1901 Meeker, E. HOP CULTURE IN THE U.S. 1883 Austin-Walker Sales Co. APACHE BEADWORK - Instructions and Designs Holmstrom, J.G. SCIENTIFIC HORSE, MULE & OX SHOEING. 1902 Fickes, Clyde P. & W. Ellis Groben. BUILDING WITH LOGS. 1945 Krause, F. SLING CONTRIVANCES. 1904	1.50 1.50 2.00 7.50 1.50 5.00 1.50 7.00 1.50 2.50 3.00 10.00 2.50 4.00
SJU 8. SJU 9. SJU 10. SJU 18. SJU 20. SJU 21. SJU 22. SJU 23. SJU 24. SJU 26. SJU 27. SJU 28. SJU 29. SJU 30.	Hammell, Wm. PINE NEEDLE BASKETRY. Frey, Clark, Vietch. HOME TANNING. 1936 Browning, Frank. STEAM PLANT ERRORS Burdick, Arthur J. THE PROSPECTOR'S MANUAL. 1905 WOODS DUAL POWER. (1902?) Hayward, Charles B. DIRIGIBLE BALLOONS. 1921 Osborn, Henry F. THE ELEPHANTS AND MASTEDONS ARRIVE IN AMERICA. Todd, Mattie Phipps. HAND LOOM WEAVING. 1902 Wilbur, C. Martin. HISTORY OF THE CROSSBOW. 1936 Alexander, A.S. HORSE SECRETS. 1913 Clute, Willard Nelson. THE FERN - COLLECTOR'S GUIDE. 1901 Meeker, E. HOP CULTURE IN THE U.S. 1883 Austin-Walker Sales Co. APACHE BEADWORK - Instructions and Designs Holmstrom, J.G. SCIENTIFIC HORSE, MULE & OX SHOEING. 1902 Fickes, Clyde P. & W. Ellis Groben. BUILDING WITH LOGS. 1945 Krause, F. SLING CONTRIVANCES. 1904 Murdoch, John. A STUDY OF THE ESKIMO BOWS IN THE U.S. NATIONAL MUSEUM.	1.50 1.50 2.00 7.50 1.50 5.00 1.50 7.00 1.50 2.50 3.00 10.00 2.50 4.00 2.50
SJU 8. SJU 9. SJU 10. SJU 118. SJU 19. SJU 20. SJU 21. SJU 22. SJU 23. SJU 24. SJU 27. SJU 28. SJU 29. SJU 30. SJI 1. SJI 2.	Hammell, Wm. PINE NEEDLE BASKETRY. Frey, Clark, Vietch. HOME TANNING. 1936 Browning, Frank. STEAM PLANT ERRORS Burdick, Arthur J. THE PROSPECTOR'S MANUAL. 1905 WOODS DUAL POWER. (1902?) Hayward, Charles B. DIRIGIBLE BALLOONS. 1921 OSborn, Henry F. THE ELEPHANTS AND MASTEDONS ARRIVE IN AMERICA. TODD, Mattie Phipps. HAND LOOM WEAVING. 1902 Wilbur, C. Martin. HISTORY OF THE CROSSBOW. 1936 Alexander, A.S. HORSE SECRETS. 1913 Clute, Willard Nelson. THE FERN - COLLECTOR'S GUIDE. 1901 Meeker, E. HOP CULTURE IN THE U.S. 1883 Austin-Walker Sales Co. APACHE BEADWORK - Instructions and Designs Holmstrom, J.G. SCIENTIFIC HORSE, MULE & OX SHOEING. 1902 Fickes, Clyde P. & W. Ellis Groben. BUILDING WITH LOGS. 1945 Krause, F. SLING CONTRIVANCES. 1904 Murdoch, John. A STUDY OF THE ESKIMO BOWS IN THE U.S. NATIONAL MUSEUM.	1.50 1.50 1.50 2.00 7.50 1.50 5.00 1.50 2.50 3.00 10.00 2.50 4.00 2.50
SJU 8. SJU 9. SJU 10. SJU 11. SJU 12. SJU 20. SJU 21. SJU 22. SJU 26. SJU 27. SJU 29. SJU 29. SJU 29. SJU 29. SJU 3.	Hammell, Wm. PINE NEEDLE BASKETRY. Frey, Clark, Vietch. HOME TANNING. 1936 Browning, Frank. STEAM PLANT ERRORS Burdick, Arthur J. THE PROSPECTOR'S MANUAL. 1905 WCODS DUAL POWER. (1902?) Hayward, Charles B. DIRIGIBLE BALLOONS. 1921 Osborn, Henry F. THE ELEPHANTS AND MASTEDONS ARRIVE IN AMERICA. Todd, Mattie Phipps. HAND LOOM WEAVING. 1902 Wilbur, C. Martin. HISTORY OF THE CROSSBOW. 1936 Alexander, A.S. HORSE SECRETS. 1913 Clute, Willard Nelson. THE FERN - COLLECTOR'S GUIDE. 1901 Meeker, E. HOP CULTURE IN THE U.S. 1883 Austin-Walker Sales Co. APACHE BEADWORK - Instructions and Designs Holmstrom, J.G. SCIENTIFIC HORSE, MULE & OX SHOEING. 1902 Fickes, Clyde P. & W. Ellis Groben. BUILDING WITH LOGS. 1945 Krause, F. SLING CONTRIVANCES. 1904 Murdoch, John. A STUDY OF THE ESKIMO BOWS IN THE U.S. NATIONAL MUSEUM. 1884 Mason, Otis T. THROWING STICKS IN THE NATIONAL MUSEUM. 1884	1.50 1.50 2.00 7.50 1.50 5.00 1.50 7.00 1.50 2.50 3.00 10.00 2.50 4.00 2.50 2.50
SJU   8.	Hammell, Wm. PINE NEEDLE BASKETRY. Frey, Clark, Vietch. HOME TANNING. 1936 Browning, Frank. STEAM PLANT ERRORS Burdick, Arthur J. THE PROSPECTOR'S MANUAL. 1905 WOODS DUAL POWER. (1902?) Hayward, Charles B. DIRIGIBLE BALLOONS. 1921 Osborn, Henry F. THE ELEPHANTS AND MASTEDONS ARRIVE IN AMERICA. Todd, Mattie Phipps. HAND LOOM WEAVING. 1902 Wilbur, C. Martin. HISTORY OF THE CROSSBOW. 1936 Alexander, A.S. HORSE SECRETS. 1913 Clute, Willard Nelson. THE FERN - COLLECTOR'S GUIDE. 1901 Meeker, E. HOP CULTURE IN THE U.S. 1883 Austin-Walker Sales Co. APACHE BEADWORK - Instructions and Designs Holmstrom, J.G. SCIENTIFIC HORSE, MULE & OX SHOEING. 1902 Fickes, Clyde P. & W. Ellis Groben. BUILDING WITH LOGS. 1945  Krause, F. SLING CONTRIVANCES. 1904 Murdoch, John. A STUDY OF THE ESKIMO BOWS IN THE U.S. NATIONAL MUSEUM. 1884 Mason, Otis T. THROWING STICKS IN THE NATIONAL MUSEUM. 1884 CHIEF JOSEPH'S OWN STORY. 1879	1.50 1.50 2.00 7.50 1.50 5.00 1.50 7.00 1.50 2.50 3.00 10.00 2.50 4.00 2.50 2.50 2.50
SJU 8. SJU 9. SJU 10. SJU 11. SJU 12. SJU 20. SJU 21. SJU 22. SJU 26. SJU 27. SJU 29. SJU 29. SJU 29. SJU 29. SJU 3.	Hammell, Wm. PINE NEEDLE BASKETRY. Frey, Clark, Vietch. HOME TANNING. 1936 Browning, Frank. STEAM PLANT ERRORS Burdick, Arthur J. THE PROSPECTOR'S MANUAL. 1905 WOODS DUAL POWER. (1902?) Hayward, Charles B. DIRIGIBLE BALLOONS. 1921 Osborn, Henry F. THE ELEPHANTS AND MASTEDONS ARRIVE IN AMERICA. TODD, Mattie Phipps. HAND LOOM WEAVING. 1902 Wilbur, C. Martin. HISTORY OF THE CROSSBOW. 1936 Alexander, A.S. HORSE SECRETS. 1913 Clute, Willard Nelson. THE FERN - COLLECTOR'S GUIDE. 1901 Meeker, E. HOP CULTURE IN THE U.S. 1883 Austin-Walker Sales Co. APACHE BEADWORK - Instructions and Designs Holmstrom, J.G. SCIENTIFIC HORSE, MULE & OX SHOEING. 1902 Fickes, Clyde P. & W. Ellis Groben. BUILDING WITH LOGS. 1945  Krause, F. SLING CONTRIVANCES. 1904 Murdoch, John. A STUDY OF THE ESKIMO BOWS IN THE U.S. NATIONAL MUSEUM. 1884 Mason, Otis T. THROWING STICKS IN THE NATIONAL MUSEUM. 1884 CHIEF JOSEPH'S OWN STORY. 1879 Mason, Otis. BASKET WORK OF THE ABORIGINES. 1884	1.50 1.50 2.00 7.50 1.50 5.00 1.50 7.00 1.50 2.50 3.00 10.00 2.50 4.00 2.50 2.50
SJU 8. SJU 9. SJU 10. SJU 118. SJU 19. SJU 20. SJU 21. SJU 22. SJU 24. SJU 27. SJU 28. SJU 28. SJU 28. SJU 28. SJU 28. SJU 28. SJU 27. SJU 27. SJU 28. SJU 27. SJU 27. SJU 28. SJU 27.	Hammell, Wm. PINE NEEDLE BASKETRY. Frey, Clark, Vietch. HOME TANNING. 1936 Browning, Frank. STEAM PLANT ERRORS Burdick, Arthur J. THE PROSPECTOR'S MANUAL. 1905 WOODS DUAL POWER. (1902?) Hayward, Charles B. DIRIGIBLE BALLOONS. 1921 Osborn, Henry F. THE ELEPHANTS AND MASTEDONS ARRIVE IN AMERICA. Todd, Mattie Phipps. HAND LOOM WEAVING. 1902 Wilbur, C. Martin. HISTORY OF THE CROSSBOW. 1936 Alexander, A.S. HORSE SECRETS. 1913 Clute, Willard Nelson. THE FERN - COLLECTOR'S GUIDE. 1901 Meeker, E. HOP CULTURE IN THE U.S. 1883 Austin-Walker Sales Co. APACHE BEADWORK - Instructions and Designs Holmstrom, J.G. SCIENTIFIC HORSE, MULE & OX SHOEING. 1902 Fickes, Clyde P. & W. Ellis Groben. BUILDING WITH LOGS. 1945  Krause, F. SLING CONTRIVANCES. 1904 Murdoch, John. A STUDY OF THE ESKIMO BOWS IN THE U.S. NATIONAL MUSEUM. 1884 Mason, Otis T. THROWING STICKS IN THE NATIONAL MUSEUM. 1884 CHIEF JOSEPH'S OWN STORY. 1879	1.50 1.50 1.50 2.00 7.50 1.50 5.00 1.50 2.50 3.00 10.00 2.50 4.00 2.50 2.50 2.50 2.50 2.50 2.50
SJU 8. SJU 9. SJU 10. SJU 118. SJU 19. SJU 20. SJU 21. SJU 22. SJU 24. SJU 27. SJU 28. SJU 28. SJU 28. SJU 28. SJU 28. SJU 28. SJU 27. SJU 27. SJU 28. SJU 27. SJU 27. SJU 28. SJU 27.	Hammell, Wm. PINE NEEDLE BASKETRY. Frey, Clark, Vietch. HOME TANNING. 1936 Browning, Frank. STEAM PLANT ERRORS Burdick, Arthur J. THE PROSPECTOR'S MANUAL. 1905 WOODS DUAL POWER. (1902?) Hayward, Charles B. DIRIGIBLE BALLOONS. 1921 Osborn, Henry F. THE ELEPHANTS AND MASTEDONS ARRIVE IN AMERICA. Todd, Mattie Phipps. HAND LOOM WEAVING. 1902 Wilbur, C. Martin. HISTORY OF THE CROSSBOW. 1936 Alexander, A.S. HORSE SECRETS. 1913 Clute, Willard Nelson. THE FERN - COLLECTOR'S GUIDE. 1901 Meeker, E. HOP CULTURE IN THE U.S. 1883 Austin-Walker Sales Co. APACHE BEADWORK - Instructions and Designs Holmstrom, J.G. SCIENTIFIC HORSE, MULE & OX SHOEING. 1902 Fickes, Clyde P. & W. Ellis Groben. BUILDING WITH LOGS. 1945  Krause, F. SLING CONTRIVANCES. 1904 Murdoch, John. A STUDY OF THE ESKIMO BOWS IN THE U.S. NATIONAL MUSEUM. 1884 Mason, Otis T. THROWING STICKS IN THE NATIONAL MUSEUM. 1884 CHIEF JOSEPH'S OWN STORY. 1879 Mason, Otis. BASKET WORK OF THE ABORIGINES. 1884 LIWd, Rev. Dr. J.P.D. THE MESSAGE OF AN INDIAN RELIC: Seattle'S Totem Pole.	1.50 1.50 2.00 7.50 1.50 5.00 1.50 7.00 1.50 2.50 3.00 10.00 2.50 4.00 2.50 2.50 2.50
SJU 8. SJU 9. SJU 10. SJU 110. SJU 120. SJU 220. SJU 23. SJU 26. SJU 26. SJU 27. SJU 29. SJU 30. SJI 1. SJI 2. SJI 3. SJI 4. SJI 5. SJI 6.	Hammell, Wm. PINE NEEDLE BASKETRY. Frey, Clark, Vietch. HOME TANNING. 1936 Browning, Frank. STEAM PLANT ERRORS Burdick, Arthur J. THE PROSPECTOR'S MANUAL. 1905 WOODS DUAL POWER. (1902?) Hayward, Charles B. DIRIGIBLE BALLOONS. 1921 Osborn, Henry F. THE ELEPHANTS AND MASTEDONS ARRIVE IN AMERICA. Todd, Mattie Phipps. HAND LOOM WEAVING. 1902 Wilbur, C. Martin. HISTORY OF THE CROSSBOW. 1936 Alexander, A.S. HORSE SECRETS. 1913 Clute, Willard Nelson. THE FERN - COLLECTOR'S GUIDE. 1901 Meeker, E. HOP CULTURE IN THE U.S. 1883 Austin-Walker Sales Co. APACHE BEADWORK - Instructions and Designs Holmstrom, J.G. SCIENTIFIC HORSE, MULE & OX SHOEING. 1902 Fickes, Clyde P. & W. Ellis Groben. BUILDING WITH LOGS. 1945  Krause, F. SLING CONTRIVANCES. 1904 Murdoch, John. A STUDY OF THE ESKIMO BOWS IN THE U.S. NATIONAL MUSEUM. 1884 Mason, Otis T. THROWING STICKS IN THE NATIONAL MUSEUM. 1884 CHIEF JOSEPH'S OWN STORY. 1879 Mason, Otis. BASKET WORK OF THE ABORIGINES. 1884 Llwd, Rev. Dr. J.P.D. THE MESSAGE OF AN INDIAN RELIC: Seattle's Totem	1.50 1.50 2.00 7.50 1.50 5.00 1.50 7.00 1.50 2.50 3.00 10.00 2.50 4.00 2.50 2.50 2.50 2.50 2.50 2.50 2.50
SJU 8. SJU 9. SJU 10. SJU 10. SJU 12. SJU 20. SJU 21. SJU 22. SJU 23. SJU 26. SJU 26. SJU 29. SJU 30. SJI 1. SJI 2. SJI 3. SJI 4. SJI 5. SJI 6. SJI 7. SJI 7. SJI 7. SJI 8.	Hammell, Wm. PINE NEEDLE BASKETRY. Frey, Clark, Vietch. HOME TANNING. 1936 Browning, Frank. STEAM PLANT ERRORS Burdick, Arthur J. THE PROSPECTOR'S MANUAL. 1905 WOODS DUAL POWER. (1902?) Hayward, Charles B. DIRIGIBLE BALLOONS. 1921 Osborn, Henry F. THE ELEPHANTS AND MASTEDONS ARRIVE IN AMERICA. Todd, Mattie Phipps. HAND LOOM WEAVING. 1902 Wilbur, C. Martin. HISTORY OF THE CROSSBOW. 1936 Alexander, A.S. HORSE SECRETS. 1913 Clute, Willard Nelson. THE FERN - COLLECTOR'S GUIDE. 1901 Meeker, E. HOP CULTURE IN THE U.S. 1883 Austin-Walker Sales Co. APACHE BEADWORK - Instructions and Designs Holmstrom, J.G. SCIENTIFIC HORSE, MULE & OX SHOEING. 1902 Fickes, Clyde P. & W. Ellis Groben. BUILDING WITH LOGS. 1945  Krause, F. SLING CONTRIVANCES. 1904 Murdoch, John. A STUDY OF THE ESKIMO BOWS IN THE U.S. NATIONAL MUSEUM. 1884 Mason, Otis T. THROWING STICKS IN THE NATIONAL MUSEUM. 1884 CHIEF JOSEPH'S OWN STORY. 1879 Mason, Otis. BASKET WORK OF THE ABORIGINES. 1884 Llwd, Rev. Dr. J.P.D. THE MESSAGE OF AN INDIAN RELIC: Seattle's Totem Pole. Mason, O. TRAPS OF THE AMERICAN INDIAN. Meeker, Louis L. OGALALA GAMES. 1901 Collins, Henry B. PREHISTORIC ART OF THE ALASKAN ESKIMO. 1929	1.50 1.50 1.50 2.00 7.50 1.50 5.00 1.50 7.00 1.50 2.50 3.00 10.00 2.50 4.00 2.50 2.50 2.50 2.50 2.50 2.50 2.50
SJU 8. SJU 9. SJU 10. SJU 18. SJU 19. SJU 20. SJU 21. SJU 26. SJU 26. SJU 27. SJU 28. SJU 28. SJU 27. SJU 30. SJI 1. SJI 5. SJI 6. SJI 7. SJI 8. SJI 7. SJI 9. SJI 10.	Hammell, Wm. PINE NEEDLE BASKETRY. Frey, Clark, Vietch. HOME TANNING. 1936 Browning, Frank. STEAM PLANT ERRORS Burdick, Arthur J. THE PROSPECTOR'S MANUAL. 1905 WOODS DUAL POWER. (1902?) Hayward, Charles B. DIRIGIBLE BALLOONS. 1921 Osborn, Henry F. THE ELEPHANTS AND MASTEDONS ARRIVE IN AMERICA. Todd, Mattie Phipps. HAND LOOM WEAVING. 1902 Wilbur, C. Martin. HISTORY OF THE CROSSBOW. 1936 Alexander, A.S. HORSE SECRETS. 1913 Clute, Willard Nelson. THE FERN - COLLECTOR'S GUIDE. 1901 Meeker, E. HOP CULTURE IN THE U.S. 1883 Austin-Walker Sales Co. APACHE BEADWORK - Instructions and Designs Holmstrom, J.G. SCIENTIFIC HORSE, MULE & OX SHOEING. 1902 Fickes, Clyde P. & W. Ellis Groben. BUILDING WITH LOGS. 1945  Krause, F. SLING CONTRIVANCES. 1904 Murdoch, John. A STUDY OF THE ESKIMO BOWS IN THE U.S. NATIONAL MUSEUM. 1884 MASON, Otis T. THROWING STICKS IN THE NATIONAL MUSEUM. 1884 CHIEF JOSEPH'S OWN STORY. 1879 MASON, Otis. BASKET WORK OF THE ABORIGINES. 1884 Llwd, Rev. Dr. J.P.D. THE MESSAGE OF AN INDIAN RELIC: Seattle's Totem Pole. MASON, O. TRAPS OF THE AMERICAN INDIAN. Meeker, Louis L. OGALALA GAMES. 1901 Collins, Henry B. PREHISTORIC ART OF THE ALASKAN ESKIMO. 1929 Eells, Rev. M. JUSTICE TO THE INDIAN.	1.50 1.50 1.50 2.00 7.50 1.50 5.00 1.50 2.50 3.00 10.00 2.50 4.00 2.50 2.50 2.50 2.50 2.50 2.50 2.50 2.50
SJU 8. SJU 9. SJU 10. SJU 18. SJU 19. SJU 20. SJU 21. SJU 26. SJU 26. SJU 27. SJU 28. SJU 28. SJU 27. SJU 30. SJI 1. SJI 5. SJI 6. SJI 7. SJI 8. SJI 7. SJI 9. SJI 10.	Hammell, Wm. PINE NEEDLE BASKETRY. Frey, Clark, Vietch. HOME TANNING. 1936 Browning, Frank. STEAM PLANT ERRORS Burdick, Arthur J. THE PROSPECTOR'S MANUAL. 1905 WOODS DUAL POWER. (1902?) Allyward, Charles B. DIRIGIBLE BALLOONS. 1921 Osborn, Henry F. THE ELEPHANTS AND MASTEDONS ARRIVE IN AMERICA. Todd, Mattie Phipps. HAND LOOM WEAVING. 1902 Wilbur, C. Martin. HISTORY OF THE CROSSBOW. 1936 Alexander, A.S. HORSE SECRETS. 1913 Clute, Willard Nelson. THE FERN - COLLECTOR'S GUIDE. 1901 Meeker, E. HOP CULTURE IN THE U.S. 1883 Austin-Walker Sales Co. APACHE BEADWORK - Instructions and Designs Holmstrom, J.G. SCIENTIFIC HORSE, MULE & OX SHOEING. 1902 Fickes, Clyde P. & W. Ellis Groben. BUILDING WITH LOGS. 1945  Krause, F. SLING CONTRIVANCES. 1904 Murdoch, John. A STUDY OF THE ESKIMO BOWS IN THE U.S. NATIONAL MUSEUM. 1884 Mason, Otis T. THROWING STICKS IN THE NATIONAL MUSEUM. 1884 CHIEF JOSEPH'S OWN STORY. 1879 Mason, Otis. BASKET WORK OF THE ABORIGINES. 1884 Llwd, Rev. Dr. J.P.D. THE MESSAGE OF AN INDIAN RELIC: Seattle's Totem Pole. Mason, O. TRAPS OF THE AMERICAN INDIAN. Meeker, Louis L. OGALALA GAMES. 1901 Collins, Henry B. PREMISTORIC ART OF THE ALASKAN ESKIMO. 1929 Eells, Rev. M. JUSTICE TO THE INDIAN. Willoughby, C. INDIANS OF THE QUINAIELT AGENCY, Washington Territory.	1.50 1.50 1.50 1.50 2.00 7.50 1.50 5.00 1.50 2.50 3.00 10.00 2.50 4.00 2.50 2.50 2.50 2.50 2.50 2.50 2.50 2
SJU 8. SJU 9. SJU 10. SJU 10. SJU 12. SJU 20. SJU 22. SJU 23. SJU 26. SJU 26. SJU 27. SJU 29. SJU 30. SJI 1. SJI 2. SJI 3. SJI 4. SJI 5. SJI 6. SJI 7. SJI 7. SJI 7. SJI 10. SJI 11.	Hammell, Wm. PINE NEEDLE BASKETRY. Frey, Clark, Vietch. HOME TANNING. 1936 Browning, Frank. STEAM PLANT ERRORS Burdick, Arthur J. THE PROSPECTOR'S MANUAL. 1905 WOODS DUAL POWER. (1902?) Hayward, Charles B. DIRIGIBLE BALLOONS. 1921 Osborn, Henry F. THE ELEPHANTS AND MASTEDONS ARRIVE IN AMERICA. Todd, Mattie Phipps. HAND LOOM WEAVING. 1902 Wilbur, C. Martin. HISTORY OF THE CROSSBOW. 1936 Alexander, A.S. HORSE SECRETS. 1913 Clute, Willard Nelson. THE FERN - COLLECTOR'S GUIDE. 1901 Meeker, E. HOP CULTURE IN THE U.S. 1883 Austin-Walker Sales Co. APACHE BEADWORK - Instructions and Designs Holmstrom, J.G. SCIENTIFIC HORSE, MULE & OX SHOEING. 1902 Fickes, Clyde P. & W. Ellis Groben. BUILDING WITH LOGS. 1945  Krause, F. SLING CONTRIVANCES. 1904 Murdoch, John. A STUDY OF THE ESKIMO BOWS IN THE U.S. NATIONAL MUSEUM. 1884 Mason, Otis T. THROWING STICKS IN THE NATIONAL MUSEUM. 1884 CHIEF JOSEPH'S OWN STORY. 1879 Mason, Otis. BASKET WORK OF THE ABORIGINES. 1884 Llwd, Rev. Dr. J.P.D. THE MESSAGE OF AN INDIAN RELIC: Seattle's Totem Pole. Masson, O. TRAPS OF THE AMERICAN INDIAN. Meeker, Louis L. OGALALA GAMES. 1901 Collins, Henry B. PREHISTORIC ART OF THE ALASKAN ESKIMO. 1929 Eells, Rev. M. JUSTICE TO THE INDIAN. Willoughby, C. INDIANS OF THE QUINAIELT AGENCY, Washington Territory. 1886	1.50 1.50 1.50 1.50 2.00 7.50 1.50 5.00 1.50 2.50 3.00 10.00 2.50 4.00 2.50 2.50 2.50 2.50 2.50 2.50 2.50 2
SJU 8. SJU 9. SJU 10. SJU 110. SJU 120. SJU 22. SJU 22. SJU 26. SJU 26. SJU 27. SJU 28. SJU 29. SJU 30. SJI 1. SJI 5. SJI 6. SJI 7. SJI 6. SJI 7. SJI 10. SJI 10. SJI 11.	Hammell, Wm. PINE NEEDLE BASKETRY. Frey, Clark, Vietch. HOME TANNING. 1936 Browning, Frank. STEAM PLANT ERRORS Burdick, Arthur J. THE PROSPECTOR'S MANUAL. 1905 WOODS DUAL POWER. (1902?) Hayward, Charles B. DIRIGIBLE BALLOONS. 1921 Osborn, Henry F. THE ELEPHANTS AND MASTEDONS ARRIVE IN AMERICA. Todd, Mattie Phipps. HAND LOOM WEAVING. 1902 Wilbur, C. Martin. HISTORY OF THE CROSSBOW. 1936 Alexander, A.S. HORSE SECRETS. 1913 Clute, Willard Nelson. THE FERN - COLLECTOR'S GUIDE. 1901 Meeker, E. HOP CULTURE IN THE U.S. 1883 Austin-Walker Sales Co. APACHE BEADWORK - Instructions and Designs Holmstrom, J.G. SCIENTIFIC HORSE, MULE & OX SHOEING. 1902 Fickes, Clyde P. & W. Ellis Groben. BUILDING WITH LOGS. 1945  Krause, F. SLING CONTRIVANCES. 1904 Murdoch, John. A STUDY OF THE ESKIMO BOWS IN THE U.S. NATIONAL MUSEUM. 1884 MASON, Otis T. THROWING STICKS IN THE NATIONAL MUSEUM. 1884 CHIEF JOSEPH'S OWN STORY. 1879 MASON, Otis. BASKET WORK OF THE ABORIGINES. 1884 LIWd, Rev. Dr. J.P.D. THE MESSAGE OF AN INDIAN RELIC: Seattle's Totem Pole. MASON, O. TRAPS OF THE AMERICAN INDIAN. Meeker, Louis L. OGALALA GAMES. 1901 Collins, Henry B. PREMISTORIC ART OF THE ALASKAN ESKIMO. 1929 Eells, Rev. M. JUSTICE TO THE INDIAN. Willoughby, C. INDIANS OF THE QUINAIELT AGENCY, Washington Territory. 1886 Leon & Holmes. STUDIES ON THE ARCHAEOLOGY OF MICHOACAN MEXICO1886	1.50 1.50 1.50 2.00 7.50 1.50 5.00 1.50 7.00 1.50 2.50 3.00 10.00 2.50 4.00 2.50
SJU 8. SJU 9. SJU 10. SJU 110. SJU 110. SJU 120. SJU 22. SJU 22. SJU 24. SJU 26. SJU 27. SJU 28. SJU 29. SJU 30. SJI 1. SJI 2. SJI 3. SJI 6. SJI 7. SJI 8. SJI 7. SJI 8. SJI 10. SJI 11.	Hammell, Wm. PINE NEEDLE BASKETRY. Frey, Clark, Vietch. HOME TANNING. 1936 Browning, Frank. STEAM PLANT ERRORS Burdick, Arthur J. THE PROSPECTOR'S MANUAL. 1905 WOODS DUAL POWER. (1902?) Hayward, Charles B. DIRIGIBLE BALLOONS. 1921 Osborn, Henry F. THE ELEPHANTS AND MASTEDONS ARRIVE IN AMERICA. Todd, Mattie Phipps. HAND LOOM WEAVING. 1902 Wilbur, C. Martin. HISTORY OF THE CROSSBOW. 1936 Alexander, A.S. HORSE SECRETS. 1913 Clute, Willard Nelson. THE FERN - COLLECTOR'S GUIDE. 1901 Meeker, E. HOP CULTURE IN THE U.S. 1883 Austin-Walker Sales Co. APACHE BEADWORK - Instructions and Designs Holmstrom, J.G. SCIENTIFIC HORSE, MULE & OX SHOEING. 1902 Fickes, Clyde P. & W. Ellis Groben. BUILDING WITH LOGS. 1945  Krause, F. SLING CONTRIVANCES. 1904 Murdoch, John. A STUDY OF THE ESKIMO BOWS IN THE U.S. NATIONAL MUSEUM. 1884 MASON, Otis T. THROWING STICKS IN THE NATIONAL MUSEUM. 1884 CHIEF JOSEPH'S OWN STORY. 1879 MASON, Otis. BASKET WORK OF THE ABORIGINES. 1884 Llwd, Rev. Dr. J.P.D. THE MESSAGE OF AN INDIAN RELIC: Seattle's Totem Pole. Mason, O. TRAPS OF THE AMERICAN INDIAN. Meeker, Louis L. OGALAIA GAMES. 1901 COllins, Henry B. PREHISTORIC ART OF THE ALASKAN ESKIMO. 1929 Eells, Rev. M. JUSTICE TO THE INDIAN. Willoughby, C. INDIANS OF THE QUINAIELT AGENCY, Washington Territory. 1886 Beckwith, Paul. NOTES ON THE ARCHAEOLOGY OF MICHOACAN MEXICO1886 Beckwith, Paul. NOTES ON TUSTOMS OF THE DAKOTAMS. 1886	1.50 1.50 1.50 1.50 2.00 7.50 1.50 5.00 1.50 2.50 3.00 10.00 2.50 4.00 2.50 2.50 2.50 2.50 2.50 2.50 2.50 3.50 1.50 2.50 2.50 2.50 2.50 2.50 2.50 2.50 2
SJU 8. SJU 9. SJU 10. SJU 110. SJU 120. SJU 221. SJU 221. SJU 23. SJU 26. SJU 26. SJU 27. SJU 29. SJU 29. SJU 30. SJI 1. SJI 2. SJI 3. SJI 4. SJI 5. SJI 6. SJI 7. SJI 8. SJI 9. SJI 10. SJI 11. SJI 11. SJI 12. SJI 12. SJI 13. SJI 14.	Hammell, Wm. PINE NEEDLE BASKETRY. Frey, Clark, Vietch. HOME TANNING. 1936 Browning, Frank. STEAM PLANT ERRORS Burdick, Arthur J. THE PROSPECTOR'S MANUAL. 1905 WCODS DUAL POWER. (1902?) Haward, Charles B. DIRIGIBLE BALLOONS. 1921 Osborn, Henry F. THE ELEPHANTS AND MASTEDONS ARRIVE IN AMERICA. Todd, Mattie Phipps. HAND LOOM WEAVING. 1902 Wilbur, C. Martin. HISTORY OF THE CROSSBOW. 1936 Alexander, A.S. HORSE SECRETS. 1913 Clute, Willard Nelson. THE FERN - COLLECTOR'S GUIDE. 1901 Meeker, E. HOP CULTURE IN THE U.S. 1883 Austin-Walker Sales Co. APACHE BEADWORK - Instructions and Designs Holmstrom, J.G. SCIENTIFIC HORSE, MULE & OX SHOEING. 1902 Fickes, Clyde P. & W. Ellis Groben. BUILDING WITH LOGS. 1945  Krause, F. SLING CONTRIVANCES. 1904 Murdoch, John. A STUDY OF THE ESKIMO BOWS IN THE U.S. NATIONAL MUSEUM. 1884 Mason, Otis T. THROWING STICKS IN THE NATIONAL MUSEUM. 1884 CHIEF JOSEPH'S OWN STORY. 1879 Mason, Otis. BASKET WORK OF THE ABORIGINES. 1884 Llwd, Rev. Dr. J.P.D. THE MESSAGE OF AN INDIAN RELIC: Seattle's Totem Pole. Mason, O. TRAPS OF THE AMERICAN INDIAN. Meeker, Louis L. OGALALA GAMES. 1901 Collins, Henry B. PREHISTORIC ART OF THE ALASKAN ESKIMO. 1929 Eells, Rev. M. JUSTICE TO THE INDIAN. Willoughby, C. Indians Of THE QUINAIELT AGENCY, Washington Territory. 1886 Leon & Holmes. STUDIES ON THE ARCHAEOLOGY OF MICHOACAN MEXICO1886 Eecls, Rev. M. THE STONE AGE. 1886 Eells, Rev. M. THE STONE AGE. 1886	1.50 1.50 1.50 1.50 2.00 7.50 1.50 5.00 1.50 2.50 3.00 10.00 2.50 4.00 2.50 2.50 2.50 2.50 2.50 2.50 2.50 2
SJU 8. SJU 9. SJU 10. SJU 10. SJU 120. SJU 22. SJU 23. SJU 26. SJU 26. SJU 27. SJU 27. SJU 27. SJU 10. SJI 11. SJI 12. SJI 13. SJI 14. SJI 12. SJI 11. SJI 12. SJI 13. SJI 14. SJI 15.	Hammell, Wm. PINE NEEDLE BASKETRY. Frey, Clark, Vietch. HOME TANNING. 1936 Browning, Frank. STEAM PLANT ERRORS Burdick, Arthur J. THE PROSPECTOR'S MANUAL. 1905 WOODS DUAL POWER. (1902?) Hayward, Charles B. DIRIGIBLE BALLOONS. 1921 Osborn, Henry F. THE ELEPHANTS AND MASTEDONS ARRIVE IN AMERICA. Todd, Mattie Phipps. HAND LOOM WEAVING. 1902 Wilbur, C. Martin. HISTORY OF THE CROSSBOW. 1936 Alexander, A.S. HORSE SECRETS. 1913 Clute, Willard Nelson. THE FERN - COLLECTOR'S GUIDE. 1901 Meeker, E. HOP CULTURE IN THE U.S. 1883 Austin-Walker Sales Co. APACHE BEADWORK - Instructions and Designs Holmstrom, J.G. SCIENTIFIC HORSE, MULE & OX SHOEING. 1902 Fickes, Clyde P. & W. Ellis Groben. BUILDING WITH LOGS. 1945  Krause, F. SLING CONTRIVANCES. 1904 Murdoch, John. A STUDY OF THE ESKIMO BOWS IN THE U.S. NATIONAL MUSEUM. 1884 Mason, Otis T. THROWING STICKS IN THE NATIONAL MUSEUM. 1884 CHIEF JOSEPH'S OWN STORY. 1879 Mason, Otis. BASKET WORK OF THE ABORIGINES. 1884 Llwd, Rev. Dr. J.P.D. THE MESSAGE OF AN INDIAN RELIC: Seattle's Totem Pole. Mason, O. TRAPS OF THE AMERICAN INDIAN. Meeker, Louis L. OGALALA GAMES. 1901 Collins, Henry B. PREHISTORIC ART OF THE ALASKAN ESKIMO. 1929 Eells, Rev. M. JUSTICE TO THE INDIAN. Willoughby, C. INDIANS OF THE QUINAIELT AGENCY, Washington Territory. 1886 Leon & Holmes. STUDIES ON THE ARCHAEOLOGY OF MICHOACAN MEXICO1886 Beckwith, Paul. NOTES ON CUSTOMS OF THE DAKOTAHS. 1886 Eells, Rev. M. THE STONE AGE. 1886 Allen, Lt. Henry T. ATNATANAS NATIVES OF COPPER RIVER, ALASKA. 1886	1.50 1.50 1.50 1.50 2.00 7.50 1.50 5.00 1.50 2.50 3.00 10.00 2.50 4.00 2.50 2.50 2.50 2.50 2.50 2.50 2.50 2
SJU 8. SJU 9. SJU 10. SJU 10. SJU 120. SJU 22. SJU 23. SJU 26. SJU 26. SJU 27. SJU 27. SJU 27. SJU 10. SJI 11. SJI 12. SJI 13. SJI 14. SJI 12. SJI 11. SJI 12. SJI 13. SJI 14. SJI 15.	Hammell, Wm. PINE NEEDLE BASKETRY. Frey, Clark, Vietch. HOME TANNING. 1936 Browning, Frank. STEAM PLANT ERRORS Burdick, Arthur J. THE PROSPECTOR'S MANUAL. 1905 WCODS DUAL POWER. (1902?) Haward, Charles B. DIRIGIBLE BALLOONS. 1921 Osborn, Henry F. THE ELEPHANTS AND MASTEDONS ARRIVE IN AMERICA. Todd, Mattie Phipps. HAND LOOM WEAVING. 1902 Wilbur, C. Martin. HISTORY OF THE CROSSBOW. 1936 Alexander, A.S. HORSE SECRETS. 1913 Clute, Willard Nelson. THE FERN - COLLECTOR'S GUIDE. 1901 Meeker, E. HOP CULTURE IN THE U.S. 1883 Austin-Walker Sales Co. APACHE BEADWORK - Instructions and Designs Holmstrom, J.G. SCIENTIFIC HORSE, MULE & OX SHOEING. 1902 Fickes, Clyde P. & W. Ellis Groben. BUILDING WITH LOGS. 1945  Krause, F. SLING CONTRIVANCES. 1904 Murdoch, John. A STUDY OF THE ESKIMO BOWS IN THE U.S. NATIONAL MUSEUM. 1884 Mason, Otis T. THROWING STICKS IN THE NATIONAL MUSEUM. 1884 CHIEF JOSEPH'S OWN STORY. 1879 Mason, Otis. BASKET WORK OF THE ABORIGINES. 1884 Llwd, Rev. Dr. J.P.D. THE MESSAGE OF AN INDIAN RELIC: Seattle's Totem Pole. Mason, O. TRAPS OF THE AMERICAN INDIAN. Meeker, Louis L. OGALALA GAMES. 1901 Collins, Henry B. PREHISTORIC ART OF THE ALASKAN ESKIMO. 1929 Eells, Rev. M. JUSTICE TO THE INDIAN. Willoughby, C. Indians Of THE QUINAIELT AGENCY, Washington Territory. 1886 Leon & Holmes. STUDIES ON THE ARCHAEOLOGY OF MICHOACAN MEXICO1886 Eecls, Rev. M. THE STONE AGE. 1886 Eells, Rev. M. THE STONE AGE. 1886	1.50 1.50 1.50 1.50 2.00 7.50 1.50 5.00 1.50 2.50 3.00 10.00 2.50 4.00 2.50 2.50 2.50 2.50 2.50 2.50 2.50 2

SJI	20.	Gibbs, Geo., Dr. Wm. F. Tolmie, & Father G. Mengarini. TRIBES OF	20.00
C 77	21.	WESTERN WASHINGTON AND NORTHWESTERN OREGON.	20.00
301	21.		5 00
CIT	22	WASHINGTON AND NORTHWESTERN OREGON. part of SJI #20.	5.00
201	22.	Gibbs, Geo. A DICTIONARY OF THE NISQUALLY INDIAN LANGUAGE. part of	
~	22	SJI #20.	10.00
501	23.	Boas, Franz. INTRODUCTION TO HANDBOOK OF AMERICAN INDIAN LANGUAGES.	
~~-		Ext. 1911	5.00
	24.	Swanton, John R. THE TLINGIT INDIAN LANGUAGE. From Hndbk of American	
	~	Indian Language.	3.00
	25.	Swanton. THE HAIDA INDIAN LANGUAGE.	5.00
	26.	Boas. THE TSIMSHIAN INDIAN LANGUAGE.	8.00
	27.	Boas. THE KWAKIUTL INDIAN LANGUAGE.	7.50
	28.	Boas. THE CHINOOK INDIAN LANGUAGE.	5.00
	29.	Boas & Swanton. THE SIOUAN, DAKOTA INDIAN LANGUAGE.	6.00
	30.	Talbitzer, Wm. THE ESKIMO LANGUAGE.	6.50
	31.	Division of the state of the st	2.00
SJI	32.	,	
		1941	2.00
	38.	The character of the ch	1.50
	41.		8.50
	43.	Mason, O. ABORIGINAL SKIN DRESSING.	5.00
	46.	Thorne, J. Frederic. IN THE TIME THAT WAS. 1909	2.50
	<b>4</b> 9.	DeSmet, Rev. P.J. NEW INDIAN SKETCHES.	8.50
	51.	Mason, O. MAN'S KNIFE AMONG THE NORTH AMERICAN INDIANS. 1899	2.00
	53.	The second secon	6.00
	55.		10.00
	57.		2.00
	58.	Mason, O. ABORIGINAL AMERICAN HARPOONS. 1902	7.50
	5 <b>9.</b>	Hough, Walter. THE LAMP OF THE ESKIMO. 1898	5.00
SJI	61.	DOLLAR DO	
		1943	7.00
	62.	INDIANS IN WASHINGTON.	3.00
	64.		2.00
	67.		5.00
	68.	Fletcher, Alice C. HOME LIFE AMONG THE INDIANS. 1897	1.50
	70.	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	15.00
	70 <b>A</b>	Teit & Boas. COEUR D'ALENE INDIANS. Ext from B.A.E. #45. 1930	9.00
	70B	Teit & Boas. THE OKANAGAN INDIANS. Ext from B.A.E. #45. 1930	7.50
	70C		7.50
	75.		
	76.	· · · · · · · · · · · · · · · · · · ·	3.00
	77.	***************************************	1.50
SJI	78.	Austin-Walker Sales Co. APACHE BEADWORK - Instructions & Designs.	2.50

### NOTE TO STUDENTS AND COLLECTORS

Many scarce items turn up in antiquarian book stores only once. And while such works are in great demand, the high prices usually commanded by the older, scarcer items put them beyond the reach of the average student and the small collector. To meet this need we are bringing back into print a diversity of Pacific Northwest and Alaskan historical material which we are selling at moderate prices. In their original form these bring prices ranging from \$3.00 to \$100.00; some even higher.

We limit most reproductions from 25 to 100 copies and reprint as the demand warrants. The books have heavy paper covers. They show both original and reprinting dates. Regular library and dealer discounts granted. For detailed descriptions of these titles send for Shorey's Catalog of Publications #3. It also lists future Shorey Publications.

ISBN 08466-01187