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J. W. POWELL, DIRECTOR.

A FURTHER CONTRIBUTION
TO THE
STUDY OF THE MORTUARY CUSTOMS
OF THE
NORTH AMERICAN INDIANS.

BY
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INTRODUCTORY.

In view of the fact that the present paper will doubtless reach many readers who may not, in consequence of the limited edition, have seen the preliminary volume on mortuary customs, it seems expedient to reproduce in great part the prefatory remarks which served as an introduction to that work; for the reasons then urged, for the immediate study of this subject, still exist, and as time flies on become more and more important.

The primitive manners and customs of the North American Indians are rapidly passing away under influences of civilization and other disturbing elements. In view of this fact, it becomes the duty of all interested in preserving a record of these customs to labor assiduously, while there is still time, to collect such data as may be obtainable. This seems the more important now, as within the last ten years an almost universal interest has been awakened in ethnologic research, and the desire for more knowledge in this regard is constantly increasing. A wise and liberal government, recognizing the need, has ably seconded the efforts of those engaged in such studies by liberal grants from the public funds; nor is encouragement wanted from the hundreds of scientific societies throughout the civilized globe. The public press, too—the mouth-piece of the people—is ever on the alert to scatter broadcast such items of ethnologic information as its corps of well-trained reporters can secure. To induce further laudable inquiry, and assist all those who may be willing to engage in the good work, is the object of this further paper on the mortuary customs of North American Indians, and it is hoped that many more laborers may through it be added to the extensive and honorable list of those who have already contributed.

It would appear that the subject chosen should awaken great interest, since the peculiar methods followed by different nations and the great importance attached to burial ceremonies have formed an almost invariable part of all works relating to the different peoples of our globe; in fact, no particular portion of ethnologic research has claimed more attention. In view of these facts, it might seem almost a work of super-

erogation to continue a further examination of the subject, for nearly every author in writing of our Indian tribes makes some mention of burial observances; but these notices are scattered far and wide on the sea of this special literature, and many of the accounts, unless supported by corroborative evidence, may be considered as entirely unreliable. To bring together and harmonize conflicting statements, and arrange collectively what is known of the subject, has been the writer's task, and an enormous mass of information has been acquired, the method of securing which has been already described in the preceding volume and need not be repeated at this time. It has seemed undesirable at present to enter into any discussion regarding the causes which may have led to the adoption of any particular form of burial or coincident ceremonies, the object of this paper being simply to furnish illustrative examples, and request further contributions from observers; for, notwithstanding the large amount of material already at hand, much still remains to be done, and careful study is needed before any attempt at a thorough analysis of mortuary customs can be made. It is owing to these facts and from the nature of the material gathered that the paper must be considered more as a compilation than an original effort, the writer having done little else than supply the thread to bind together the accounts furnished.

It is proper to add that all the material obtained will eventually be embodied in a quarto volume, forming one of the series of Contributions to North American Ethnology prepared under the direction of Maj. J. W. Powell, Director of the Bureau of Ethnology, Smithsonian Institution, from whom, since the inception of the work, most constant encouragement and advice has been received, and to whom all American ethnologists owe a debt of gratitude which can never be repaid.

Having thus called attention to the work, the classification of the subject may be given, and examples furnished of the burial ceremonies among different tribes, calling especial attention to similar or almost analogous customs among the peoples of the Old World.

For our present purpose the following provisional arrangement of burials may be adopted, although further study may lead to some modifications.

CLASSIFICATION OF BURIAL.

1st. By **INHUMATION** in pits, graves, or holes in the ground, stone graves or cists, in mounds, beneath or in cabins, wigwams, houses or lodges, or in caves.

2d. By **EMBALMMENT** or a process of mummifying, the remains being afterwards placed in the earth, caves, mounds, boxes on scaffolds, or in charnel-houses.

3d. By **DEPOSITION** of remains in urns.

4th. By SURFACE BURIAL, the remains being placed in hollow trees or logs, pens, or simply covered with earth, or bark, or rocks forming cairns.

5th. By CREMATION, or partial burning, generally on the surface of the earth, occasionally beneath, the resulting bones or ashes being placed in pits in the ground, in boxes placed on scaffolds or trees, in urns, sometimes scattered.

6th. By AERIAL SEPULTURE, the bodies being left in lodges, houses, cabins, tents, deposited on scaffolds or trees, in boxes or canoes, the two latter receptacles supported on scaffolds or posts, or placed on the ground. Occasionally baskets have been used to contain the remains of children, these being hung to trees.

7th. By AQUATIC BURIAL, beneath the water, or in canoes, which were turned adrift.

These heads might, perhaps, be further subdivided, but the above seem sufficient for all practical needs.

The use of the term *burial* throughout this paper is to be understood in its literal significance, the word being derived from the Teutonic Anglo-Saxon "*birgan*," to conceal or hide away.

In giving descriptions of different burials and attendant ceremonies, it has been deemed expedient to introduce entire accounts as furnished, in order to preserve continuity of narrative, and in no case has the relator's language been changed except to correct manifest unintentional errors of spelling.

INHUMATION.

PIT BURIAL.

The commonest mode of burial among North American Indians has been that of interment in the ground, and this has taken place in a number of different ways; the following will, however, serve as good examples of the process:

One of the simplest forms is thus noted by Schoolcraft:*

The Mohawks of New York made a large round hole in which the body was placed upright or upon its haunches, after which it was covered with timber, to support the earth which they lay over, and thereby kept the body from being pressed. They then raised the earth in a round hill over it. They always dressed the corpse in all its finery, and put wampum and other things into the grave with it; and the relations suffered not grass nor any weed to grow upon the grave, and frequently visited it and made lamentation.

In Jones† is the following interesting account from Lawson‡ of the burial customs of the Indians formerly inhabiting the Carolinas:

Among the Carolina tribes the burial of the dead was accompanied with special ceremonies, the expense and formality attendant upon the funeral according with the rank of the deceased. The corpse was first placed in a cane hurdle and deposited in

* Hist. Ind. Tribes of U. S., 1853, pt. 3, p. 193.

† Antiq. of Southern Indians, 1873, pp. 108-110. ‡ Hist. of Carolina, 1714, p. 181.

an outhouse made for the purpose, where it was suffered to remain for a day and a night, guarded and mourned over by the nearest relatives with disheveled hair. Those who are to officiate at the funeral go into the town, and from the backs of the first young men they meet strip such blankets and matchcoats as they deem suitable for their purpose. In these the dead body is wrapped and then covered with two or three mats made of rushes or cane. The coffin is made of woven reeds or hollow canes tied fast at both ends. When everything is prepared for the interment, the corpse is carried from the house in which it has been lying into the orchard of peach-trees and is there deposited in another hurdle. Seated upon mats are there congregated the family and tribe of the deceased and invited guests. The medicine man, or conjurer, having enjoined silence, then pronounces a funeral oration, during which he recounts the exploits of the deceased, his valor, skill, love of country, property, and influence; alludes to the void caused by his death, and counsels those who remain to supply his place by following in his footsteps; pictures the happiness he will enjoy in the land of spirits to which he has gone, and concludes his address by an allusion to the prominent traditions of his tribe.

Let us here pause to remind the reader that this custom has prevailed throughout the civilized world up to the present day—a custom, in the opinion of many, “more honored in the breach than in the observance.”

At last [says Mr. Lawson], the Corpse is brought away from that Hurdle to the Grave by four young Men, attended by the Relations, the King, old Men, and all the Nation. When they come to the Sepulchre, which is about six foot deep and eight foot long, having at each end (that is, at the Head and Foot) a Light-Wood or Pitch-Pine Fork driven close down the sides of the Grave firmly into the Ground (these two Forks are to contain a Ridge-Pole, as you shall understand presently), before they lay the Corps into the Grave, they cover the bottom two or three time over with the Bark of Trees; then they let down the Corps (with two Belts that the *Indians* carry their Burdens withal) very leisurely upon the said Barks; then they lay over a Pole of the same Wood in the two Forks, and having a great many Pieces of Pitch-Pine Logs about two Foot and a half long, they stick them in the sides of the Grave down each End and near the Top thereof, where the other Ends lie in the Ridge-Pole, so that they are declining like the Roof of a House. These being very thick plac'd, they cover them [many times double] with Bark; then they throw the Earth thereon that came out of the Grave and beat it down very firm. By this Means the dead Body lies in a Vault, nothing touching him.

After a time the body is taken up, the bones cleaned, and deposited in an ossuary called the Quiogozon.

Figure 1, after De Bry and Lafitau, represents what the early writers called the Quiogozon, or charnel-house, and allusions will be found to it in other parts of this volume. Discrepancies in these accounts impair greatly their value, for one author says that bones were deposited, another dried bodies.

It will be seen from the following account, furnished by M. B. Kent, relating to the Sacs and Foxes (*Oh-sah-ke-uck*) of the Nehema Agency, Nebraska, that these Indians were careful in burying their dead to prevent the earth coming in contact with the body, and this custom has been followed by a number of different tribes, as will be seen by examples given further on.

Ancient burial.—The body was buried in a grave made about 2½ feet deep, and was laid always with the head towards the east, the burial taking place as soon after death as possible. The grave was prepared by putting bark in the bottom of it before the corpse

was deposited, a plank covering made and secured some distance above the body. The plank was made by splitting trees, until intercourse with the whites enabled them to obtain sawed lumber. The corpse was always enveloped in a blanket, and prepared as for a long journey in life, no coffin being used.

Modern burial.—This tribe now usually bury in coffins, rude ones constructed by themselves, still depositing the body in the grave with the head towards the east.

Ancient funeral ceremonies.—Every relative of the deceased had to throw some article in the grave, either food, clothing, or other material. There was no rule stating the nature of what was to be added to the collection, simply a requirement that something must be deposited, if it were only a piece of soiled and faded calico. After the corpse was lowered into the grave some brave addressed the dead, instructing him to walk directly westward, that he would soon discover moccasin tracks, which he must follow until he came to a great river, which is the river of death; when there he would find a pole across the river, which, if he has been honest, upright, and good, will be straight, upon which he could readily cross to the other side; but if his life had been one of wickedness and sin, the pole would be very crooked, and in the attempt to cross upon it he would be precipitated into the turbulent stream and lost forever. The brave also told him if he crossed the river in safety the Great Father would receive him, take out his old brains, give him new ones, and then he would have reached the happy hunting grounds, always be happy and have eternal life. After burial a feast was always called, and a portion of the food of which each and every relative was partaking was burned to furnish subsistence to the spirit upon its journey.

Modern funeral ceremonies.—Provisions are rarely put into the grave, and no portion of what is prepared for the feast subsequent to burial is burned, although the feast is continued. All the address delivered by the brave over the corpse after being deposited in the grave is omitted. A prominent feature of all ceremonies, either funeral or religious, consists of feasting accompanied with music and dancing.

Ancient mourning observances.—The female relations allowed their hair to hang entirely unrestrained, clothed themselves in the most unrepresentable attire, the latter of which the males also do. Men blacked the whole face for a period of ten days after a death in the family, while the women blacked only the cheeks; the faces of the children were blacked for three months; they were also required to fast for the same length of time, the fasting to consist of eating but one meal per day, to be made entirely of hominy, and partaken of about sunset. It was believed that this fasting would enable the child to dream of coming events and prophesy what was to happen in the future. The extent and correctness of prophetic vision depended upon how faithfully the ordeal of fasting had been observed.

Modern mourning observances.—Many of these of the past are continued, such as wearing the hair unrestrained, wearing uncouth apparel, blacking faces, and fasting of children, and they are adhered to with as much tenacity as many of the professing Christians belonging to the evangelical churches adhere to their practices, which constitute mere forms, the intrinsic value of which can very reasonably be called in question.

The Creeks and Seminoles of Florida, according to Schoolcraft,* made the graves of their dead as follows:

When one of the family dies, the relatives bury the corpse about four feet deep in a round hole dug directly under the cabin or rock wherever he died. The corpse is placed in the hole in a sitting posture, with a blanket wrapped about it, and the legs bent under and tied together. If a warrior, he is painted, and his pipe, ornaments, and warlike appendages are deposited with him. The grave is then covered with canes tied to a hoop round the top of the hole, then a firm layer of clay, sufficient to support the weight of a man. The relations howl loudly and mourn publicly for four days. If the deceased has been a man of eminent character, the family immediately remove

* Hist. Ind. Tribes of U. S., 1855, pt. 5, p. 270.

diately remove from the house in which he is buried and erect a new one, with a belief that where the bones of their dead are deposited the place is always attended by goblins and chimeras dire.

Dr. W. C. Boteler, physician to the Otoe Indian Agency, Gage County, Nebraska, in a personal communication to the writer, furnishes a most interesting account of the burial ceremonies of this tribe, in which it may be seen that graves are prepared in a manner similar to those already mentioned:

The Otoe and Missouri tribes of Indians are now located in southern Gage County, Nebraska, on a reservation of 43,000 acres, unsurpassed in beauty of location, natural resources, and adaptability for prosperous agriculture. This pastoral people, though in the midst of civilization, have departed but little from the rude practice and customs of a nomadic life, and here may be seen and studied those interesting dramas as vividly and satisfactorily as upon the remote frontier.

During my residence among this people on different occasions, I have had the opportunity of witnessing the Indian burials and many quaint ceremonies pertaining thereto.

When it is found that the vital spark is wavering in an Otoe subject, the preparation of the burial costume is immediately begun. The near relatives of the dying Indian surround the humble bedside, and by loud lamentations and much weeping manifest a grief which is truly commensurate with the intensity of Indian devotion and attachment.

While thus expressing before the near departed their grief at the sad separation impending, the Indian women, or friendly braves, lose no time in equipping him or her with the most ornate clothes and ornaments that are available or in immediate possession. It is thus that the departed Otoe is enrobed in death, in articles of his own selection and by arrangements of his own taste and dictated by his own tongue. It is customary for the dying Indian to dictate, ere his departure, the propriety or impropriety of the accustomed sacrifices. In some cases there is a double and in others no sacrifice at all. The Indian women then prepare to cut away their hair; it is accomplished with scissors, cutting close to the scalp at the side and behind.

The preparation of the dead for burial is conducted with great solemnity and care. Bead-work the most ornate, expensive blankets and ribbons comprise the funeral shroud. The dead, being thus enrobed, is placed in a recumbent posture at the most conspicuous part of the lodge and viewed in rotation by the mourning relatives previously summoned by a courier, all preserving uniformity in the piercing screams which would seem to have been learned by rote.

An apparent service is then conducted. The aged men of the tribe, arranged in a circle, chant a peculiar funeral dirge around one of their number, keeping time upon a drum or some rude cooking-utensil.

At irregular intervals an aged relative will arise and dance excitedly around the central person, vociferating, and with wild gesture, tomahawk in hand, imprecate the evil spirit, which he drives to the land where the sun goes down. The evil spirit being thus effectually banished, the mourning gradually subsides, blending into succeeding scenes of feasting and refreshment. The burial feast is in every respect equal in richness to its accompanying ceremonies. All who assemble are supplied with cooked venison, hog, buffalo, or beef, regular waiters distributing alike hot cakes soaked in grease and coffee or water, as the case may be.

Frequently during this stage of the ceremony the most aged Indian present will sit in the central circle, and in a continuous and doleful tone narrate the acts of valor in the life of the departed, enjoining fortitude and bravery upon all sitting around as an essential qualification for admittance to the land where the Great Spirit reigns. When the burial feast is well-nigh completed, it is customary for the surviving friends to

present the bereaved family with useful articles of domestic needs, such as calico in bolt, flannel cloth, robes, and not unfrequently ponies or horses. After the conclusion of the ceremonies at the lodge, the body is carefully placed in a wagon and, with an escort of all friends, relatives, and acquaintances, conveyed to the grave previously prepared by some near relation or friend. When a wagon is used, the immediate relatives occupy it with the corpse, which is propped in a semi-sitting posture; before the use of wagons among the Otoes, it was necessary to bind the body of the deceased upon a horse and then convey him to his last resting place among his friends. In past days when buffalo were more available, and a tribal hunt was more frequently indulged in, it is said that those dying on the way were bound upon horses and thus frequently carried several hundred miles for interment at the burial places of their friends.

At the graveyard of the Indians the ceremony partakes of a double nature; upon the one hand it is sanguinary and cruel, and upon the other blended with the deepest grief and most heartfelt sorrow. Before the interment of the dead the chattels of the deceased are unloaded from the wagons or unpacked from the backs of ponies and carefully arranged in the vault-like tomb. The bottom, which is wider than the top (graves here being dug like an inverted funnel), is spread with straw or grass matting, woven generally by the Indian women of the tribe or some near neighbor. The sides are then carefully hung with handsome shawls or blankets, and trunks, with domestic articles, pottery, &c., of less importance, are piled around in abundance. The sacrifices are next inaugurated. A pony, first designated by the dying Indian, is led aside and strangled by men hanging to either end of a rope. Sometimes, but not always, a dog is likewise strangled, the heads of both animals being subsequently laid upon the Indian's grave. The body, which is now often placed in a plain coffin, is lowered into the grave, and if a coffin is used the friends take their parting look at the deceased before closing it at the grave. After lowering, a saddle and bridle, blankets, dishes, &c., are placed upon it, the mourning ceases, and the Indians prepare to close the grave. It should be remembered, among the Otoe and Missouri Indians dirt is not filled in upon the body, but simply rounded up from the surface upon stout logs that are accurately fitted over the opening of the grave. After the burying is completed, a distribution of the property of the deceased takes place, the near relatives receiving everything, from the merest trifle to the tent and horses, leaving the immediate family, wife and children or father out-door pensioners.

Although the same generosity is not observed towards the whites assisting in funeral rites, it is universally practiced as regards Indians, and poverty's lot is borne by the survivors with a fortitude and resignation which in them amounts to duty, and marks a higher grade of intrinsic worth than pervades whites of like advantages and conditions. We are told in the Old Testament Scriptures, "four days and four nights should the fires burn," &c. In fulfillment of this sacred injunction, we find the midnight vigil carefully kept by these Indians four days and four nights at the graves of their departed. A small fire is kindled for the purpose near the grave at sunset, where the nearest relatives convene and maintain a continuous lamentation till the morning dawn. There was an ancient tradition that at the expiration of this time the Indian arose, and mounting his spirit pony, galloped off to the happy hunting-ground beyond.

Happily, with the advancement of Christianity these superstitions have faded, and the living sacrifices are partially continued only from a belief that by parting with their most cherished and valuable goods they propitiate the Great Spirit for the sins committed during the life of the deceased. This, though at first revolting, we find was the practice of our own forefathers, offering up as burnt offerings the lamb or the ox; hence we cannot censure this people, but, from a comparison of conditions, credit them with a more strict observance of our Holy Book than pride and seductive fashions permit of us.

GRAVE BURIAL.

The following interesting account of burial among the Pueblo Indians of San Geronimo de Taos, New Mexico, furnished by Judge Anthony Joseph, will show in a manner how civilized customs have become engrafted upon those of a more barbaric nature. It should be remembered that the Pueblo people are next to the Cherokees, Choctaws, and others in the Indian Territory, the most civilized of our tribes.

According to Judge Joseph, these people call themselves *Wee-ka-nahs*.

These are commonly known to the whites as *Piros*. The manner of burial by these Indians, both ancient and modern, as far as I can ascertain from information obtained from the most intelligent of the tribe, is that the body of the dead is and has been always buried in the ground in a horizontal position with the flat bottom of the grave. The grave is generally dug out of the ground in the usual and ordinary manner, being about 6 feet deep, 7 feet long, and about 2 feet wide. It is generally finished after receiving its occupant by being leveled with the hard ground around it, never leaving, as is customary with the whites, a mound to mark the spot. This tribe of Pueblo Indians never cremated their dead, as they do not know, even by tradition, that it was ever done or attempted. There are no utensils or implements placed in the grave, but there are a great many Indian ornaments, such as beads of all colors, sea-shells, hawk-bells, round looking-glasses, and a profusion of ribbons of all imaginable colors; then they paint the body with red vermilion and white chalk, giving it a most fantastic as well as ludicrous appearance. They also place a variety of food in the grave as a wise provision for its long journey to the happy hunting-ground beyond the clouds.

The funeral ceremonies of this tribe are very peculiar. First, after death, the body is laid out on a fancy buffalo robe spread out on the ground, then they dress the body in the best possible manner in their style of dress; if a male, they put on his beaded leggings and embroidered *saco*, and his fancy dancing-moccasins, and his large brass or shell ear-rings; if a female, they put on her best manta or dress, tied around the waist with a silk sash, put on her feet her fancy dancing-moccasins; her *rosario* around her neck, her brass or shell ear-rings in her ears, and with her tressed black hair tied up with red tape or ribbon, this completes her wardrobe for her long and happy chase. When they get through dressing the body, they place about a dozen lighted candles around it, and keep them burning continually until the body is buried. As soon as the candles are lighted, the *veloris*, or wake, commences; the body lies in state for about twenty-four hours, and in that time all the friends, relatives, and neighbors of the deceased or "*difuntti*" visit the wake, chant, sing, and pray for the soul of the same, and tell one another of the good deeds and traits of valor and courage manifested by the deceased during his earthly career, and at intervals in their praying, singing, &c., some near relative of the deceased will step up to the corpse and every person in the room commences to cry bitterly and express aloud words of endearment to the deceased and of condolence to the family of the same in their untimely bereavement.

At about midnight supper is announced, and every person in attendance marches out into another room and partakes of a frugal Indian meal, generally composed of wild game; Chile Colorado or red-pepper tortillas, and guayaves, with a good supply of mush and milk, which completes the festive board of the *veloris* or wake. When the deceased is in good circumstances, the crowd in attendance is treated every little while during the wake to alcoholic refreshments. This feast and feasting is kept up until the Catholic priest arrives to perform the funeral rites.

When the priest arrives, the corpse is done up or rather baled up in a large and well-tanned buffalo robe, and tied around tight with a rope or lasso made for the purpose; then six or eight men act as pall-bearers, conducting the body to the place of burial, which is in front of their church or chapel. The priest conducts the funeral ceremonies in the ordinary and usual way of mortuary proceedings observed by the Catholic church all over the world. While the grave-diggers are filling up the grave, the friends, relatives, neighbors, and, in fact, all persons that attend the funeral, give vent to their sad feelings by making the whole pueblo howl; after the tremendous uproar subsides, they disband and leave the body to rest until Gabriel blows his trumpet. When the ceremonies are performed with all the pomp of the Catholic church, the priest receives a fair compensation for his services; otherwise he officiates for the yearly rents that all the Indians of the pueblo pay him, which amount in the sum total to about \$2,000 per annum.

These Pueblo Indians are very strict in their mourning observance, which last for one year after the demise of the deceased. While in mourning for the dead, the mourners do not participate in the national festivities of the tribe, which are occasions of state with them, but they retire into a state of sublime quietude which makes more civilized people sad to observe; but when the term of mourning ceases, at the end of the year, they have high mass said for the benefit of the soul of the departed; after this they again appear upon the arena of their wild sports and continue to be gay and happy until the next mortal is called from this terrestrial sphere to the happy hunting-ground, which is their pictured celestial paradise. The above cited facts, which are the most interesting points connected with the burial customs of the Indians of the pueblo San Geronimo de Taos, are not in the least exaggerated, but are the absolute facts, which I have witnessed myself in many instances for a period of more than twenty years that I have resided but a short distance from said pueblo, and, being a close observer of their peculiar burial customs, am able to give you this true and undisguised information relative to your circular on "burial customs."

Another example of the care which is taken to prevent the earth coming in contact with the corpse may be found in the account of the burial of the Wichita Indians of Indian Territory, furnished by Dr. Fordyce Grinnell, whose name has already been mentioned in connection with the Comanche customs. The Wichitas call themselves *Kitty-ka-tats*, or those of the tattooed eyelids.

When a Wichita dies the town-crier goes up and down through the village and announces the fact. Preparations are immediately made for the burial, and the body is taken without delay to the grave prepared for its reception. If the grave is some distance from the village, the body is carried thither on the back of a pony, being first wrapped in blankets and then laid prone across the saddle, one person walking on either side to support it. The grave is dug from three to four feet deep and of sufficient length for the extended body. First blankets and buffalo-ropes are laid in the bottom of the grave, then the body, being taken from the horse and unwrapped, is dressed in its best apparel and with ornaments is placed upon a couch of blankets and robes, with the head towards the west and the feet to the east; the valuables belonging to the deceased are placed with the body in the grave. With the man are deposited his bows and arrows or gun, and with the woman her cooking utensils and other implements of her toil. Over the body sticks are placed six or eight inches deep and grass over these, so that when the earth is filled in, it need not come in contact with the body or its trappings. After the grave is filled with earth, a pen of poles is built around it, or, as is frequently the case, stakes are driven so that they cross each other from either side about midway over the grave, thus forming a complete protection from the invasion of wild animals. After all this is done, the grass of other debris is carefully scraped from about the grave for several feet, so that the ground is left smooth and clean. It is seldom the case that the relatives accompany

Here bring the last gifts; loud and shrill
 Wail death-dirge of the brave!
 What pleased him most in life may still
 Give pleasure in the grave.
 We lay the axe beneath his head
 He swung when strength was strong,
 The bear on which his hunger fed—
 The way from earth is long!
 And here, new-sharpened, place the knife
 Which severed from the clay,
 From which the axe had spoiled the life,
 The conquered scalp away.
 The paints that deck the dead bestow,
 Aye, place them in his hand,
 That red the kingly shade may glow
 Amid the spirit land.

The position in which the body is placed, as mentioned by Dr. McChesney, face upwards, while of common occurrence among most tribes of Indians, is not invariable as a rule, for the writer discovered at a cemetery belonging to an ancient pueblo in the valley of the Chama, near Abiquiu, N. Mex., a number of bodies, all of which had been buried face downward. The account originally appeared in *Field and Forest*, 1877, vol. iii, No. 1, p. 9.

On each side of the town were noticed two small arroyas or water-washed ditches, within 30 feet of the walls, and a careful examination of these revealed the objects of our search. At the bottom of the arroyas, which have certainly formed subsequent to the occupation of the village, we found portions of human remains, and following up the walls of the ditch soon had the pleasure of discovering several skeletons *in situ*. The first found was in the eastern arroya, and the grave in depth was nearly 8 feet below the surface of the mesa. The body had been placed in the grave face downward, the head pointing to the south. Two feet above the skeleton were two shining black earthen vases, containing small bits of charcoal, the bones of mammals, birds, and partially consumed corn, and above these "*ollas*" the earth to the surface was filled with pieces of charcoal. Doubtless the remains found in the vases served at a funeral feast prior to the inhumation. We examined very carefully this grave, hoping to find some utensils, ornaments, or weapons, but none rewarded our search. In all of the graves examined the bodies were found in similar positions and under similar circumstances in both arroyas, several of the skeletons being those of children. * * * No information could be obtained as to the probable age of these interments, the present Indians considering them as dating from the time when their ancestors with Motezuma came from the north.

The Coyotero Apaches, according to Dr. W. J. Hoffman,* in disposing of their dead, seem to be actuated by the desire to spare themselves any needless trouble, and prepare the defunct and the grave in this manner:

The Coyoteros, upon the death of a member of the tribe, partially wrap up the corpse and deposit it into the cavity left by the removal of a small rock or the stump of a tree. After the body has been crammed into the smallest possible space the rock or stump is again rolled into its former position, when a number of stones are placed around the base to keep out the coyotes. The nearest of kin usually mourn for the period of one month, during that time giving utterance at intervals to the most dismal lamentations, which are apparently sincere. During the day this obligation is

*U. S. Geol. Surv. of Terr. 1876, p. 473.

frequently neglected or forgotten, but when the mourner is reminded of his duty he renews his howling with evident interest. This custom of mourning for the period of thirty days corresponds to that formerly observed by the Natchez.

Somewhat similar to this rude mode of sepulture is that described in the life of Moses Van Campen*, which relates to the Indians formerly inhabiting Pennsylvania:

Directly after, the Indians proceeded to bury those who had fallen in battle, which they did by rolling an old log from its place and laying the body in the hollow thus made, and then heaping upon it a little earth.

As a somewhat curious, if not exceptional, interment, the following account, relating to the Indians of New York, is furnished, by Mr. Franklin B. Hough, who has extracted it from an unpublished journal of the agents of a French company kept in 1794:

CANOE BURIAL IN GROUND.

Saw Indian graves on the plateau of Independence Rock. The Indians plant a stake on the right side of the head of the deceased and bury them in a bark canoe. Their children come every year to bring provisions to the place where their fathers are buried. One of the graves had fallen in, and we observed in the soil some sticks for stretching skins, the remains of a canoe, &c., and the two straps for carrying it, and near the place where the head lay were the traces of a fire which they had kindled for the soul of the deceased to come and warm itself by and to partake of the food deposited near it.

These were probably the Massasauga Indians, then inhabiting the north shore of Lake Ontario, but who were rather intruders here, the country being claimed by the Oneidas.

It is not to be denied that the use of canoes for coffins has occasionally been remarked, for the writer in 1875 removed from the graves at Santa Barbara, California, an entire skeleton which was discovered in a redwood canoe, but it is thought that the individual may have been a noted fisherman, particularly as the implements of his vocation—nets, fish-spears, &c.—were near him, and this burial was only an exemplification of the well-rooted belief common to all Indians, that the spirit in the next world makes use of the same articles as were employed in this one. It should be added that of the many hundreds of skeletons uncovered at Santa Barbara the one mentioned presented the only example of the kind.

Among the Indians of the Mosquito coast, in Central America, canoe burial in the ground, according to Bancroft, was common, and is thus described:

The corpse is wrapped in cloth and placed in one-half of a pitpan which has been cut in two. Friends assemble for the funeral and drown their grief in *mushla*, the women giving vent to their sorrow by dashing themselves on the ground until covered with blood, and inflicting other tortures, occasionally even committing suicide. As it is supposed that the evil spirit seeks to obtain possession of the body, musicians are called in to lull it to sleep while preparations are made for its removal. All at once four naked men, who have disguised themselves with paint so as not to be recognized and punished by *Wulasha*, rush out from a neighboring hut, and, seizing a rope at-

* Life and adventures of Moses Van Campen, 1841, p. 252.

and so covered them that the arrangement of rooms could scarcely be traced at all.

The modern village of Ojo Caliente was also surveyed and diagrams and photographs made.

Towards the end of September camp was moved to the vicinity of Zuñi. Here four other villages of the Cibola group and the old villages on the mesa of Ta-ai-ya-lo-ne were examined. Camp was then moved to Nutria, a farming pueblo of Zuñi. From this camp Nutria was surveyed and photographed, and also the village of Pescado, which is occupied only during the farming season. Both of these modern farming pueblos appear to be built on the ruins of more ancient villages, the remains of which were especially noticeable in the case of Pescado, where the very carefully executed masonry, characteristic of the ancient methods of construction, could be seen outcropping at many points.

WORK OF MR. E. W. NELSON.

Following the return of the main party to Washington, some preliminary exploration was carried on by Mr. E. W. Nelson, who made an examination of the headwaters of the South Fork of Salt River, but did not find any ruins. Thence the Blue Ridge was crossed, and the valley of the Blue Fork of the San Francisco River visited. Here ruins were frequently increasing in number toward the south. Farther south three sets of cliff ruins were also located.

GENERAL FIELD STUDIES.

WORK OF DR. H. C. YARROW.

During the summer and fall of 1885, Dr. H. C. Yarrow, acting assistant surgeon U. S. Army, examined points in Arizona and Utah. In the vicinity of Springerville, Apache County, Arizona, in company with Mr. E. W. Nelson, he visited a number of ancient pueblos and discovered that the people formerly occupying the towns had followed the custom of burying their dead immediately outside the walls of their habitations, marking the places of sepulcher with circles of stones.

Powell, J. W. WORK OF DR. H. C. YARROW. BAE 7th ANNUAL
Report 1885-1886; xxviii - xxx

The graves were four or five feet in depth, and various household utensils had been deposited with the dead. Mr. Nelson, who had made a careful search for these cemeteries, informed him of the locality of hundreds. Unfortunately for anthropometric science, most of the bones are too much decayed to be of practical value. The places of burial selected at these pueblos are similar to the burial places discovered in 1874 near the large ruined pueblo of Abiquiu, in the valley of the Chama, New Mexico.

Dr. Yarrow also visited the Moki pueblos in Arizona, and obtained from one of the principal men a clear and succinct account of their burial customs. While there he witnessed the famous snake dance, which occurs every two years, and is supposed to have the effect of producing rain. From his knowledge of the reptilian fauna of the country he was able to identify the species of serpents used in the dance, and from personal examination satisfied himself that the fangs had not been extracted from the poisonous varieties. He thinks, however, that the reptiles are somewhat tamed by handling during the four days that they are kept in the estufas and possibly are made to eject the greater part of the venom contained in the sacs at the roots of the teeth, by being teased and forced to strike at different objects held near them. He does not think that a vegetable decoction in which they are washed has a stupefying effect, as has been supposed by some. He also obtained from a Moki high priest a full account of the ceremonies attending the dance. Through the assistance of Mr. Thomas V. Kean, of Kean Canyon, Arizona, and Mr. A. M. Stephen, he was able to procure from a noted Navajo-wise man an exact account of the burial customs of his people, as well as valuable information regarding their medical practices, especially such as relate to obstetrics.

From Arizona Dr. Yarrow proceeded to Utah, and made an examination of an old rock cemetery near Farmington, finding it similar to the one he discovered in 1872 near the town of Fillmore. The bodies had been carried far up the side of the mountain; cavities had been prepared in a rock slide, and the bodies placed therein. Branches of cottonwood were then laid

over and large boulders piled on top. In several of these graves the skeletons were in a fair state of preservation, and were removed, as well as the articles found with them.

Through the kindness of Mr. William Young, of Grantsville, a skeleton of a Gosiute, in excellent preservation, was obtained, and has been presented to the Army Medical Museum. It may be stated that the examination of the rock cemetery at Farmington showed that the inhabitants of the eastern slope of the Wahsatch Range, in Great Salt Lake Valley, followed the mode of rock sepulture from this, the most northern point visited, to below Parowan, a distance of at least two hundred miles southward, and it seems that these people occupied the valley long subsequent to those living near the water courses who constructed the small mounds on top of which were the rude adobe dwellings, and in some instances used these huts for burial purposes.

WORK OF MR. J. C. PILLING.

In the spring of 1886 Mr. James C. Pilling made a trip to Europe in the interest of his work on the Bibliography of the Languages of the North American Indians, and spent many days in the library of the British Museum, the Bibliothèque Nationale at Paris, and several extensive private libraries in England and France. The results of this trip are highly satisfactory and valuable.

WORK OF MR. JEREMIAH CURTIN.

Mr. Jeremiah Curtin continued to collect vocabularies and myths in California. The whole number of myths obtained in California and Oregon was over three hundred. The number of vocabularies was eight, being the Yana, Atsugëi (Hat Creek), Wasco, Miléblama (Warm Springs), Pai Ute, Shasta, Maidu, and Wintu. Texts were also obtained in Yana, Wasco, Warm Spring, and Shasta.

OFFICE WORK.

Prof. CYRUS THOMAS was engaged during the year, except the few weeks he was in the field, in the preparation of his general report and in correspondence relating to the archeology