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The Mrs. Morris K. Jesup Expedition

*The Arapaho*

By ALFRED L. KROEBER

IV. RELIGION

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## THE ARAPAHO.

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### IV. — RELIGION.

PLATES LVII-LXXXVIII.

#### INTRODUCTION.

Part IV, "Religion," completes that portion of "The Arapaho" which deals with the Arapaho proper. Like the preceding parts, it is issued as the result of investigations made through the generosity of Mrs. Morris K. Jesup. It includes all the information obtained on this phase of Arapaho life, with two exceptions. The first of these is the ceremonial organization, which has been described in the preceding section. The sun-dance, which by the Arapaho themselves is included in the enumeration of their tribal ceremonies, but which is fundamentally different, is treated in the present part. This ceremony has been recently described with great thoroughness as it is practised by the southern Arapaho.<sup>1</sup> The present much briefer account applies to the northern Arapaho. The second exception is the myths and traditions. These have been published conjointly with a more extensive collection subsequently made along the same lines in the same tribe by Dr. G. A. Dorsey.<sup>2</sup> The present section of "The Arapaho," besides treating of the sun-dance, includes information on religious customs of a tribal nature, modern ceremonies and the objects used in them, and personal supernatural powers.

#### THE SUN-DANCE.

The following brief account of the sun-dance of 1900 among the Wyoming Arapaho is a record of casual observations during a week spent in the camp and given over primarily to other purposes. It is about what any one in the camp would witness, both within the camp-circle and in the dancing-lodge,

<sup>1</sup> G. A. Dorsey, *The Arapaho Sun-Dance* (Field Columbian Museum Publications, Anthropological Series, Vol. IV).

<sup>2</sup> G. A. Dorsey and A. L. Kroeber, *Traditions of the Arapaho*, *ibid.*, Vol. V.



without entering the ceremony, or being directly connected with it.<sup>1</sup>

*Opening Day.* — By noon of June 14, the tribe had gathered and the camp-circle was practically complete, although a few tents were put up subsequently. About the middle of the day, the old men—including the head priest, the keeper of the sacred pipe—were gathered under a shelter in the middle of the camp-circle. The men of proper age to be members of the second of the tribal series of dances, the *biitaha<sup>n</sup>wu*, charged on the camp from behind a hill to the west, shooting and crying. All were mounted. They carried rude shields of willow brush, and lances made of willow poles on the ends of which the leaves had been left. Many had guns, and some flags. Some had leggings of bagging or of green calico around their horses' front legs. This was to indicate unmounted men. West of the camp they stopped and stood for a while. Then they rode entirely around the outside of the camp-circle anti-sunwise. Then, passing inside through a gap at the western end, they rode around the interior of the camp-circle in the opposite direction, two, three, four, and sometimes five abreast. Behind them rode two men who were either the head men of this company or more probably their ceremonial elder brothers. After completing the inner circuit, these two men joined the old men under the shelter in the centre of the camp-circle, while the company of mounted men went to their place, just opposite the west end of the camp-circle, and there drew up abreast in three lines with a few stragglers. After a few minutes they dispersed. Some of the horses were painted with mud on the forehead and from the hind quarters down to the hoofs.

The same night, about ten o'clock, the people gathered for what was called the "stirring-up singing," for practice, as it were, evidently of sun-dance songs. The singing took place in a tent, no doubt the rabbit-tent or the tent of preparation

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<sup>1</sup> The sun-dance is called by the Arapaho "*haseiha<sup>n</sup>wu*," which is translated sacrifice-lodge or offering-lodge. The individual directly responsible for the performance of each ceremony is called "*yanahut*,"—as in the age-society ceremonies,—which has been rendered here by "pledger," the equivalent of Dorsey's "lodge-maker." See p. 152.



for the ceremony; but no note of this was made by the writer. The singing here continued until four next morning. Then the biitaha<sup>wu</sup> company again rode around the camp-circle, three or four abreast, with much shooting and yelling, as on the previous day. They carried no willow shields, except in a few instances, where they were obviously left over from the preceding day. The course now was somewhat different. Starting from the interior of the camp-circle at its eastern end, they rode out, and then three-quarters of the way around it, from left to right. Turning north of the camp-circle, they retraced their course in the opposite direction, and entered the camp-circle again at the east, riding to the middle, where they disbanded.

The slight shelter in the middle of the camp-circle appears to have been in the place later occupied by the sun-dance lodge. It was erected before noon of June 14, the first day of the ceremony. On the evening of this day, the rabbit-tent appears to have been set up. It stood during the next three days (June 15, 16, 17) about halfway west of the centre of the camp-circle, between it and the circle of tents. West of the rabbit-tent — almost in the line of tents, but a little nearer the inside of the camp-circle than the others — was the painted tent of the keeper of the sacred pipe.

The tent for the keeper of the sacred pipe is shown in Plate LVII. It is at present made of canvas, and the painting is as follows: The lower edge of the tent for two or three feet up is blue. There are eight different sections of this, each having five horizontal rows of yellow suns, represented by solid circles. Each row contains seven of these circles, except in one section, where there are eight in a row. The parts of the tent surface which separate these sections of circles are painted each with seven vertical zigzag red lines forked at the top, apparently representing lightning. Above this lower band of sun and lightning symbols, the body of the surface of the tent is occupied by horizontal stripes, alternately orange-red and green. There are fourteen of the red stripes, and thirteen of the green. The very uppermost portion of the tent is again blue, with five horizontal rows of yellow circles.



In front, the strip where the tent is pinned together is painted red. At the lower end, at the top of the door, this red band expands into a circle. Down the middle of the back of the tent, from the top as far down as the lowest of the red horizontal stripes, is a green line. At the very top this is crossed with a horizontal green bar; near the lower end, where it intersects the next to the lowest red stripe, two green horns branch out, forming a horizontal crescent.

This tent is discussed later in connection with the tribal pipe.

*First Preliminary Day.*—About eleven in the morning of June 15, four good warriors went out as scouts or "wolves" to find suitable trees for the dancing-lodge. An hour or two later the young men gathered on horseback again, and rode around the camp-circle, as they had on the previous day. It was said that this ride represented a ride customary before a war-party started out. After they had made two circuits, the company gathered near the shelter in the centre of the camp-circle. After a time they sent out scouts. These met the four "wolves" who had been sent out earlier in the day. These four men cried "Wuuuu!" imitating wolves; thus announcing that they had seen the enemy. Thereupon the entire company of young men rode out of the camp and then charged on it. After this they drew up, still mounted, west of the shelter in the centre. The four scouts came riding slowly one behind the other. Women were singing, and drums beating. The women stood in two rows; one in front of the shelter, looking west, and the other in front of the rabbit-tent, looking east. In front of the row of women at the shelter stood the drummers. The mounted young men were in three rows, south or southwest of the shelter. They also faced about west. The four scouts came from the direction in which the selected trees were, to the west of the camp-circle, or, more exactly, somewhat northwest. The young men now wheeled three times in a body around the shelter in which the old men were. Then the scouts, one after another, advanced and told war-stories. Thereupon the gathering broke up.

Soon after this, three elderly men went off in a southerly



direction to hunt buffalo. One or two of them carried bows and quivers. At some distance out on the prairie a buffalo-skin had been laid. They shot this and then loaded it on the horse of one of them. In the old days, of course, a live buffalo was shot. As they returned, a drum was beaten in the rabbit-tent. They came quite slowly, walking their horses. Stopping in front of the rabbit-tent, they counted their coups one after the other. The keeper of the sacred pipe came out of the rabbit-tent, and going to its rear, where a small cedar-tree leaned against it, took some buffalo-chips. One of the three hunters took the buffalo-skin from the horse. Two of them took hold of it, and, after moving it four times, stretched it out by a little pile of dirt (Plate LVIII). The keeper of the sacred pipe took a little of the earth, and at the head of the skin made a pile of it. A glowing coal was brought out from the rabbit-tent on a forked stick and put on this heap of earth. Then incense was put on it. The women of the camp now brought all the small children to touch the buffalo-skin four times. After this the men went up to touch it. Finally two of the hunters took the skin again, and, after moving it four times, raised it up and walked to the rabbit-tent, taking about five minutes to cover the short distance. Taking four slow steps, they stopped while a song, accompanied by rattling, was sung in the tent. When the singing ended, they were near the door, and took the skin inside. Then a man and a woman inside, evidently the pledger of the dance and his wife, said "Hoiiii!" several times in thanks.

During the day, "medicine was boiled" in the rabbit-tent, the medicine being sung over with drumming.

*Second Preliminary Day.*—On the morning of June 16, about sunrise, all the children, it was said, were brought to touch a piece of calico which had been "given away" or sacrificed (*haseiyaa*<sup>n</sup>) to the supernatural beings (*tcâyatawunenita*<sup>n</sup>, untrue person), and was now being held out toward the east. The man who "gave away" this cloth sacrificed it on account of his wife who had been sick. After the children had all touched it, it was hung up over the door of the largest tent in the camp, which was at the southeast of the camp-circle.

It is not certain whether or not this man was the pledger of the dance. The man "gave away" considerable property, and furnished food. Other people also contributed. The gifts were made to old men. On this morning about forty women brought food to the tent.

Later in the day a sweat-house was put up. In the morning the willows for this sweat-house were lying back of the tent in which the gathering took place. Some of the willow poles for the framework were put in place by four women together holding a stick. One woman went about the framework before it was covered with blankets, and passed her hands down along each of the poles toward the ground. On a little mound of earth east of the entrance lay a buffalo-skull.

This skull faced the east, and was painted red and black. Between the horns it was black. The left or southern horn was painted black; the right or northern, red. Down the median line of the skull ran a black and a red line, the black on the south, the red on the north. There were also four short black lines extending toward the nose from the black area between the horns. The nasal and orbital cavities were stuffed with vegetation, perhaps sage. This appears to have been the skull later used at the "altar" in the main lodge.

All the morning and afternoon of this day, singing went on in the large tent, where at intervals the people "gave away" their property. The singing was accompanied by rattling. The songs were all begun by an old man in a loud voice and at a high pitch. After a few notes, other men joined in the singing, and, towards the end of each song, one woman or more. The song gradually fell in both pitch and volume until it died away. Thereupon the leader in the singing began again. The pledger of the dance and his wife were said not to be in this tent, but in the rabbit-tent, fasting.

Early in the afternoon a hole was dug for the centre pole of the sun-dance lodge and a small cottonwood-branch stuck into it. Sixteen holes were dug in a circle around this centre hole for the outside forks of the lodge, and a similar branch put in each.

Before sunset, long stripped pine-trees were brought on



wagons. These were to be the rafters for the top of the lodge. They had been brought about twenty miles from the mountains. All the young men now rode into the camp-circle; then, dividing into two parties, they went through a sham battle, each side alternately pursuing the other. After this the two parties rode around the camp in opposite directions; one inside the camp-circle, the other outside, and then respectively outside and inside. After this they drew up around the shelter in the centre of the camp-circle, and dismounted. Food was then provided for them by the elder brothers of the companies that had taken part in the ride.

On the evening of this day, two young men who were going to take part in the dance came into the tent of an old man who was to be their grandfather. They touched both him and his wife on the forehead, saying "Hoihi, hoihi!" One of them prayed as they sat at the back of the tent. They again said "Hoihi!" twice. Food was prepared and set before them. Each of them said "Hoihi!" twice again, and then ate. They left the tent without having spoken another word, taking with them the food that they had not eaten.

*Third Preliminary Day.*—June 17 was the day on which the centre pole for the lodge was to be brought to the camp-circle. About nine in the morning the majority of the people of the camp rode around the camp once slowly, and singing. The women followed the men: the dog-company, and perhaps others, brought up the rear. Then they rode to where the tree intended for the centre pole stood, about four miles up stream in a northwesterly direction. Several wagons accompanied them to bring back brush to form the walls of the lodge. The women gathered large, leafy branches for this purpose, and put them on the wagons. Some would take one or two cottonwood-branches, and, tying them to ropes, fasten them to their saddles to drag home. A large crowd gathered in groups among the timber and brush of the river-bottom about the main tree. This was cut down, and as it fell the people shouted, shooting at it; and certain men ran to count coup on it, striking it with whatever they held in their hands. One branch of the fork was broken by the

fall of the tree, but after some consultation it was decided that the tree would answer. It was cut off and stripped, and four horses tied to it. They hardly succeeded in dragging it through the brush out on to the prairie. There it was put on a wagon. The wagon started for the camp, and the people went with it amid some excitement and much merriment. The women rode ahead, while the men followed in two parties. On arriving at the camp, these two parties engaged in a sham battle.<sup>1</sup> Then they rode to the centre of the camp-circle. After this they again rode, two abreast in two companies, twice around the camp-circle in opposite directions, inside and out. Meanwhile about fifteen old men and women were dancing shoulder to shoulder, the men holding hand-drums.

It was on the morning of this day that the old man made the speech to the people given on p. 15.

While the people were away bringing the centre pole, the pledger of the dance made the circuit of the camp-circle from left to right, asking the people who had remained for contributions of food. He wore a buffalo-robe to which pieces of rabbit-fur were attached, and which, later in the ceremony, lay at the foot of the centre pole.

A stick about four feet high with a fork at the top had been set up west of the incompleting dancing-lodge, between it and the pile of brush later used for the walls of the lodge. This stick had sage at the top, similar to the bundle of willows that later was put into the fork of the centre pole of the lodge, and in addition to the sage something red, apparently cloth.

Late this afternoon the important ceremony of the erection of the dance-lodge took place. The pledger and his wife, the keeper of the sacred pipe, and other people, including three of the dancers, came out of the rabbit-tent bearing the sacred

<sup>1</sup> It was said that among the southern Arapaho the dog-company takes charge of the bringing-in of the centre pole, the younger companies fighting a sham battle on the way home. In this battle the stars and *biitaha<sup>wu</sup>* company are opposed to the kit-foxes and tomahawk-men; that is to say, the second preliminary and second full company against the first preliminary and first full company. Dorsey, however (op. cit. 80, 84), states, that in 1901 the battle was between the dog-company as against stars, kit-foxes, and *biitahenena*<sup>a</sup> (the crazy-company having failed to arrive), and in 1902, between the dog-company, the kit-foxes, and the *biitahenena*<sup>a</sup>, against the stars and crazy-men. Thus in 1901 the fourth society would have been opposed to the second and the two preliminaries; in 1902 the second and fourth societies with the first preliminary company would have been against the third society and the second preliminary. It will be seen that all these accounts conflict considerably.

paraphernalia, consisting of a buffalo-skull, the buffalo-skin shot the preceding day, a buffalo-robe, a stick that was apparently a digging-stick, with buffalo-fat, a rawhide rope, the sacred wheel, a pipe, a knife, and black and red paint (Plates LIX and LX). After emerging from the tent, the people carrying these objects proceeded to the dancing-lodge to paint the rafters, after which the centre pole was put up. Sixteen forks around the periphery of the lodge had been previously put up, as well as the short rafters connecting them.

The pledger's wife, carrying the sacred wheel, was the first to emerge from the tent. She was followed by her husband with the pipe. After him came three men; the first carrying the knife, the second the black paint in a bag, and the third the red paint. These three dancers, as well as the pledger, were painted with white paint, with a black circle on the breast, and lines extending from this over the shoulders and arms. They wore also a white plume erect at the back of the head. The pledger's wife wore a blanket from her waist down. She was painted red over the body, and her hair was loose. On her chest was painted a blue circle. Her wrists had black bands, and below her eyes were black lines. A red feather hung down from the back of her head. After coming out from the tent, these five people stood and waited; whereupon the old men bringing the buffalo-skins, the digging-stick, and other objects, came out. They proceeded very slowly in single file toward the dancing-lodge. Three men in advance carried the buffalo-skin shot on the preceding day, and perhaps a buffalo-skull. They were followed by two men with a buffalo-robe. After them came a man with the badger-skin, then one with the stick and the fat, and after him the one with the rawhide rope. The keeper of the sacred pipe was sometimes behind this line of men, and sometimes in advance. Evidently he did not form part of the procession. After a little interval came the pledger's wife, then the pledger, then the three dancers with the knife and the paint, and finally two men to paint the pole. The progress of these people was very slow and impressive, and great silence was maintained in the camp. A number of people, especially old



men, were gathered near the dancing-lodge, while others of all ages sat in the open space of the camp-circle or at their tents.

In the slow circling that now took place around the half-erected dance-lodge to paint the poles, not all of the people that had emerged in procession from the rabbit-tent took part. There were now only seven. They still marched in single file, but not quite as slowly as before. First came the ceremonial grandfather of the pledger, carrying sage. He was followed by the keeper of the sacred pipe with an eagle-wing fan, which he carried with him throughout the ceremony, and some sage. Third was the pledger with his pipe; next, his wife, still with the wheel; then the dancer with the knife; and, sixth and seventh, the two men to do the painting. The rafters were lying outside the lodge, on the ground. The seven people went four times around the lodge, touching the rafters with their feet. They did not quite complete the fourth circuit, but stopped south of the pole, raising what they carried, except two men with the paint. Then they bowed their heads, sang softly, and prayed. They were standing abreast along the rafter. The pledger now touched the pole seven times, cutting it twice on the right, twice on the left, then on the right again, and then drawing from the right to the left twice. Then the woman touched the pole with her wheel, and the dancer carrying the knife cut the rafter four times, first cutting, and then drawing the knife across. After this, the first of the two men carrying paint, the one with black, stooped down and began painting the rafter. He first painted the pole in the places where it had been cut, and then filled in all the intervening spaces, making a band of paint extending around the tree. The keeper of the sacred pipe stood about, directing the cutting and the painting, pointing out the places. The seven people then continued to proceed around the dancing-lodge from left to right, four poles altogether being painted, — one at the southeast and southwest, each black; and one at the northwest and northeast, each red. In painting the first two poles black on the south of the lodge, the seven people stood facing the east; in painting the last two poles red on the north side of the lodge, they faced westward.

After this, they entered the half-completed lodge from the east and stood abreast in the middle, facing north and praying. The members of the *biitaha<sup>wu</sup>*<sup>1</sup> now drew up north and south of the lodge; the "stout men" on the south, the "short men" on the north. With the latter half of the company were two drummers. The members of the company carried tent-poles the tops of which were connected in pairs by short ropes. They sang a *biitaha<sup>wu</sup>* song referring to the thunder. It began with gentle drumming, then a hard crack on the drum represented a flash of lightning and sharp thunder. Toward the end of the song the drumming became soft again.

The keeper of the sacred pipe now began to fasten the various objects to the centre pole. Two men lifted up the bunch of willows. The centre pole, which was lying on the ground, was turned so that the plane of its forking branches was vertical, and the willows were tied to it. Then came women and a number of visiting Crees and a few Arapaho men, bringing calico and other objects to be fastened to the centre pole. The woman for whom the dance had been pledged now kissed all the people who gave things to tie to the pole, in thanks for her restoration to health. At this time about ten elderly men, said to belong to the dog-company, were sitting close to the lodge (west of it), and drumming. The rawhide rope carried in the ceremonial procession was used to tie the various objects to the tree. Then a man told a war-story, and, taking the digging-stick painted red at the point, stuck it into the bunch of willows and other objects to hold them in place.

The centre pole was now lifted a short distance seven times amid shouting, while it was motioned to with the wheel to rise. The seventh time it was lifted up, and by means of the joined tent-poles pushed into place (Plate LXI). All this time the dog-dancers were drumming and singing. The pledger, his wife, and the three other dancers, had retired to the west of the lodge, facing the east. It was now perhaps three-quarters of an hour before sunset. The young men with

<sup>1</sup> It is not certain that the information given as to the part played by the *biitaha<sup>wu</sup>* here, before, and subsequently, is exact. It is possible that several of the younger companies should have participated, but that the disorganization of *bāyaa<sup>wu</sup>* at the present time caused a modification, or that several companies did take part and only the *biitaha<sup>wu</sup>* was mentioned. See footnote on p. 286.

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tent-poles continued to hold the centre pole in place until it was firmly set in the ground. Then the long horizontal rafters from the centre fork to the periphery were slid into place while the dog-dancers continued their drumming and singing. As soon as these rafters were in place, young men climbed up on the forks at the edge of the lodge to tie the rafters in place with thongs. The pile of cottonwood-branches was then distributed and the branches set up around the lodge, leaning against the polygon of horizontal beams. The lodge was herewith completed (Plate LXII).

Not long after, "the dancing-in" took place. The people had returned to their tents, but now gathered rapidly. The young men collected in two or three parties at various places in the camp-circle, and ran to the lodge, two abreast, shooting and shouting. They came into the lodge by the entrance at the east. Everybody in the camp came into the lodge, which was much crowded. The young men and women stood in a ring, facing the centre pole; behind and around them, just inside of the brush wall of the lodge, stood other people, mostly older; in the centre were the old men. The people danced, standing and singing, some of the men shooting at the fork. In the intervals between the songs, horses and calico were given away. The visiting Crees especially received these gifts. Then this formation broke up. The old men and women now danced a few times, standing shoulder to shoulder, the men carrying drums. Practically all the old men of the tribe took part in this, for the dancers were so numerous that they formed two concentric circles.

This evening or night the rabbit-tent was taken down.

*First Day of the Dance.*—On June 18 the dancers were painted by the old men. About one in the afternoon they had been painted white, but with no designs, and were resting. At half-past seven in the evening they were dancing, fully painted. Most of them were white, some yellow, some buff, and some pink. Each of them had on the breast a circle. From this, two lines extended downward, and two others upward, on the shoulders and along the arms. They usually had a line around the wrists and a line enclosing the face. In



many cases, perhaps in the majority, the lines were replaced by a double row of dots. They danced standing in their places, merely raising the heels from the ground, the toes remaining entirely stationary. Each time the heels came down on the ground, the body seemed to be dropped into the pelvis. The upper part of the body was also thrown a little forward. The arms were hanging and the head up, with a bone whistle in the mouth projecting straight forward or upward. The dancers looked to the top of the centre pole. At this time eighteen were dancing. Later on, they dropped out one by one, and rested. At half-past ten in the evening, only four were dancing. The dancers wore blankets from their hips, and long breech-cloths (most of them red), and had three bunches of sage stuck in the fronts of their belts. At the ends of their bone whistles were feather plumes, and all wore a plume upright at the back of the head. The pledger's hands were painted black up to his wrists, looking like gloves. He was holding the wheel, and with each dance-movement raised it to about the height of his head, occasionally passing it behind his back to change it to his other hand.

About half-past seven of the evening of this day, a stand of four sticks was brought. The keeper of the sacred pipe set the stand up in front of two of the dancers in order to help them, and then hung the bundle containing the sacred pipe upon it. The buffalo-robe trimmed with pieces of rabbit-skin, which had been previously worn by the pledger and had been carried in the ceremonial procession from the rabbit-tent to the dancing-lodge, now lay west of the foot of the centre pole. The dancers, while erect, had the blankets on which they reposed when resting, lying before them at their feet. In the southeast part of the lodge sat the drummers, all young men, beating a bass drum hung from sticks set in the ground, most of them using sticks the ends of which were not wrapped. At this time, fourteen were drumming at once, sitting crowded very closely in a circle. All around them the women sat on the ground in their blankets, holding up branches of willows, raising them in time to the drumming and their own singing. In concluding a song the drummers struck about four hard

blows at intervals twice as great as the beats accompanying the song. The women continued to sing two or three phrases after the stop of the drum, and then allowed their voices to die away. The men, on the other hand, began each song, and continued to sing only as long as the drumming lasted. The dancers blew their whistles each time that they raised themselves on their toes.

At half-past ten the scene was much the same, except that there were fewer dancers. A fire was burning in the lodge, the bundle containing the sacred pipe was on the stand in front of one or two of the dancers, the drumming was going on, the singing-women were still about the drummers, while about the lodge, mostly outside, stood young men concealing their faces behind their blankets, and watching. The dancing appears to have continued all this night.

*Second Day of the Dance.*—About sunrise on June 19, all the dancers are said to have faced the east and danced, after which the four rafters that had been painted were motioned to with food.

By eight this morning, this being the second of the three days of the actual dance, the relatives of the dancers brought food for the young men's grandfathers into the lodge, in return for their painting the dancers. The old men distributed this food to their relatives. It is said that on the last day the giving was reversed, the grandfathers presenting food to their grandchildren, the dancers. On this morning a rod, apparently a tent-pole, painted red, with a small crossbar at the top from which hung feathers and two blue handkerchiefs, was put up for a young man who had made the dance two or three times, having on each occasion fasted for the entire period.

Several tents or shelters had been taken down and their canvas used to cover the western half of the dancing-lodge to shelter the dancers. This canvas was stretched inside of the brush wall along the entire western half of the lodge. Where the spectators looked in, the wall consisted only of cottonwood brush. On the morning of June 19, tent-canvas was also put on the rafters overhead, along the western part of the circumference of the lodge, to form a shade for the grandfathers

and dancers. Other men variously occupied other places in the lodge. The middle of the back or western end of the lodge was occupied by the pledger and his wife, and was screened with six deciduous trees and with the small cedar-tree that previously had been leaned against the back of the rabbit-tent. The pledger's wife did not come forward like the men dancers, nor dance. From this place a small trench extended in the direction of the centre of the lodge, bordered on each side by a small log and by seven upright sticks tufted with bunches of rabbit-fur. These logs and sticks were painted respectively red and black on the two sides of the trench. At the rear or western end of the trench a painted buffalo-skull lay, apparently the one used two days before for the sweat-house. Near this skull stood a forked stick, mentioned before as having stood, at the time of the ceremonial procession, outside of the sun-dance lodge, with sage and a red object on it. It was now used to hang the wheel from, when this was not held by the pledger. In front of the skull, between it and the rear of the trench, or perhaps covering the rear portion of the trench, were small arched sticks or wickets in a row. Nearly at each side of these sticks was a small mass of low shrubbery stuck into a round piece of soil or sod which had been cut out of the ground. These two pieces of earth and shrubbery had been brought in the morning of the first day of the dance by old men and women who had gone to the near-by river for the purpose. The seven small trees formed a sort of screen parallel with the outside of the lodge at the middle of this western end. Just to the south of the rear end of the trench was the cedar, south of this was a row of three cottonwood trees or branches, making a total of four trees south of the trench. The three trees on the north side of the trench were of three different species; the first one nearest the trench being again a cottonwood; the second, a tree called by the Arapaho *ha"wa"wubiic* ("praying-wood"); and the third and farthest, a willow.

The centre pole, about ten feet above the ground, was encircled by a band of black and red paint, the black below. Between these bands a piece of light-colored calico a foot or



more in width, encircled in the middle by a yellow ribbon, was tied around the tree so that the red-painted portion of the trunk was immediately above it, the black just below. From the fork of the tree hung a buffalo-robe, to the lowest end of which were attached a bunch of eagle-feathers and gorgets (beii).

About nine or ten in the morning of this second day, singing began in the lodge preparatory to the painting of the dancers. The grandfathers now sat in a semicircle at the eastern end of the lodge, the end opposite to that in which the dancing went on. In front of them were sitting their grandsons (the dancers), twenty-four in number. At the end of each song the old men touched the dancers on the face with wet sage, and the last time on the back. After this the old men got up, went to the west end of the lodge, and sat down. The dancers stood up, and washed themselves with water brought to them in buckets, and then sat around the middle of the lodge to dry.

When they were dry, they came up to the old man, the keeper of the sacred pipe, and he touched them with paint. Taking paint of the color with which they were to be covered, he rubbed it in his hands, and made a mark on each hand with the other. Then he passed his hands up from the feet of each young man to his body; from his hands up his arms, to his shoulders, and to his head, touching him lightly with the paint. The young man sat before him with his knees drawn up, and his hands over his shins. Then the old man passed his hands along the dancer in reverse direction, taking hold of several fingers of his hands, and pulling them downward. To some dancers he did this twice, to others four times. Then the young man turned around, presenting his back, which the old man rubbed rather heavily with paint. After this the young men took cups of paint, and rubbed themselves uniformly over the entire body. Fewer of them were white, and more of them yellow, than on the day before. The pledger of the dance and his father, who had gone into the dance with him and constantly stood beside him, were again painted white. Then the grandfathers came, and sat or knelt before the keeper of the sacred pipe, who described to them how to paint the dancers. Thereupon the old men proceeded to do the

painting. Using black paint, they enclosed the face in a line, made a circle on the breast, bands around the arms just above the wrists, and around the legs just above the ankles, and a horizontal arc of a circle on the back over the left shoulder-blade. Then they drew lines from the circle on the breast, downward along the legs, and up over the shoulders, down the arms, to the lines at the wrists. In most cases a row of black dots bordered the black lines on each side, or entirely replaced them. The pledger and his father had two diamond-shaped areas on each leg and arm wiped clear of paint to be later painted over in dark red. The pledger and his father, while being painted, sat just north of the ceremonial trench. The old man in charge of the ceremony sat just south of this trench in front of the cedar-tree. Four dancers, all of them with a ground-color of yellowish buff, were not painted with lines or dots, but had, instead, two eagles painted on each arm and leg, one on the breast, and four or five small eagles on the face. These four dancers also showed certain differences in their apparel. The majority wore wreaths of sage on the head, with the down plume that had been previously worn at the back now standing up in front. The four men painted with eagles wore no such wreath, and had the down plume at the back of the head. They also wore bunches of sage in their belts, as on the preceding day; while the majority of the dancers now had a wreath or belt of it around the waist. All the dancers wore anklets and wrist-bands of sage, held in shape with sinew.

About half-past one, with a large crowd in the lodge, and after a number of horses had been given away, the pledger took a piece of white skin, and moved along slowly, holding it a foot or less above the ground, going along the lodge from left to right until he came to where the drummers and singers were. He passed the skin to them, and they began the drumming, whereupon dancing commenced. The pledger thereupon laid the skin down at the foot of the centre pole. The drum, although made like a bass drum, with double head and lacings, was of native manufacture, about two feet in diameter and a foot high.

At first little interest was shown in the dancing. Many horses were given away at this period and the ears of a number of children were pierced. Three young men, all of them dancers, changed their names at this time, each giving away a horse. An old man, speaking over them, stood behind them, holding a bunch of sage over their heads, and touching them with it at the end of his speech.

Early in the afternoon a number of dancers, first of all the pledger and his father, took a twig of sage, dipped it into food, and then, standing under the four painted rafters, motioned toward them. Then, standing east of the centre pole, they touched this with the food-dipped sage; and finally, going to the pipe-bundle hanging on its stand west of the foot of the centre pole, they touched this in the same way.

A tent-pole painted yellow had been set up in the lodge for one of the dancers. Another one was now brought in. This was painted red with a green band nearly halfway up, and an eagle-feather tied on it somewhat higher. At the top was a crow. Later in the afternoon a third pole, which had been erected on the preceding day some distance outside of the entrance to the lodge, was also set up inside. These poles were set in the ground just in front of the dancers for whom they were erected, so that they could hold them while dancing.

The old man in charge of the dance moved the sacred-pipe bundle with its stand several times in the course of the afternoon, setting it up before different dancers.

During the day the larger wood-fire of the night was replaced by a small fire of cow-dung used in place of buffalo-chips.

About six or seven o'clock in the evening of this second day, somewhat before sunset, the dancers rested, and were repainted; but the singing and drumming continued without intermission. Some of the dancers at this time, especially about the time the sun went down and for some time afterward, took blankets and lay down on the ground outside of the lodge. They were now repainted somewhat differently. The pledger and his father were still white; but in each place where before they had had a large red diamond they now had two small

ones. One other dancer was painted white. These three and six other dancers wore neither head-wreaths, anklets, nor wrist-bands of sage. Among these six other men were the four dancers who earlier in the afternoon had been painted with eagles. Of these four, three were painted a dull red; the fourth was light yellow, and he had a red circle on his breast. The three others were painted with green figures of animals shaped somewhat like turtles, but narrower, and with horns on the head. Of the remaining dancers, more than before were painted with dull yellow-buff. Some of them still had the lines and rows of dots extending from the circle on the breast down the arms and legs, while others had the entire breast covered with red dots on the yellow ground. A small upright mark was generally made at the upper end of the circle on the breast.

About nine in the evening it was fully dark, and a wood-fire was lighted in the lodge. Few of the participants in the ceremony were now dancing. Most of them were in the lodge, in their places, sleeping. Generally not more than from one to four were dancing at one time, and these were not always whistling. One man and three women had lain all day in the southern part of the lodge at one end of the row of dancers, fasting. About sunset, or soon after, the women went off. About ten o'clock the keeper of the sacred pipe and the grand-fathers were not in the lodge. The singing-women sat around the drummers; and all about the inside of the lodge, as well as outside, lay, sat; and stood young men wrapped up in their blankets. Once or twice a dancer went to the pipe-bundle, laid his head on it, and cried or prayed.

*Third Day of the Dance.* — At a quarter after four on the morning of June 20, the third and last day of the dance, very few of the dancers were standing. All the women had left the lodge; but twelve men who were drumming were singing. Just before sunrise, twenty-two of the twenty-four dancers got up. Facing the spot on the horizon where the sun was about to rise, they danced without intermission five or ten minutes, until the sun was completely above the horizon; then they all lay down. No old men were present. The pledger



danced in the trench, but without his wheel. The sacred-pipe stand was in front of a dancer whose place was a few yards to the right of the pledger. All the dancers whistled.

About seven in the morning, all the grandfathers and old men were in the lodge again. A great quantity of food was on the ground around the centre pole. Smoking was going on, the keeper of the sacred pipe giving pipes to the dancers to smoke. Taking a little tobacco from the pipe, and laying it on the ground, he motioned with the pipe in the four cardinal directions, then up, and then down, evidently praying. A young man kneeling in front of him then received the pipe in his left hand, passing his right hand down over the old man's arm four times, and saying "Hoiiii!" twice. Other old men gave pipes to the dancers to smoke in the same way. Sometimes the old men, before motioning with the pipe, held it with the bowl up, passing each hand down it twice, and then held it horizontally, again passing the hands along it. The bundle containing the sacred pipe was now hanging on its stand west of the foot of the centre pole, the stand being above the buffalo-robe trimmed with rabbit-fur.

The dancing on this last day began about noon, or soon after. The four dancers painted with eagles the preceding day were now painted in green, their faces red, and their hands and forearms yellow. They were painted with dragon-fly designs, consisting of a line knobbed at one end and forked at the other, and crossed near the former by two short bars. These designs were yellow except where, as on the forearms, the background was yellow, in which case they were done in red. These four men danced four songs in four different places around the centre pole. The pledger and his father were painted in a purplish or pinkish white with a double row of dots down the arms and legs. Of the other dancers, some had these rows of dots, some red or green circles on their breast and around their nipples, and one was painted with what looked like a lightning design. On this day all danced with much gesticulation. One man fell to the ground from thirst. He was covered with a blanket, and soon got up again. One jumped wildly about, and then leaned against the centre

pole, hugging it. Several dancers at times laid their heads on the sacred-pipe bundle, and wept aloud. One or two cried in this way while leaning against the centre pole. About half-past two the pledger's father took sage dipped into food, and motioned from the four painted rafters toward the ground, then to the centre pole, and then touched the sacred-pipe bundle. After this the other dancers did the same. Much food was brought into the lodge. Some of it was given away by the grandfathers to the visiting Crees and to other people. In the intervals of the dancing, horses were given away.

After five in the afternoon, dancing began again, the dancers having been once more repainted. All except three were now painted in some shade of yellow-buff. Of the three exceptions, one was painted red, and two (the pledger and his father) were still in the purplish-white in which they had been painted earlier in the day. The majority were painted with rows of spots, some with large ones, and others with many small ones. The colors of these spots were various, — red, green, blue, or black. One man was painted with a tree on his forearms and legs. The pledger and his father had a lightning-mark extending down the arm. The crowd of spectators was much larger than before and the scene was very animated. All of the twenty-four participants in the ceremony were still in the lodge. The bundle for the sacred pipe was still on its stand at the foot of the centre pole; the sacred pipe itself, it was said, having been during the dance at the very back of the lodge behind the pledger. Again one of the dancers, after beginning to swing his arms wildly, fell down, or rather threw himself down, but soon got up and rested. Later on, fewer of the dancers were dancing. Some went out of the lodge a short distance to rest, and one was washed off. Near sunset they gave away their blankets, apparently to their grandfathers. When the sun had set, part of the canvas wall at the western end of the lodge was removed. Seven dancers, including the pledger now (for the only time in the ceremony), stood in the eastern part of the lodge, facing the west, dancing against the sun. One song was repeated without intermission for nearly half an hour, the pledger as he danced swinging his

wheel heavily downward. The scene was full of excitement. All the dancers but the seven were sitting about. When finally the old men had given the signal that the last red glow had disappeared from the sky, there was a rush to drink the goose-water (hitêçounetc) behind the ceremonial trench. The dancers did not appear to whistle or utter a sound before drinking of this, as they were said to do among the southern Arapaho. Many of the spectators also crowded to this water and drank of it. The dancers now drank water, vomited, and, some having bathed, ate for the first time after their three-days' fast. The people of the entire camp were scattered about the open space around the lodge, sitting on the ground in groups, and eating, making a most pleasing picture in the dusk. It was about half-past eight when the last song of the dance was concluded.

Before the end of the dance, the keeper of the sacred pipe had taken all the sacred objects from the back of the lodge and laid them at the foot of the centre pole, under the stand for the pipe-bundle. He took in this way the pipe itself, the badger-skin, two bundles of skin and sticks, or rattles, as well as the forked stick on which the wheel had hung, which was set in the ground west of the foot of the centre pole. At the conclusion of the ceremony the drum was picked up and carried, and beaten in a circle from left to right once or twice, those carrying it dancing with it, and the women forming in dense circles around.

*Supplementary Day.*—None of the supplementary ceremonies on the following day, June 21,—such as the “dancing-out” in the morning and the tying of children’s worn-out clothing to the lodge-poles,—were witnessed; but they took place according to custom. The camp began to break this day, and by evening comparatively few tents appear still to have stood.

About two months before the ceremony, the keeper of the sacred pipe was said to have prayed on behalf of the tribe at a gathering of the people at a place down stream from where the dance was later held. Among the southern Arapaho, it is said, this prayer is made after the tribe has gathered in

the camp-circle at the site of the dance. In walking across the camp-circle this man should have moved exceedingly slow. A sudden and violent wind-storm on June 14, after the camp had assembled for the dance, was attributed to his having walked too carelessly and fast on the earlier occasion.

It is said that during one sun-dance in the past it became so hot that the pledger was unable to continue the ceremony, and left the lodge. The other dancers followed, as they could not continue the dance without him. On another occasion the sun, in the final "dancing against the sun," to deceive the people, came up again after it had set.

COMPARISON OF THE SUN-DANCE OF THE NORTHERN AND  
SOUTHERN ARAPAHO.

A comparison of this more or less casual account with the studies made by Dr. George A. Dorsey, of the southern Arapaho sun-dances of 1901-02, brings out great similarities, but some interesting minor differences. The general plan of the ceremony, and the duration and sequence of events, are identical among the two parts of the tribe. Dr. Dorsey's scheme of the eight days applies exactly to the northern Arapaho. It would seem, however, that a clearer conception of the relation of different portions of the ceremony is gained by a somewhat different arrangement. This is briefly the following:—

*Opening Day (First Day):—*

Gathering of the camp, and formal announcement of ceremony.

At the end of the day, erection of the preparatory or rabbit tent, followed by singing in this during the night.

*First Preliminary Day (Second Day). Rabbit-tent:—*

Singing and rites in the rabbit-tent.

Scouting for the centre pole.

Killing the buffalo.

*Second Preliminary Day (Third Day). Rabbit-tent:—*

Rites in the rabbit-tent.

Making and use of the sweat-house.

Lodge-rafters brought.

*Third Preliminary Day (Fourth Day). Rabbit-tent:—*

Felling and bringing of the centre pole.

Procession abandoning the rabbit-tent, and painting of the lodge-poles.

Erection of the lodge.

"Dancing-in."

Beginning of the dancers' fast.

*First Day of the Dance (Fifth Day). Dancing-lodge:—*

Cutting sods, and construction of the altar.

Painting of all the dancers.

Dancing.

*Second Day of the Dance (Sixth Day). Dancing-lodge:—*

Painting of all the dancers.

Dancing.

*Third Day of the Dance (Seventh Day). Dancing-lodge:—*

Painting of all the dancers.

Dancing.

Formerly, torture of the dancers.

Dancing against the sun, drinking of the sacred water, breaking of the dancers' fast, end of the ceremony.

*Supplementary Day (Eighth Day):—*

"Dancing-out."

Sacrifice of children's worn clothing in the dancing-lodge.

Abandonment of the lodge, and breaking of the camp.

The main ceremony thus lasts three nights and three days. It is held in the completed dancing-lodge, and the participants fast and abstain from drink, dance and are painted, during this time. Formerly the self-torture characteristic of the sun-dance also took place during these three days. This chief portion of the ceremony is preceded by a period of three days of preparation, during which the rabbit-tent, an ordinary tent temporarily set apart for the purpose, is used. In this are the pledger of the dance and his wife. The rites in this tent are comparatively secret. They include singing on the first day, and the preparation of various ceremonial objects. The public ceremonies during these three days relate mainly to the securing of the materials for the dancing-lodge. There is no dancing during the rabbit-tent period: the ordinary participants in the ceremony as yet take no part. The rabbit-tent is erected in the evening preceding the three days during which it is used. At the end of the third of these days it is abandoned. An impressive ceremonial procession leaves it for the dancing-lodge, which is then erected. A few minutes' dance by the people (the "dancing-in") on this same evening resembles a dedication of the now completed dancing-lodge.



Just three days later, almost at the same hour, the arduous ceremony is ended. Next morning, on the supplementary day, a few minutes' "dancing-out" marks the ceremonial abandonment of the lodge, which is further signalized by the leaving in it of all the worn-out clothing of the children in the tribe. The opening day preceding the three preparatory days is even more devoid of ritual actions, these being practically confined to the formal announcement of the beginning of the ceremony, and riding by the members of the younger age-companies. The erection of the rabbit-tent at the end of this opening day, and the singing in it during the night, should be regarded as marking the beginning of the three preliminary days; for it is evident—from the fact that the erection of this tent as well as of the dancing-lodge, and the conclusion of the dancers' fasting, painting, and dancing, all occur about sunset—that each of the periods of three days includes the preceding evening.

This division of the sun-dance agrees exactly with that existing in the age-company ceremonies, in which there is also a three-days' period of preparation, more or less private or secret, and a three-days' period of public spectacular performance. The Indians generally speak of both the *bāyaa<sup>a</sup>wu* and the sun-dance as four-day ceremonies. They include with the latter the evening which terminates the three preliminary days and begins the ceremony proper; so that this actually occurs on four consecutive days. Altogether, however, it occupies only three nights and three days.<sup>1</sup>

The sun-dance lodge of the northern Arapaho differs considerably in appearance, due chiefly to varying proportions, from that of the southern Arapaho, as a glance at the figure here shown, as compared with the photographic illustrations in Dr. Dorsey's work on the sun-dance, will reveal. The northern Arapaho lodge is much greater in diameter, and correspondingly flatter in proportion, than that of the southern Arapaho. The northern Arapaho lodge in the present figure (Plate LIX) was that of 1899, which was said by the Indians to have been too low or flat; but that seen erected in 1900,

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<sup>1</sup> See pp. 152, 153, 166, 226.

which was declared to be of proper proportions, was but very little higher. The difference between the shape of the lodge in the two parts of the tribe seems to be due to geographical location. The Oklahoma people are on the Plains, with little timber available other than cottonwood, which is short, heavy, and crooked. The Wyoming Arapaho are at the edge of the mountains, from which they easily obtain straight, long, slender pines or conifers, which enable them to increase the diameter of their lodge, and give it a clear-cut look that is entirely wanting about the tumble-down southern lodge.

For all uprights and the short beams, the Wyoming people use cottonwood. The southern people rest the long inclined rafters on the horizontal cross-beams forming the periphery of the lodge; the northern people attach them to or lay them into the upright forks that support these cross-beams. The southern Arapaho continue the cross-beams entirely around the lodge; those in the north omit the one at the easternmost side of the lodge, thus more definitely marking an entrance opposite the "altar."

As regards the interior of the lodge, the general plan of the "altar" at the middle of the back is identical among the two groups. There is, however, considerable difference in the proportions of the objects composing it and the distances between them, much as in the shape of the lodge. Thus the seven arched sticks appear to be much larger among the northern Arapaho. Unfortunately, the loss on the prairie of a note-book containing memoranda as to the "altar" makes it impossible to speak more definitely. The impression produced by the excellent model of the southern Arapaho sun-dance "altar" at the Field Columbian Museum, after the northern "altar" has been seen, is, that it would be an entirely complete but somewhat distorted representation of the latter.

That there may be minor differences other than of proportion between the two "altars" is made probable by the differences in the species of trees used for the screen just behind the "altar." In order from north to south, these seven little trees are respectively:—

<i>Southern Arapaho.</i>	<i>Northern Arapaho.</i>
Red-painted cottonwood.	Willow.
Red-painted cottonwood.	Praying-wood.
Red-painted cottonwood. (trench)	Cottonwood. (trench)
Cedar.	Cedar.
Willow.	Cottonwood.
Black-painted cottonwood.	Cottonwood.
Black-painted cottonwood.	Cottonwood.

The present account being so much less full than Dr. Dorsey's, and neither secret rites having been witnessed nor any special study of the ceremony having been made on the spot, omissions in the foregoing description, when compared with Dr. Dorsey's, must not be regarded as indicative of the absence of such features in the northern ceremony. The chief positive differences that have been observed are the following:—

On the opening day, the ride of the young men about noon was lacking in the Oklahoma ceremonies. The singing in the rabbit-tent this night appears to have been continued longer in the north.

The ride around the camp before sunrise next morning has not been mentioned in the south.

The cedar-tree at the back of the rabbit-tent appears to have been put in place in the north on the first preliminary day; in the south, on the second. In the north it was four or five feet high; in the south, about twenty.

After the buffalo (represented at the present time by a skin) had been killed and the hide brought in, it was touched, among the northern Arapaho, by the children of the camp (brought by their mothers), and then by a number of men. It seems that the southern Arapaho also formerly had this practice; but it was not observed in the two ceremonies described.

The singing all day in the large tent, with the sacrifice of cloth and the feast on the second preliminary day, by the northern Arapaho, appears to have had no parallel in the two southern ceremonies. This ceremony was not held in the rabbit-tent, and was perhaps entirely accessory or intrusive.

The sweat-house of this day is made by men in the south,

by women in the north. It is used by men in the south; nothing was observed as to its use in the north.

The ceremonial procession from the rabbit-tent to the lodge-rafters to be painted, at the end of the third preliminary day, differs considerably in the north and south. In the south it includes nine people besides the old man directing the dance, who generally does not walk in file with the others: in the north, it includes fifteen. The order of the persons and objects in the procession also varies.<sup>1</sup> The following is a comparison of the northern Arapaho procession of 1900 and the southern of 1902:—

<i>Northern.</i>	<i>Southern.</i>	<i>Southern Equivalent of Northern Agent.</i>
1 man with buffalo-skull	1 man with skull	1
2 man } with buffalo-skin	2 woman with wheel }	3
3 man }	3 man with buffalo-skin }	
4 man } with buffalo-robe		0
5 man }		
6 man with badger-skin	4 man with badger-skin	4
7 man with digging-stick		9
8 man with rawhide rope		0
9 woman with wheel		2
10 pledger with straight pipe	5 man with pipe	5
11 dancer with knife		8
12 dancer with black paint	6 pledger with red paint	7
13 dancer with red paint	7 man with black paint	6
14 man to paint rafters	8 dancer with knife	0
15 man to paint rafters	9 man with digging-stick	0

At the conclusion of the ceremony, the northern dancers were not heard to whistle, or utter a cry, before drinking the sacred water.

A great proportion of the children's sacrificed clothing was hung by the northern Arapaho on the forks of the sixteen uprights at the periphery of the lodge, as can be seen in Plate LXII. The southern Arapaho tied the clothing mainly to the centre pole, and what was on the outside uprights was half-way up, not at the fork on top.

The body-painting used varied considerably, although the general type—consisting of an oval on the face, a circle on the

<sup>1</sup> Compare Plates LIX and LX with Dorsey, Arapaho Sun-dance, Plate xxxii.

breast, lines around wrists and ankles, and lines, rows of dots, or series of figures, from the breast-circle to the wrist and ankles — persisted with hardly an exception. The sun-dance paintings are so largely individual in their nature, that they differ in successive ceremonies among the same people. There is, however, a marked difference in the number of paintings observed in the north and south. Dr. Dorsey distinguishes four paintings; the first occurring on the evening of the last preliminary day, in the very first hours of the seventy-two that the dance lasts; the second, third, and fourth, on the three succeeding days. As to the first painting, no observations were made among the northern Arapaho. During the following day, the first of the dance, the dancers were painted in the afternoon. It is not known whether they were painted in the morning also. On the second and third days, they were painted twice, — once in the morning and once in the afternoon. As opposed to the total of four paintings among the southern Arapaho, five were observed in the north, though six undoubtedly took place, and there may have been a total of seven.

The pledger's paint in the south is white. An oval area on the face, including the eyes and mouth, is colored. On his breast, and on each thigh, calf, upper arm, and lower arm, are colored diamonds connected by lines. On the first day, this oval and the diamonds are red; on the second, yellow; on the third, green. In the north, the pledger's paint was also white. On the first day he appears to have been painted only with lines, or rows of dots, from a circle on the breast to the wrists and ankles. His hands were black. On the second day he was first painted with red diamonds; later, with smaller red diamonds, — four, instead of two, on each leg and arm. On the third day he was first painted with double rows of dots. The second paint on this day was zigzag or wavy lines from breast to wrists and ankles. Neither he nor any other dancer appears to have had the circle on his breast replaced by a diamond at any time.

The small figure surmounted by a tree-symbol, usually painted by the southern Arapaho on top of the breast-circle,

is generally reduced to a smaller and simple upright mark, painted solidly, in the north.

Of the southern Arapaho paints described, the pink calf paint and the striking yellow-hammer and thunder paints were not seen in the north. The observations recorded were not sufficiently detailed to say how exactly the other southern paints — the pink, yellow earth, first yellow, and second yellow — were represented. At least, one remarkable northern paint has not been described in the south. In this the dancers were painted at different times with figures of dragon-flies, water-monsters, and eagles. The ground-color of one of their paints was green. Four men wore this painting, which was considered particularly hard to endure, and were further distinguished from the other dancers by variations in the sage apparel.

It seems probable that the few features here recorded, but not yet observed in the southern Arapaho sun-dance, were originally common, but have been retained in the north while already lost or abridged in the south, chiefly through contact with civilization. The other differences between the two ceremonies are due in part to habitat, such as the form of the lodge, or rest largely on the room left to individual action in certain aspects of the dance, such as the paintings. Finally, there are certain direct discrepancies which cannot be explained. These, though interesting, are entirely minor: fundamentally, the two ceremonies are identical.

#### TRIBAL RELIGIOUS CUSTOMS.

The great tribal fetish of the Arapaho is a sacred pipe. This is called *sæitca*<sup>n</sup> ("flat pipe"). As the pipe is not flat, but cylindrical, the reason for the use of this name is not clear, unless the word denotes that the pipe is tubular without a bowl at an angle to the stem. The pipe is in the keeping of an old man among the northern Arapaho. Its sacredness is equally recognized by the northern and southern Arapaho, though obviously it can play but little direct part in the religious practice of the latter. The pipe is cylindrical, about two feet long, an inch and a half or two inches in diameter,

and without taper. The stem is as thick as the bowl, and is white, apparently of wood. The bowl, whose length is perhaps half a foot, is black, probably of the soapstone often used by the Plains tribes for small pipe-bowls. Strings of some kind hang from the stem, but there are few appendages. The pipe is kept wrapped in a large bundle of many separate pieces of cloth, one around the other. This bundle is hung near the top of a stand of four sticks to keep it from touching the ground. It is kept in a painted tent. This tent, which is now of canvas, but probably preserves the old painting, has been described in the preceding section (Plate LVII). At present the keeper of the pipe lives in an ordinary tent, but during the sun-dance he erects the painted tent, and inhabits it. Whether this was also formerly the case, or whether the painted tent was then continuously used by the keeper of the sacred pipe, is not known. The symbolism of this tent recalls that prevalent during the ghost-dance, and may be partly or entirely influenced by the movement. The official origin or tribal myth of the Arapaho is in the keeping of the individual who has the sacred pipe in his possession. The tradition can be told only with the observance of certain regulations and ceremonies, and occupies four entire consecutive nights for its narration. It has never yet been recorded by a white man even in fragments of any amount. The majority of the Arapaho, even of those who have heard it related by the proper keeper, know it very imperfectly, and have been forbidden to tell it. In addition to being the maintainer of the sacred tribal myth, the keeper of the sacred pipe seems to have the chief direction of important ceremonies among the northern Arapaho. At the sun-dance in 1900 he supervised and ordered the entire ceremony, and was treated with the greatest respect and awe.

There seem to be several sacred wheels in the tribe, as the southern Arapaho have at least one, and the northern Arapaho use another at the sun-dance. Owing to the presence of the sacred pipe among the northern Arapaho, the wheel is relatively of more importance among the southern half of the tribe. The wheel is a hoop, perhaps a foot and a half across,



sometimes used for a game (see Fig. 139). The hoop of the wheel represents a snake (biisān), literally "insect, vermin." Among the southern Arapaho it is kept enclosed in a bundle, and is ceremonially wrapped and sacrificed to for the good of the giver. Like the sacred pipe in the north, it is in the keeping of a special individual, whose approval must, of course, be secured before this ceremony can be made. The keeper of the wheel sits at the middle of the back of the tent, and is the one to handle it. The ground in the tent is covered with sage, and cedar is used as incense. Silence is observed, except where prayer or speaking forms part of the ritual. Usually, cloth is given to the wheel, and at the conclusion of the ceremony is wrapped around it, the earlier wrappings remaining outside. After this, food is eaten, presumably furnished by the person wishing the ceremony made. The wheel might be thus wrapped on account of the sickness of a relative. The wheel and its ceremonies have been more fully described by Dr. Dorsey in his account of the sun-dance.

There are a number of sacred bags in the tribe, and one was obtained, through inheritance, by a young woman shortly before the summer of 1899. In Plate LXIII the bag is shown unpacked, and its contents in the position in which they are set in the tent. The upright cylindrical leather object is a person, apparently the spirit of the bag. Food and gifts were given to the bag on the occasions on which it was opened. The food, or part of it, was then kept in the bag. The object of these gifts was to secure prosperity and an abundance of food to the giver.

The disposition of the contents of the bag during the ceremony is as follows:—

The owner of the bag sits at the rear of the tent. In the middle is a small fire of coals. Directly before the owner is the outer bag, now holding only the various gifts of food contained in small bags and pieces of cloth. The outer bag itself is still covered, to a large extent, with the calico with which it is ordinarily kept wrapped, and which presumably has been given to it. The smaller longitudinal bag is removed from the inside of the large bag, and put in front of it, nearer the

fire. In front of this are placed grizzly-bear claws. To the right of these claws is a small bag of incense called "man," and to the left a similar bag called "woman." Immediately in front of the grizzly-claws are four small sticks of unequal length, which are leaned up together like tent-poles, and which represent a tent. In front of these sticks, and not far from the fire, is the cylindrical leather case representing the "owner" of the bag. By the side of this object and the four sticks, another stick, ordinarily kept inside of the cylindrical case, is laid on the ground. This represents the gift of a horse.

A middle-aged northern Arapaho has in his possession two pieces of buckskin on which are painted in three or four colors pictographic designs referring to myths of creation and the tribal ceremonies. These pieces could neither be secured nor reproduced at the time they were seen, and only fragmentary information was obtained in regard to them. The designs are, however, comparatively simple, and are reproduced here from memory, with probably approximate correctness (Plate LXIV). The first of the two strips of skin is several inches wide and a foot or more long. Its end is cut off rudely and irregularly. Near this end are figures in blue with two red spots. A straight line diagonal to the length of the buckskin strip represents the extent of the world and the course of the sun. On it are shown both the sun and the moon; the former, by a small solid circle, the latter by the arc of a circle. Four blue dots, two on each side of the line, represent the "four old men." Beyond the end of this line is a painted ovate figure drawn in blue outline, and representing a mountain-goat horn spoon from which old men are fed. Near this a red spot denotes paint. To the side of the line on which are painted the sun and the moon, is a third group of figures. The centre of this is a blue spot, or solidly filled circle, representing the heart. Around this are four short lines or bars forming a square in outline. These four lines represent the bands or lines painted around the wrists and ankles of the old men in the tribal ceremonies. These old men are said to maintain the life of the people. These four bars also denote the four

old men themselves. Just beyond them is a small crescent, the half-moon, and near it a hollow circle representing either the sun or a sun-dog, while an oval red spot denotes paint. The central circle, with the four surrounding bars and the crescent, also represent sun-dance body-paintings; the circle being the circle painted on the dancers' breasts; the bars, the lines encircling their wrists and ankles; and the crescent often painted on the back at the shoulder-blade.

The symbols just described constitute the painting of only one end of the larger strip of skin. The rest of this piece is executed in a design of red and yellow lines, small solid circles, smaller triangles, and broken semicircles, to which two or three blue semicircles, called "black," are added. The meaning of this part of the pictograph is not known. Its fourfold arrangement is no doubt significant. On the back of this strip of skin there is painted only a single figure in blue, consisting of a hollow circle bisected by a line extending beyond it on both sides, and containing four spots, — two on each side of the bisecting line.

The second piece of skin was also painted on both sides, one representing the earth, the other the sky. On the side representing the sky was a long wavy red line. Near one end of this was a figure of the thunder-bird in blue; beyond it, also on the line, a half-moon; and beyond this the sun, also in blue. Near the opposite end, this red line was crossed by two blue bars, while at the end was an ellipse solidly filled in with green. On the middle of the line, and parallel to it, were four figures, — two blue on the right, and two green or red on the left. These consisted of wavy lines forked at the upper ends. It will be noticed that this part of the painting contains green, but no yellow. It has been reproduced in the plate. In addition, this strip contains two human figures in brown at the side of the long red line, and four others, one above the other, painted in yellow. On the other side, which represents the earth, this piece of skin was painted with eight figures. Each of these consisted of two lines somewhat resembling a pair of legs, the upper parts of the two lines being close together and parallel, and the lower

ends diverging. Above the upper end of each line was a dot.

The earth is sometimes spoken of as woman, the sky as man, as shown in the phrase "biitaawu" neina" hixtçāba neisana" ("the earth my mother, the above my father").

The beings addressed in certain prayers are, in order, first our father, second the sun, third hiiteni, fourth hitaxusa" (or last child, equivalent to hiintcābiit, "water-monster or owner of water"), fifth the thunder, sixth the whirlwind, and seventh the earth.

According to one account, the persons sometimes addressed in prayer were successively, Above-Nih'ā'ça",<sup>1</sup> the four old men, and then the sun.

The following is a free rendering of a hypothetical prayer or speech made by an old man at a young man's change of name.

"This is what I mention. On the Cimarron River near the Turkey hills I brought back black paint. May children grow well! The seven old men and the seven old women, Found-in-the-grass (biaxuya"), and the myths, may they be for the good of the people of all ages! This is another that I mention: At sand creek. I mention when there were seven sweat-houses, and the day and the rivers and the earth made sickness be far away. My grandfather, the sun, you who walk yellow, look down on us. Pity us. Pity us. May this young man facing straight be helped to walk for his life! Those that shine above at night, and the animals of the night, we pray to you. The morning star and my father, listen. I have asked for long breath, for large life. May this young man, with his people and his relatives, do well, walking where it is good, obtaining food and clothing and horses of many colors, and where there are birds that are crying and the day is long and the wind is good! Animals that move on the surface, animals

<sup>1</sup> Nih'ā'ça" (spider, also white person), etymology still uncertain, is the trickster-culture-hero of Arapaho mythology (see *Traditions of the Arapaho*, op. cit., pp. 6, 7, footnotes). Hixtçāba-nih'ā'ça", Above-Nih'ā'ça", or Above-White-man, is the term for the God of Christianity. Nih'ā'ça" seems to be more or less hesitatingly identified with heisanāni (our Father), the vague supreme deity above: how much Christian notions have had to do with this is not certain. By the people of the present day, Above-Nih'ā'ça" is quite frequently mentioned; but in ceremony "our Father" seems to be the name still customary. Compare in *Traditions*, op. cit., p. 16, "After this, Nih'ā'ça" lived in the sky, and was called our Father."

under ground that inhabit the water, listen, be attentive. This one standing here asks of you a name that is good. Children of all ages, young men and young women of all ages, old women and old men of all ages, all look at him. Do well to this young man, and be kind to him. He wishes to become an old man. Bāiinenā of whatever company, look at this young man. Call him Sun-child when you give him commands, when you invite him to give him food, when you look at him, when you meet him. — Sun-child you will be called. This is your name. Now take it. Rainy-mountain remains here. With Sun-child your name, go away. Father-above-white-man, you who are nailed down flat, and Father Crow, and Large-nose (thunder), and the birds, — now they have all heard it. Well, now at last, my friend, you are known.”

The following is a prayer such as might be spoken before eating.

“Our father, hear us, and our grandfather. I mention also all those that shine (the stars), the yellow day, the good wind, the good timber, and the good earth. All the animals, listen to me under the ground. Animals above ground, and water-animals, listen to me. We shall eat your remnants of food. Let them be good. Let there be long breath and life. Let the people increase, the children of all ages, the girls and the boys, and the men of all ages and the women, the old men of all ages and the old women. The food will give us strength whenever the sun runs. Listen to us, father, grandfather. We ask thought, heart, love, happiness. We are going to eat.”

When a young man desired to live to be old, he would go to an old man, especially to one of the seven men of the oldest society, and begin to cry, generally outside of his tent, perhaps at the door, perhaps by the wall of the tent where the old man's bed was. The old man would wait a long time to see if the young man was really in earnest. Then at last he would get up from his bed, and pray for him. After mentioning the beings addressed in prayer, he would say, —

" Hāyuni'çi " Four	haçoutii ridges <sup>1</sup>	hātiiteta <sup>n</sup> may you pass over,	hanaxaaha young man,
nihiiça <sup>n</sup> çi said	tc iinetcei the sprinkling (?)	bā hāeihaha <sup>n</sup> ." old men." <sup>2</sup>	

The following is a hypothetical speech of a man at the marriage of his daughter.

"I have thought of this occasion before, just as others have, since I have had a daughter. I used to plan that my daughter when married might have good land to sit on. That is what I wished for. That is why I took pains to look for a place that was good where this tent now stands. 'May my daughter live safely in this house that I am making,' I have said to myself. It is a custom for men who are fathers to welcome the son-in-law because of marriage. This young man pleases me. I am satisfied that he unites with my tent. That is why I spoke to my daughter. Now her other relatives have not come, because they live scattered and away. My son-in-law, here is your tent. This is your pipe. Here is your water and your food, together with your wife. Now eat."

The following is a hypothetical speech of the father of a young man at his marriage to a Cheyenne woman.

"My chiefs, my friends, women, I am deeply glad that you have come here on account of my son who is to marry. It is the wish of men when their sons marry, for I and my son are poor. My son has chosen well for his union. He has made his own selection. Even though the distance is great where my son will belong, nevertheless many Cheyenne are married with the Arapaho. I am glad where my son is marrying. Thanks. I say it to you, her parents, who treated me and my son well, who are people that I am fond of, who try to be agreeable. — My son, it pleases me much where you found a woman. My son, disregard it, even if there is something unpleasant for you to hear. Even if your own wife strikes you, disregard it, and even if the others say what you do not like to listen to. Where you are a servant, you must not mind it. Try hard, my son, not to become discouraged too quickly. Do not be bashful, but be kind. Do good where

<sup>1</sup> Or hills.<sup>2</sup> The members of the old society.

you are united. Whatever your father-in-law orders you to do, my son, or your mother-in-law, or your brother-in-law, do that for them. Do not go away without the consent of your wife. Do not roam about without purpose, my son, but do your best where you offered yourself as servant. In the former life of the people it was good to be a servant. If I might be young, I should be providing food for all; but what we lived on is gone. Do your best in planting, which we are shown by the whites, my son. Do whatever you are told,

and water your animals carefully. Love your wife's parents, and love her people. Be pleasant to persons who come to your tent, my son. When friends come where you are serving, they will be Cheyenne who come. When the Cheyenne arrive, say to them, 'Well, come in.' Do not be bashful, for you are now united to them. Do not scold your wife. Always treat her well and pity her. Those who try to be good are treated well and are pitied. Do your best, and do not become tired. And now look at your tent, your pipe, your food, and your friends."

Buffalo-tails mounted on a short stick, and in recent times horse-tails, are used by the Arapaho in the sweat-house to switch or whip the body. This practice seems to be in large measure ceremonial, but is no doubt founded on a practical purpose. A specimen from the northern Arapaho consists of a white horse-tail, about three feet in length, wrapped to a stick handle about an inch in diameter, by a thong painted red. A dozen long iridescent magpie-feathers are attached to this handle by red-painted thongs (Museum No.  $\frac{50}{1118}$ ). A specimen (Museum No.  $\frac{50}{52}$ ) from the southern Arapaho is a yellowish white



Fig. 103 ( $\frac{50}{52}$ ).  
Switch of Horse-  
tail. Length, 64 cm.

horse-tail or cow-tail much shorter than the preceding. It is wrapped to a thinner but longer stick handle by



twine. Another specimen (Fig. 103) is a black buffalo-tail. It is mounted on a stick about one-third of an inch in diameter and two-thirds of a foot long, apparently painted red. The skin of the tail is tightly sewed over the stick with diagonal stitches of sinew. For the upper half of the stick the tail is cut free from hair, thus forming a distinct handle: below this, the outermost hair is allowed to extend about an inch, when it is cut off. The hair under this extends to its full length, so that where the outermost hair is cut off there is a notch-like depression extending around the tail.

Screech-owls (*băăgeina*) are ghosts. When quiet or timid people die, their spirits are noisy and troublesome; but the ghosts of people who in life are loud and active are harmless after death. The property of the dead, including clothes and bedding, is burnt, as it is thought that the dead spirit will revisit the locality if this is not done. For the same reason, cedar is thrown on the fire before the relatives of the dead go to bed at night.

The rainbow is the fishing-line of the thunder for the *hiintcābiit*. Lightning is generally thought to strike in the water, being aimed at this monster. Springs are inhabited by these beings. When a spring dries up, the thunder is thought to have taken away the water-monster inhabiting it. The spring is sometimes thought to issue from the monster's mouth. Near a certain spring, numerous snakes were seen projecting their heads. Clothes and offerings were frequently tied to a tree near this spring, and people were afraid to go to it alone. The flashing of the eye of the *hiintcābiit* can be seen, especially in the morning or evening.

The Arapaho do not count the stars, as it would cause misfortune.

When there was a fog, a figure of the turtle would be drawn in the soft earth, and then beaten with a stick. "Now it is killed, the fog will clear off," it was said. The Omaha-Ponka had much the same practice. The custom is no doubt connected with the identity of the words for fog and turtle (*băăna*) in Arapaho.

The meadow-lark's song is supposed to be *hinēnitā* tcei-

taksa" ("a person is crawling toward me"). Children sometimes imitate this song, though forbidden to do so by their parents. The song of this bird is thought to be evil. Sometimes it is also interpreted as obscene.

When stories are told during winter nights, the listeners must constantly say "Hi!" to show that they are awake. If any of them fall asleep, the narrator takes a stick from the fire, and touches them with it on the finger-nail.

Men say "Haa" for yes; women, "Aa." For thanks, men say "Hahou;" women, in former times, "Hahoukac;" though at present "Hahou" is used by both sexes. "Hoi" is a more distinctly ceremonial word of thanks.

An entertainment practised at night is called "tcâoçoçihit." Two parties of men sit on opposite sides of a tent, the older being nearer the door. In the middle, at the back, sits a questioner. Between the two sides is placed food, to be consumed during the night. In front of each side, near the questioner, four sticks are set up in the ground. The questioner then states hypothetical cases of deeds of war or of generosity. These are always quite specific and detailed. The following are characteristic examples.

"Your father-in-law gave you a tent with black ornaments, and you gave him a white horse with black ears."

"You went to war, starting from such a place and going to such a one."

"While travelling, you met a friend and gave him your horse."

"When you possessed only one horse, you gave it away."

Any man who can say that he has performed the particular feat that is mentioned, speaks, and relates it at length. If this statement is accepted, a counter is put down for him. The side for which the most counters are laid down on any one question scores one point, and one of its four sticks is laid down. When all the four sticks on one side have been laid down, that side has won, and one of its old men selects four men from the other side to provide breakfast. The questioning and relating occupy the entire night. Very often a hypothetical deed is proposed which no one present has accomplished. For a

man to be accepted, it is necessary for him to have performed exactly the conditions of the case stated by the questioner: even a slight deviation in circumstances rules him out. A pipe passed around and smoked during the contest serves to cause the truth to be told. Those who are present deny or affirm a man's statements about himself. Sometimes a man when thus challenged will at once give a horse to a doubter in order to prove his manliness. At other times, statements are challenged in joke, especially between brothers-in-law.

When men dispute as to deeds of honor in war, the misunderstanding is sometimes settled by their whipping each other; the one who first becomes angry being considered unmanly (*tciinenĩnit*).

#### MODERN CEREMONIES.

Several modern ceremonies, belonging to at least two different cults, have obtained a foothold with the Arapaho; and among the people at large, especially among the younger members of the tribe, these now occupy a much larger part in their life than the virtually extinct ceremonies of the *bāyaa*"wu or the sun-dance.

The more important of these ceremonies are the result of the ghost-dance movement of fifteen years ago. This has been elaborately treated by Mooney, who has given special attention to the cult among the Arapaho.<sup>1</sup> The ghost-dance proper is no longer practised; but the beliefs of the movement have left a considerable influence on the minds of the people. A number of objects made for use in the ghost-dance at the time of greatest activity in its agitation are described in the following pages, with special reference to the symbolism shown by them. It will be seen that while this symbolism is always more or less decorative, and often so to a considerable degree, it is in most cases primarily pictographic. Many of the figures are semi-realistic, and where there is a conventionalization it is in the meaning rather than in the designs.

Many old games were revived during the ghost-dance, and assumed a religious aspect. A number of objects made for

<sup>1</sup>Fourteenth Report of the Bureau of American Ethnology.

such games, most of them more or less symbolic, are described in the following pages. Accounts of several games not particularly connected with the ghost-dance have also been included.

The so-called "crow-dance" is the dance most commonly practised by the Arapaho of to-day. It is chiefly the younger people who take part in it; but the older do not look upon it as in any way an intrusion or innovation, and give it full approval. At present the ceremony is permeated with ghost-dance ideas. Its basis seems to have been a widespread dance, half social and half religious, attributed to some of the eastern Plains tribes, usually the Omaha. At the time of the ghost-dance movement, this seems to have been taken up by certain tribes, such as the Arapaho, and to have had a lively growth under the new influences. A brief description of this ceremony is given.

Entirely distinct from the ghost-dance cult is the peyote worship. This cult rests on the mental excitement produced by the eating of a small dried cactus commonly called by the Indians "mescal," or "mescal bean," and known in literature as "mescal button" and "peyote." It is not known how accurate the latter term is, as the Aztec peyote may have been a different plant. It affects the heart, produces muscular lassitude, is a strong stimulant of the nervous system, and has a marked effect on the general feeling of the person, giving the impression of stimulating especially the intellectual faculties. In most cases it produces visions of a kaleidoscopic nature. Its emotional effect varies greatly, being in some cases depressing or intensely disagreeable; in others, which are the more frequent, producing quiet but intense exaltation. There is little subsequent reaction.

The religious ceremonies connected with this drug have been previously described by Mooney as witnessed by him among the Kiowa.<sup>1</sup> They are said to have been introduced among the Arapaho by the Kiowa. A number of young men

<sup>1</sup> J. Mooney, *The Kiowa Peyote Rite* (Am Urquell, N. S., I, 329; *Therapeutic Gazette*, Jan. 15, 1896). See, also, Prentiss and Morgan (*Therapeutic Gazette*, September, 1895, February, 1896; *Medical Record*, Aug. 22, 1896), J. Ramirez (*Anales del Inst. Med. Nac.*, Mexico, IV, 233, 1900), S. Weir Mitchell (*Brit. Med. Jour.*, December, 1896), L. Lewin (*Arch. f. Experim. Pathol. u. Pharmac.*, XXIV, 401, XXXIV, 374), A. Heffner (*ibid.*, XXXIV, 65), H. Ellis (*Contemp. Review*, January, 1898).

now follow the cult with assiduity among the Arapaho. Middle-aged men and women are not rare among the participants, but there are very few of the older men. The plant is not ordinarily eaten, even by the devotees, except during the ceremonies, which take place at irregular intervals of weeks, though sometimes it is used without any formality, as medicine.

**GHOST-DANCE. Head-dresses.**—A great many feather objects, especially head-dresses, are made by the Arapaho in connection with their ghost-dance beliefs. These, of course, resemble in certain respects the feather-work of their older tribal ceremonies, but on the whole have a distinct character of their own. The head-dresses are characterized especially by the frequent use of plumes and of hanging feathers, by a frequent and often exceedingly beautiful use of dyes obtained from the whites, and by a certain method of trimming and cutting feathers. The last two characteristics are almost wanting in the feather-work of the older ceremonies of the tribe. Eagle-feathers continue to be freely used in ghost-dance objects. The same is true of owl and hawk feathers, which occur in all classes of Arapaho decoration. It is possible that the connection believed to exist between owls and spirits of the dead contributed to the use of owl-feathers on ghost-dance objects. Crow and magpie feathers are more frequent than owl-feathers. Magpie-feathers appear not to have been more used, only because they could not be secured. Pheasant-feathers are not uncommon. Other feathers are rare. These characteristics of feather head-dresses are found also in the feather portions of other ghost-dance objects, including games.

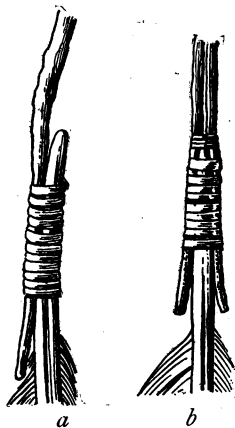


Fig. 104 (*a*, 889; *b*, 1078). Feather Attachments.

Several methods of attaching feathers to thongs are in use in such modern ceremonial ornaments. The most common is the simple laying of the end of the thong along the base of

the quill, and then wrapping them together with sinew. This is the usual method for small feathers, and it is not rare for the large ones (Fig. 104, *a*). In a few instances the base of the quill is halved or slit so that the thong fits into it: more often the base of the quill is somewhat flattened. There are a few instances of large feathers with square quills being attached to a two-strand thong. The two thongs are laid along opposite sides of the quill, and wrapped to it with sinew (Fig. 104, *b*). Again, large feathers are sometimes, though not often, attached by means of a hole made through one side of the quill, just above the base (Plate LXV). The thong enters at the cut-off end of the quill, and passes out of this hole. It is then either knotted so that it cannot slip back (1), or laid

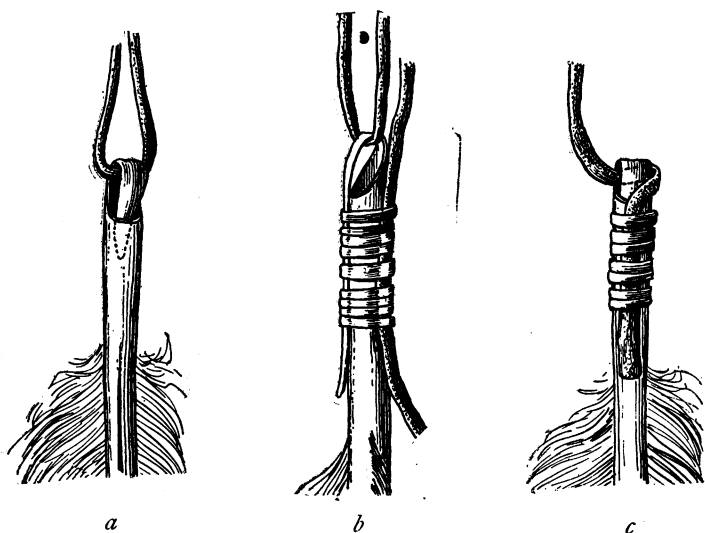


Fig. 105 (*a*, 88a; *b*, 88b; *c*, 116). Feather Attachments.

along the quill and wrapped to it (2), or brought back to itself and there tied (3). A variation of this method of piercing the quill is to pass the thong through two holes made into the quill on opposite sides (4). This practice seems to be followed chiefly with feathers the butt-ends of whose quills have been shortened by wear or accident. A third method is the well-

known one of bringing the end of the quill back on itself, thus forming a loop through which the thong passes (Fig. 105). This is done in two ways, in each of which the end of the quill is cut down to a comparatively narrow strip. According to the first method, this narrow strip is simply inserted in the quill (*a*), which may in addition be bound with sinew. According to the second method, it is laid against the outside of the quill, and then wrapped to it with sinew (*b*). A variation, consisting of a combination of this method and of wrapping the thong to the quill, is shown in *c*.

A combination of methods of attachment is shown in Fig. 106. One feather is attached to a thong by being wrapped to it. The end of the quill is split, whether with intent or not is not clear, and the thong is almost enclosed by it. Over the same thong is looped the narrow end of the quill of another feather inserted in itself. Wrappings on both feathers hold the bases of dyed plumes decorating the lower portions of the two feathers.

The ghost-dance head-dresses of the Arapaho are principally of the following types.

Dyed plumes mounted on small sticks inserted in the quill, and worn upright at the back of the head, constitute one type. Occasionally they are fastened to the hair by a thong attached to the stick, but more usually the stick is pointed, and simply stuck into the hair. It seems that the wearing of head-dresses of this type was associated with the expected return of the dead. These were usually thought to be wearing such head-dresses; and a spirit as opposed to a living person is often represented on ghost-dance pictographs by a human figure with an upright feather at the back of the head. In most cases the head-dresses of the present type contain a number of plumes, often of different colors. They are attached to the stick on which they are mounted by having

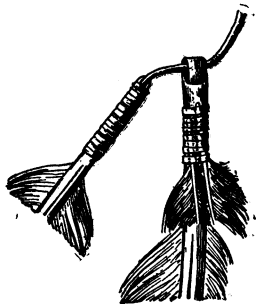


Fig. 106 ( $\frac{100}{100}$ ). Combination Feather Attachment.

the base of the quill wrapped to it with sinew. The feathers at the upper end of the stick are attached first; and those below successively overlap the wrapping of those above, so that nothing is visible in the head-dress but the downy feathers and the pointed end of the stick. Usually these head-dresses are erect and slender; occasionally, as in Fig. 1, Plate LXVI, they are fuller. In a few cases a wrapping of a string of beads covers the sinew wrapping at the base. Sometimes small feathers of different character are attached to the base of a head-dress. Fig. 2, Plate LXVI, shows a head-dress consisting of purplish-blue plumes. At the base are three small black feathers covering the wrapping of the plume. Fig. 3, Plate LXVII, shows a head-dress of the present type with a thong for fastening it to the hair. This head-dress is also unusual in having few feathers, so that the stick on which they are mounted is visible, and in the fact that the top of the lower plume is tied to the stick with the bottom of the upper feather, whereas ordinarily the plumes are fastened only at the base. Fig. 3, Plate LXVI, shows a form lacking any unusual characteristics. The plumes at the base are bright red; those above, white. The feathers in Fig. 1, Plate LXVI, are light-colored plumes dyed in soft shades of light red, blue, yellow, and green, which blend with very beautiful effect. At the base is a black plume.

A second type of head-dress characteristic of the ghost-dance consists essentially of several feathers, usually of crows, mounted upright on a pointed stick, and in part cut away to the quill. The lower part of the vanes may be cut off entirely, or only in parts. The uppermost portion of the vanes is in all cases left on the quill. Sometimes the lower portion of the vanes is not entirely removed, and the quill is slit, so that the lower part of the quill stands up, while the two vanes fall downward, giving the feather a slashed effect. This general method of cutting and trimming feathers is not confined to crow and magpie feathers, nor to this specific type of head-dress, but occurs also in hanging head-dresses and in other feather objects. In such other objects, short hanging crow-feathers are often cut off across their ends; but this mutila-





FIG. 107 ( $\frac{50}{831}$ ). Ghost-dance Head-dress.  
Length, 45 cm.

tion is found also in certain of the older tribal regalia. In the case of the upright head-dresses under present consideration, the black feathers are usually rubbed over with red paint. In order to keep the upright feathers apart, the end of the stick, or, in longer head-dresses, several portions, swell into a sort of head, around which, or just below which, the feathers are fastened with sinew wrapping. The swelling of the stick gives the feathers an inclination to separate from one another. The head-dresses of this type are usually worn by the leaders of the ceremony.

Fig. 107 shows one of seven head-dresses of this type made, together with seven painted shirts or dresses, by Sitting Bull, the most influential Arapaho ghost-dance apostle. The stick on which the feathers are mounted has three successive knobs or swellings, at each of which upright feathers are attached. There are four medium-sized feathers in the lowest of these tiers or circles, three medium-sized feathers in the second, and four long and two short feathers in the uppermost tier. All the feathers are cut into the vane in two, three, or four places on both sides of the quill, and are more or less reddened with paint.

Fig. 3, Plate LXVIII, shows a simpler head-dress. From the end of the stick rise four feathers entirely trimmed away, except for the tip. Even the quill has been mostly cut away, and barely enough left to enable the feather to stand without drooping. The interior side of the four cut quills is painted respectively blue, red, yellow, and green. The remaining portions of the vanes are reddened. In the middle of the top of the stick is set a small black wing-feather, which appears to have been nearly cut in two, but is not cut away.

Fig. 1, Plate LXVII, shows a similar head-dress, in which both feather and quill have been cut away still more than in the last piece, so that nothing remains of the quill but a thin strip resembling whalebone. The inner side of these strips of quill is painted red. At the mounting of the four trimmed feathers, blue and yellow plumes are inserted. The four black tops are reddened with paint.

Fig. 108 shows a simple head-dress somewhat resembling

the multiple crow-feather head-dress just described. It consists of a single brownish feather mounted on a stick which appears to be inserted in the end of the quill; and the vanes are cut away, except at the top. At the mounting, three small hawk-feathers are wrapped on with sinew.

A third type of upright head-dress consists of a pair of long narrow feathers mounted on a stick. Occasionally, single feathers of this character are thus treated, and sometimes three feathers are mounted together. The favorite feather for this type of head-dress is the long tail-feather of the magpie. The feathers are usually ornamented either at the base or at the tip, or in both places. The ornamentation is usually dyed plumes, which are either fastened to the feather with cement, or, at the base, are included in the wrapping of the feather. Fig. 1, Plate LXIX, shows a typical head-dress of this type. It consists of two magpie-feathers and a few small orange-yellow plumes. Another specimen (part of Museum set Nos.  $\frac{50}{102}$ — $\frac{50}{112}$ ) consists of a single magpie-feather mounted on a stick without any adornment. Fig. 2, Plate LXIX, shows, a three-feathered form of this type of head-dress. The feathers in this case are of a pheasant. They are ornamented just below their pointed tips with red plumes, and at their bases with a pair of small black-and-white woodpecker-feathers.



Fig. 108  
( $\frac{50}{112}$ ).  
Upright Feather Head-dress. Length, 24.5 cm.

Another type of head-dress that is common consists of a cross of stiff skin either painted, or covered with bead-work, and in most cases with a hanging attachment of feathers or embroidered strings. Plate LXX shows one form, the use and symbolism of which are described in another place in connection with the remaining objects obtained from its owner. Fig. 138, and Fig. 1, Plate LXXI, show two other cross head-dresses, which, like the last, form part of a larger group of objects, in connection with which they, also, are more fully described. Fig. 2, Plate LXXI, shows a somewhat different

form of these head-dresses. The skin is in the shape of a simple cross, without appreciable taper towards the middle, and is covered with bead-work instead of painting. The feather attachments, which are more elaborate than in the preceding cases, consist of two eagle-feathers, along the quill of each of which is tied a strip of skin completely wrapped with red, yellow, and green quill-work. The feathers are tipped with red plumes, and attached to the middle of the cross by strings of red beads. The four ends of the cross are also tipped with red plumes. Like the preceding piece, this specimen also forms part of a group, the pieces accompanying it being a whistle, and pendants for tying the hair (Museum No.  $\frac{5}{114}$ , b, c), which are described elsewhere.

In the collection is another bead-covered cross (Museum No.  $\frac{5}{109}$ ) with slight taper towards the middle of the arms. The beading is red, except that at the ends of the arms there are four small lines of blue beads. From the centre of the cross hang the usual attachments, which in this case consist of five thin thongs wrapped with red quill-work. On each thong are five places where blue quill-work replaces the red. Pendants of this nature occur on ghost-dance head-dresses of other types; and similar pendants are found in regalia of the older tribal ceremonial organizations, as in the whistle ornaments of the ghost-dance.

Specimen Museum No.  $\frac{5}{93}$  is a Maltese cross of painted rawhide, resembling the body of the piece shown in Plate LXX in having the centre of the cross circular. Half of this cross, including one entire arm and half of the adjacent arms, is painted green; the other half, red. These colors represent respectively sky and earth. The whole cross is the morning star. A white eagle-feather hangs from the end of one arm. Such attachment of feathers to the ends of the arms seems usual in painted crosses, whereas beaded crosses ordinarily have the attachments made to the middle. The white feather is painted in part with red and green. A narrow strip on each side of the lower part of the quill is reddened; beyond this there is a narrow green stripe on each side of the quill to the tip of the feather, where the green area

spreads out fan-shaped. A red and a dark band pass transversely across the feather near this end.

Another type of head-dress somewhat resembles the beaded cross head-dresses, but replaces the cross with the figure of a bird. Fig. 109 shows such a head-dress, which, like the cross head-dresses, is worn attached by thongs at the back or side of the head. The bird—which probably represents the crow, or perhaps the thunder-bird—is covered with blue beading. From the centre of its body issues a thong to which is attached a feather, apparently of a hawk. The base of this feather is covered with a piece of bird-skin, apparently from the head or neck of a duck.

Specimen Museum No.  $\frac{5}{8}$  0, a, is a similar piece. The figure of the bird is somewhat smaller than in the last specimen, and is covered with blue beads with a crescent of red, green, and yellow beads at the centre of its body. Two black feathers, ornamented at their bases with red-dyed plumes, hang from this crescent ornament.

Still another type of head-dress resembling the cross and bird head-dresses—in that its body is of wood or skin, and its feathers are primarily attachments to this—consists of a small ring or hoop. Usually these rings are covered with bead-work of one color, and have four small areas of another color on them. They are also traversed by two bisecting strings of sinew. Feathers may be attached at the four colored spots, or at the bisection of the strings. These head-dresses represent the sacred tribal wheels and the game-wheels used by the Arapaho. The symbolism of the sacred wheels—which refers to the world, the snake, and other ideas—is therefore more or less transferred to them. Fig. 111 shows such a head-dress, one of a pair which are more fully commented upon elsewhere. Another such object is shown attached to the crow belt shown in Plate LXXIV. A third piece approximating this



Fig. 109 ( $\frac{5}{8}$  0,  $\delta$ ).  
Head-dress representing a Bird.  
Length, 26 cm.

type is shown in Fig. 110, one of a set of ghost-dance objects. It consists of a small hoop wrapped with a dark-green thong.

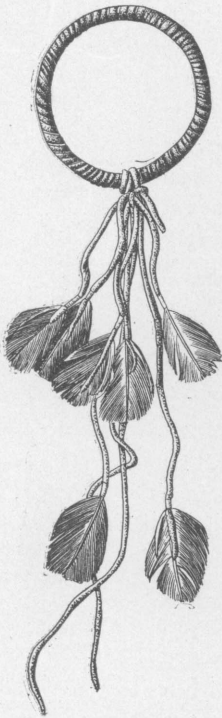


Fig. 110 ( $\frac{50}{100}$ ). Head-ornament used in the Ghost-dance. Length, 22 cm.

From the hoop hang, by yellow-painted thongs, five tips of black feathers, and by longer thongs (which are yellow, green, and red), two other such feather-tips. Two still longer thongs probably serve to fasten the ornament to the head. A fourth piece, resembling the last, has been illustrated in Fig. 3, Plate VI.

A somewhat divergent type of head-dress is shown in Fig. 112. A hoop of rawhide is covered on one side only with blue beads. From it hang two strings of blue beads and two twists of brown fur, which appear to have been partly painted green. This head-dress, like the ordinary head-dress, is worn attached by two thongs.



Fig. 111 ( $\frac{50}{100}$ ,  $\frac{1}{2}$ ). Head-ornament used in the Ghost-dance. Length, 19 cm.

A type of ghost-dance

head-dress different from all the preceding, in that it is a realistic representation instead of a merely symbolic ornament, consists of a small bow and arrows, usually ornamented with feathers. Such a head-dress (forming part of a larger group of objects belonging to one man, and described elsewhere) is shown in Fig. 113. The bow is painted red on one edge, green on the other, and dark green on the outer side: the inner side is half green, half yellow. Two arrows are tied to the middle of the bow. These are carved so as to show triangular feathering and a notch at the end. The forward

half of each arrow is yellow; the rear half, dark green. The arrows are tied against the bow, so that their yellow halves are near the green portion of the inside of the bow, their green



Fig. 112  
(320).  
Head - ornament  
used in  
Ghost-dance.  
Length, 21 cm.

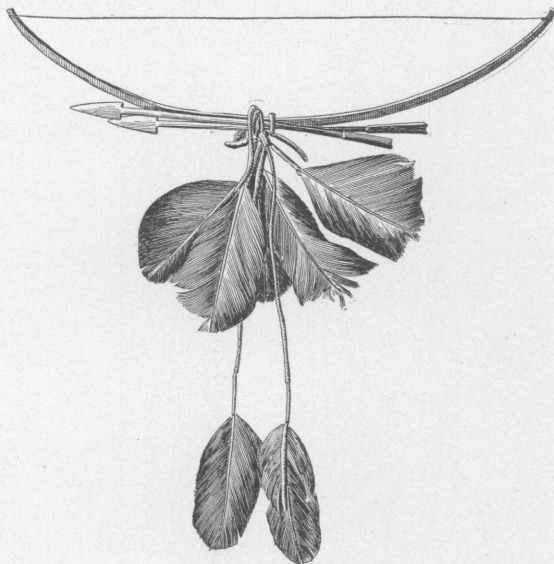


Fig. 113 (<sup>50</sup>/<sub>113, a</sub>). Head-dress of Small Bow and Arrows. Length  
of bow, 23 cm.

halves along the yellow portion of the bow. Seven short crow-feathers hang from thongs at the place where the arrows are tied to the bow. Five of these thongs are short, two are considerably longer, so that the feathers at their ends fall below the others. Two additional thongs fastened at the same place serve to tie the head-dress to the hair. This arrangement of seven small black feathers on thongs of unequal length occurs on another object belonging to the same owner (Fig. 110), described under the hoop form of head-dress.

Other head-dresses consist of combinations of two or more of the types described. Fig. 114 shows such a specimen. It consists of two magpie-feathers mounted on a stick, of a hoop head-dress with four quill-covered pendants, and of a miniature bow and arrows. The entire object is profusely ornamented

with green and yellow quill wrapping and with green, yellow, and red plumes. The bow is painted green, as are the two arrows, which are feathered with trimmed magpie-feathers.



Fig. 114 ( $\frac{50}{312}$ ). Head-dress with Wheel and Bow. Length, 75 cm.

One arrow is blunt as if for play, the other pointed. These two arrows are said to represent the sun; the quilled pendants, rain. Such head-dresses as this are worn upright at the back of the head, the hoop and bow hanging from the lower part of the upright head-dress. This object belonged to the same person who owned the specimens Museum Nos.

$\frac{50}{312} - \frac{50}{316}$

A head-dress similar to the last specimen is Museum No.  $\frac{50}{125}$ . It lacks the bow and arrows of the last piece, but has the pair of mounted magpie-feathers ornamented along the shaft with a strip of quill-work, and the quill-covered hoop, from which hang quill-covered pendants. At the ends of these pendants are feathers. The quill-work on the magpie-feathers is alternately red and yellow. At the base of the feathers are red plumes; at their tips, blue plumes. The ring is half red and half yellow. From it

hang, besides a single plume, five thin thongs completely wrapped with quill-work. Four areas of the quill covering of each of these thongs are red, and three black. At the end of each thong is an iridescent black magpie-feather, at the base of which are red and yellow plume-feathers. The yellow quill-work on this double head-dress is said to represent the earth, more, perhaps, because it occurs on the circular hoop than on account of its color. The red denotes people; the blue, the sky. The feathers represent birds.

Another form of head-dress consists of a pair of hanging eagle-feathers. This type has already been met with as a



constituent of the cross head-dress. Fig. 115 shows such a head-dress taken from a group of ghost-dance objects. The feathers are nearly perfectly white eagle-feathers somewhat stained with paint, which may not have been intentional. They are tied together by a thong passing through the loop formed by the trimmed end of the quill doubled, and inserted into itself. Like most other head-dresses of this class, this one is worn hanging from the back of the head.

Fig. 116 is a head-dress accompanying the feathered belt or scarf shown in Plate LXXIII. It is a spotted eagle-feather more or less stained with red, and tipped, at the end and at a short distance below the end, with yellow down attached to the feather with red cement. Contrary to the most common usage, this feather lacks any thong for attachment. A little of the feathering is removed on one side of the base, and the end of the quill is sharpened, so that it seems to have been intended to have been stuck into the hair.

Head-dresses consisting of entire or partial bird-skins are not rare. There

Fig. 115 ( $\frac{50}{102}$ ). Simple Head-dress of Feathers. Length, 29 cm.

Fig. 116 ( $\frac{50}{121}$ ,  $\frac{5}{8}$ ). Feather worn in the Hair. Length, 34 cm.

are two such skins — one an entire crow-skin, the other a partial one — in the set of the ghost-dance objects (Museum Nos.  $\frac{50}{102}$  —  $\frac{50}{112}$ ). Specimen No.  $\frac{50}{98}$  is another crow-skin,

kept wrapped in red flannel. The eyes have been painted red. It is not certain whether or not this bird-skin was removed from its red-flannel wrapping when worn. Two ends of thong attached at the neck of the bird serve to fasten the head-dress to the back of the dancer's head. Plate LXXII shows a head-dress consisting of a black and a red bird-skin tied breast to breast. The birds appear to be a black-bird and a tanager. This head-dress is also worn fastened to the hair by two thongs.

Specimen Museum No.  $\frac{50}{622}$  is a head-dress belonging to the class of bead-covered rawhide head-dresses with attached feathers, but cannot be included under the related types of cross, bird, and hoop head-dresses. It is a crescent forming the greater part of a circle, with its ends downward. Half of the crescent is beaded yellow, and half light blue. Red and yellow plumes are attached respectively to the blue and yellow ends of the crescent, and from the middle there rise larger red, green, and yellow plumes. This form of head-dress does not seem to be common.

One of the simplest forms consists of a number of hanging feathers. These are usually wrapped with sinew against thongs, the thongs knotted together, and two of them extended beyond the rest; or perhaps, more frequently, two additional thongs are inserted for tying the head-dress to the scalp-lock or to the hair at the side of the head.

Specimen Museum No.  $\frac{5}{6}$  is such a head-dress, consisting of twenty-four iridescent magpie-feathers, some of them being the long tail-feathers of the bird. There is also attached a black-and-white eagle or hawk feather. This specimen was secured for the Museum by Rev. W. C. Roe, and, according to the information given him, was worn in war to turn away the enemy's missiles. It thus appears that this form of head-dress is not especially associated with the ghost-dance movement.

Fig. 117 shows another such head-dress, consisting of twelve crow-feathers, the number being determined by the number of feathers in the bird's tail. The thongs and sinew wrappings are painted red. The thongs are knotted together into a round lump of considerable mass. This feature is often found

on head-dresses of this type, including those used in the peyote worship.

This simple form of ghost-dance head-dress, the hanging

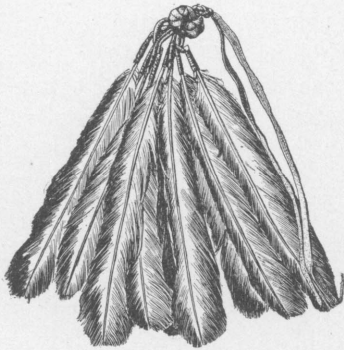


Fig. 117 ( $\frac{5}{9}$ ). Head-dress of Crow-feathers.  
Length, 22 cm.

bunch of feathers, does not occur among the regalia of the Arapaho tribal ceremonial organization, just as another common form—the thick bunch of feathers worn upright on the head among the Shoshoneans, the Californians, and other Indians

—is lacking altogether among the Arapaho. The bunch of hanging feathers is a frequent head-dress in the Arapaho peyote ceremony. The peyote head-dresses, however, differ from those of the ghost and crow dance in being smaller, and from other species of birds.

An unusual form of head-dress, worn by a boy, is shown in Fig. 118. It consists of a long tuft of twisted white hair from a cow's tail, representing a snake. At the top are attached two brass clock-wheels, the larger flat one representing the sun, and the other, it is said, food.

Specimen Museum No.  $\frac{5}{114}$ , c, is a pair of hair-ornaments, each consisting of two thongs painted red, ornamented about the middle with red, white, and green quill wrapping, and divided each at the lower end into four fringes. These hair-ties form a group with a feather-ornamented whistle and the cross head-dress shown in Fig. 2, Plate LXXI.

Fig. 119 shows a flat piece of bone used as a base for an upright feather arising from one of the deer-tail head-dresses of familiar type. The bone is cut into the shape



Fig. 118 ( $\frac{5}{92}$ ). Head-dress of Unusual Form.  
Length, 32 cm.

of a woman. Several holes in the face indicate spots of paint.

A number of head-dresses and other objects of wear made in connection with the ghost-dance, and kept together by one man, who was also the owner of the painted tent described below, comprise the following: a shell gorget (called "beii," or



Fig. 119 ( $\frac{50}{88}$ ).  
A Piece of Bone  
from a Head-dress.  
Length, 13.5 cm.

"moon-shell," when the Indians speak English) representing a part of the buffalo's throat, and hence the buffalo (Fig. 120); an entire crow-skin worn tied to the back of the head; another crow-skin, split, and lacking the head, similarly worn; knee-bands of bells; armlets of porcupine-quills; a pair of white feathers of the bald eagle; a head-dress (Fig. 115); a head-dress of four upright trimmed black feathers, to be worn by the leaders in the dance (Plate LXVIII); a long single-mounted magpie tail-feather; four upright plume head-dresses of the type first described; a miniature bow and arrow head-dress (Fig. 113), to be worn by a drummer; the hoop head-dress of Fig. 110.

*Feather Necklaces and Belts.*—Necklaces and belts or scarfs ornamented with feathers were frequently made in connection with the ghost-dance movement. With but few exceptions, these consist of a two-strand twisted cord of skin or cloth to which are attached numerous feathers ornamented at the base or tip with the usual dyed plumes or hair. In one specimen in the Museum a single partly twisted strand of fur is used; in another, a somewhat wider flat strip of otter-skin; and in one case the feathers are attached to the two edges of a silk handkerchief folded diagonally.

A necklace or scarf consisting of two black-painted thongs twisted together, to which crow-feathers and four eagle-feathers are tied by red-painted thongs, is shown in Plate LXXIII. The crow-feathers are ornamented at the base by red plumes; two of the black-and-white eagle-feathers have green plumes at the base; and all four have red plumes at the ends. The white portion of these eagle-feathers has been rubbed with

red paint. All four of them are much worn, especially along one side. To each of the thongs, from which hangs an eagle-feather, are attached four other thongs, at the ends of which are crow-feathers without plume ornamentation. It was stated that each of these eagle-feathers, with its four crow-feathers, represented five successive lives or worlds, the eagle-feather being the last.

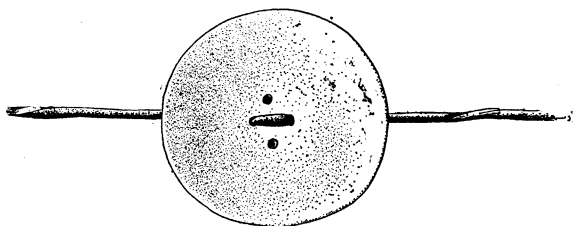


Fig. 120 ( $\frac{5}{9}\frac{0}{2}$ ). A Gorget of Shell. Diameter, 6 cm.

Specimen Museum No.  $\frac{5}{9}\frac{0}{2}$ , *a*, was said to have been worn as a scarf over one shoulder. Its body consists of a cord of two strands of twisted red calico. The pendant attachments are in part weasel-tails more or less ornamented with red and purple and green plumes, and long tufts of green horse-tail ornamented with red and blue plumes. One yellow tuft of hair is ornamented with green and purple. A number of small belts are also attached to the scarf. The fur and other pendants were said to represent people in the new world. The green of the horsehair tufts denoted the earth, the yellow the sky.

Specimen Museum No.  $\frac{5}{3}\frac{0}{4}$ , altogether about three feet long, seems to have been intended primarily for wear from the back of the head, but resembles the scarfs. It consists of a cord of two strands of twisted black silk, from which hang five bunches of black-and-white magpie-feathers and two bunches of black crow or magpie feathers. From one end hang three pheasant-feathers and a white weasel-skin. Near the middle is attached a small rawhide cross, about an inch in size, wrapped with red, white, and blue quills. This was also worn separately as a head-dress, being tied to the hair by two thongs.

Specimen Museum No.  $\frac{50}{408}$  is one of the largest of these feathered scarfs. The feathers are attached by thongs to two cords of braided rawhide. One half of these two rawhide ropes is painted red; the other half, green. According to customary ghost-dance symbolism, these represent earth and sky. The feathers attached to the two halves of the scarf are dyed red and green to accord with the color of the rawhide braid to which they are fastened. The green-dyed feathers are adorned with green plumes at the base, and yellow at the tip. In the middle, at the junction of the red and green halves of the scarf, is a red ribbon, an eagle-feather dyed purple and ornamented with yellow plumes at the base and tip, a long grayish-white feather dyed yellow and tipped with a red plume, and five red-tipped black feathers attached to green thongs. At one end of the scarf a somewhat similar bunch of pendants consisting of a gray-and-white feather dyed yellow and of four red-tipped black feathers, is attached to the scarf by green thongs. The opposite red end of the scarf shows no such attachments; but this half of the scarf has fastened to it, at some distance from the end, a single yellow-tipped white feather. About two dozen small brass bells are attached to this scarf in addition to the feathers. These bells were said to represent hail. The red covering of the feathers on the scarf denoted the sun; the yellow, the water of a lake in the world to be.

Specimen Museum No.  $\frac{50}{106}$  is an unusually graceful necklace of black-and-white magpie-feathers ornamented with orange, green, and yellow plumes of delicate shades. The body of the necklace is a light-brown fur somewhat twisted, and lightly painted red. The two ends of this hang down for nearly a foot beyond where they are joined. From the point of the junction there hangs also a bunch of six black-and-white magpie-feathers without colored plumes, together with a fringe of green thongs.

Specimen Museum No.  $\frac{50}{40}$  consists of feathers hanging from a strip of otter-skin about an inch wide. The bare side of the skin is painted yellow. From the hair side proceed thongs to which black feathers are attached, for the most part in pairs. These feathers are ornamented with red plumes at

the base and with yellow plumes at the tip. At one end of the piece there is a length of more than a foot of twisted otter-skin without any feather attachments.

The one scarf or belt consisting of feathers attached along the two outer edges of a folded silk handkerchief contains crow, magpie, pheasant, hawk or owl, and perhaps other feathers, dyed red, yellow and green, and ornamented at the base with red, yellow, or green plumes. The plumes are always of a different color from the feather to which they are attached. The feathers are tied to the handkerchief with red thongs.

A necklace of rabbit feet and feathers (specimen Museum No.  $\frac{5}{330}$ ) was worn during the ghost-dance or crow-dance to prevent the dancer from becoming tired. Similar rabbit-foot charms seem to be sometimes put on horses to enable them to run better. An additional motive for the selection of rabbits' feet in this case was the fact that the Piute originator of the ghost-dance movement was reported to the Arapaho to live largely on rabbits.

*Crow Belts.*—The most conspicuous pieces worn in the crow-dance are common to the Arapaho and to almost all of the Plains tribes. They consist of a belt from which hang two long and sometimes wide strips of skin ornamented with feathers, paintings, and sometimes bells. These strips fall from the back of the waist of the dancer nearly to the ground. At the upper part of the back of the belt there is a piece of rawhide, usually cut into the shape of a bird. This serves to give support to various ornaments. The most conspicuous and frequent of these are two projecting arms attached to thongs which are drawn through the rawhide, and which, being pulled tight and knotted behind, cause the ornaments to stand out horizontally, at right angles from the rest of the piece. Sometimes a row of feathers between these two arms is made to project in a similar manner. As the crow-dance belts are worn, these projecting ornaments stand out from the back below the waist in a very striking manner. It will be seen that, while these specimens are nominally belts, they actually ornament only the lower part of the wearer's rear.

A specimen of this class, which was made by the owner as

the result of his belief that he visited the sky as a "shadow," and was there instructed to make the belt, is shown in Plate LXXIV. The two hanging strips of skin which form the body of the specimen are together somewhat over a foot in width. The one on the left is painted yellow; the one on the right, red. To each strip are attached four rows of about four plumes each, alternating with rows of about four tufts of wool. These plumes and tufts of wool are wrapped with sinew to thongs passing through the skin, and knotted on the other side. The plumes and wool are dyed yellow and red to accord with the painting of the skin to which they are attached. Halfway down the length of the strip of skin, a skin fringe is sewed on. To this skin are attached two horizontal rows of small bells. The lower ends of the two strips are also fringed, and just above the fringe are ornamented with horizontal stripes of blue, red, and yellow bead-work. The yellow and red ground-color of the two strips has been painted over with six wavy vertical lines extending the length of each strip, and applied in a more intense shade of the color of the background. In addition, two red horizontal crescents are painted on the yellow strip, two black ones on the red strip. The backs of the two strips are painted over very lightly with red and yellow. On the yellow side of the back are painted four black and three red crescents; on the red strip, four red and three black crescents.

The piece of rawhide at the top has in this specimen been cut into the shape of the upper part of an eagle. It is pierced with many small holes, and is edged with red, blue, and yellow beading. The body of the bird below the wings has not been represented, and almost all there is of it projects above the two hanging strips. To the eye of this rawhide figure of a bird is attached a small head-dress, probably usually removed from this belt, and tied to the wearer's hair. This head-dress consists of a bunch of half a dozen crow-feathers that have been rubbed with red paint. These feathers have been slit in the customary ghost-dance style, so that the quill remains bare, except at the tip; while the lower part of the feather, much slashed, remains hanging loose at the base of the quill.

The two projecting arms are in this specimen made of wire



entirely wrapped with bead-work, — red on the right arm, and blue on the left. At the base of each arm are a few owl-feathers cut like the crow-feathers just described, and dyed respectively red and yellow on the right and left arms. At the outer end of each wire arm is a black feather trimmed so as to resemble the vane of a two-feathered arrow. At the base, this feather is ornamented with yellow-dyed plumes; at its tip, with a tuft of dyed wool wrapped to the pared quill with sinew. Between the two projecting arms are six large eagle-feathers, each attached to thongs passing through the rawhide. The base of the quills of these feathers is wrapped with yellow ribbon, from under which hangs a red ribbon several inches in length. The tips of the six feathers are ornamented with yellow-dyed plumes fastened to the feather with cement; while a few inches below, a red plume is similarly fastened. As the specimen is worn, these six feathers project at an angle downward. Under their bases is a large braid of grass, apparently the sweet-grass used for incense. Below the sweet-grass are two rows of hawk or owl feathers partly trimmed from the quill. They are dyed red and yellow to accord with the side of the piece to which they are fastened. Just above the six large feathers there are attached two rawhide horns painted black. These also project from the piece, much as did the two arms and the row of feathers.

The belt-straps of this specimen are formed by a strip of skin little more than an inch in width, which is fastened by thongs to the back of the rawhide bird. This belt is ornamented with vertical strips of blue, red, and yellow bead-work, in several places with bells, and with several bunches of crow-feathers hanging from thongs a few inches in length. These crow-feathers have had the upper half cut off. From one of the belt-straps hangs a small ring wrapped with red quill-work. In two opposite places, yellow wrapping replaces the red on the ring; and in two other places, also diametrically opposed, there is blue quill-work. These four points are connected by strings. From the intersection of these strings hangs a long thong wrapped in three places with red quill-work. It is possible that this small hoop was intended to be

detached from the belt on certain occasions, and worn as a head-dress.

The symbolism of this piece is the following. The entire object represents the thunder-bird. The six eagle-feathers projecting from the lower part of the rawhide figure are to be considered as its tail. The two bead-covered projecting attachments are lightning: they also represent arrows, as indicated by the feathering at their end. The two black horns of rawhide indicate buffalo, and therefore subsistence. The yellow strip of skin denotes life in heaven; the red one, life on earth. The blue, red, and yellow stripes of bead-work on the lower ends of the main skin-strips and on the belt-straps represent the rainbow. The ceremony in which these pieces are worn, not only refers to the thunder, but is sometimes called "rain-dance." The owl-feathers at the base of the two projections denote ghosts, which owls are supposed to be. Their trimming, which leaves only the tip of the feather on the quill, was said to represent arrow-feathering. The numerous small holes in the rawhide bird represent the metallic sheen of the thunder-bird. The red and yellow ribbons at the bases of the eagle-feathers are flashes of lightning. The bells on the specimen represent thundering, and, as they are round, hail. The red crescent denotes the sun; the black, the moon. The small hoop attached to the belt-strap represents the sacred wheel. The entire object is called *niihina"ka* ("bird-tail" or "eagle-tail").

Accompanying this specimen is a head-dress, the body of which consists of a wooden arrow with a barbed point and a wooden representation of feathering (Fig. 121). Three feathers appear to have been represented; only two now remain. The shaft of the arrow is wrapped with a string of red beads on sinew. At the base of the wooden feathering, bits of plumes dyed dark blue are attached by sinew wrapping. The shaft is painted red; the point, dark green or black; and the feathering, red on one side and dark green on the other. At the end of the wooden feathering an eagle-feather is attached by a string. This string passes through the doubled quill. The lower portion of the feather

is notched. This arrow is worn as a head-dress with the point downward. It represents the thunder's arrow, — lightning. The eagle-feather and bits of plume were interpreted as arrow-feathering; the red beads were said to represent each a person; and the string along the wooden feathering, serving as a means of attachment for the hanging eagle-feather, was said to be the course of the owner, or of his prayer to heaven before he predicted rain.

Another crow belt (Museum No.  $\frac{50}{38}$ ) is green on one side, yellow on the other. The green represents the earth; the yellow, the sky. The feathers attached to each side are dyed in the same color, and the belt strips are painted in the same color as the hanging strips. From the middle of the top, where a magpie-skin lacking the head is attached over the red-painted figure of a bird, there hang two long thin strips of skin, one green, and one yellow. In addition there are two yellow ribbons. From the sides of the red figure of the bird a red line extends on each side down to the lower end of the specimen. The two ornaments made to stand out from the uppermost piece have for their main part an eagle wing-feather, the quill of which has a wrapping of porcupine-work laid over it and tied on. Small bells are strung along the back of the feather. At the base of the eagle wing-feather, where this is apparently stiffened by the insertion of a stick into the quill and by wrapping with thong, about eight feathers, apparently of an owl, are attached. The quills of these have been split to the base.



Fig. 121 ( $\frac{50}{38}$ , c). Head-dress resembling an Arrow. Length of arrow, 28.5 cm.

These feathers are attached by reducing the base of the quill to a flat strip, bending this around the thong and back upon the entire quill above, where it is fastened by a wrapping of sinew. These owl-feathers are dyed respectively green and yellow on the two sides. Where the projecting ornaments which they encircle are attached, small five-pointed stars of rawhide intervene between the body of the piece and the ornaments. At the top of the back is a piece of rawhide cut out into the shape of a bird, presumably the thunder-bird. This piece is attached so that, when the specimen is worn, it is entirely hidden from view, except for the head of the bird, which projects above the top of the soft skin of which the main portion of the specimen consists. This head is painted with red and green vertical stripes. When the specimen is spread out so that the belt-straps are horizontal, the entire piece resembles in outline a bird; the head being made by the head of this bird-form piece of rawhide; the wings, by the fringed and pointed belt-straps; and the tail, by the two long feathered hanging strips. On the back of these two main strips of skin are painted irregular dots of green and yellow. The green dots are on that one of the two strips which in front is yellow, and *vice versa*. With the yellow dots are a few in light blue. This specimen was obtained by Rev. W. C. Roe.

A simpler piece (Museum No.  $\frac{5}{8}$ ), obtained by the Rev. Mr. Roe, lacks the rawhide figure of a bird at the top of the back. Instead, there is a rectangular piece of stiff rawhide doubled on itself, from the lower part of which two triangular pieces have been cut, giving the whole piece the angular outline of the body, wings, and tail of a bird. While no information was obtained as to the symbolism of this specimen, it seems very probable that this piece of hide represented a bird to its maker. Through the upper part of this hide is passed a horizontal stick to support the entire specimen. The soft skin forming the body of the specimen appears to have been painted over very lightly in green. The uppermost portion of this soft skin, about where it covers the stiff rawhide, is painted green more distinctly. In this green area is a dark-blue horizontal crescent. On each of the two hanging strips

of the soft skin is painted a long dark-blue arrow, the point upward. The back or inside of the soft skin is roughly painted dark blue. The feather ornamentation of this piece consists principally of pheasant-feathers, which are attached in five or six horizontal tiers of about five feathers each. These pheasant-feathers have been lightly dyed blue. The uppermost tier of feathers is, as usual, attached to a strip of skin distinct from the body of the piece, and shows some tendency to stand out at an angle. The feathers are all attached by the method of turning the quill upon itself over a thong, and have small red-dyed plumes fastened to their bases by the same sinew wrapping which holds the doubled-over end of the quill. A few pheasant-feathers are also attached to the belt-straps. They are fastened to bunches of short thongs, which are tied into one knot. The two stiff projecting ornaments are in appearance quite different from the customary form, in that they consist of slender rods covered with rabbit-skin. The interior of these rods, however, appears to be nothing but a long eagle wing-feather which has been folded closely around its quill; so that actually the usual type is adhered to. The ends of these projecting ornaments are tipped with bunches of red-dyed plumes, and at the base each ornament is encircled by owl or hawk feathers dyed green. These have been cut off square at the ends, and the entire lower portion of each feather has been slit from the quill on each side, remaining attached only at the base.

Specimen Museum No.  $\frac{50}{298}$  is made of cloth instead of deer-skin, and is somewhat smaller and simpler than the preceding pieces. It is entirely supported by a square piece of rawhide doubled upon itself over a horizontal stick at the top. From each side of this hangs a comparatively narrow strip of blue-edged red cloth to which are attached six eagle-feathers in pairs. Just above the place where these two hanging strips are fastened to the rawhide, are the two projecting attachments, which, in this piece also, consist essentially of a long eagle wing-feather. Over the front of this a smaller feather, apparently also from an eagle-wing, has been laid: along the under side of the quill there is a strip of red and black quill-

wrapped rawhide. Four or five small brass bells are attached to a string running along the feather and this quilled strip. At the base, each of the two eagle wing-feathers is encircled by about eight owl or hawk feathers dyed green. The quills of these have been slit, so that the body of the feather hangs loosely in two portions from the base; only the quill itself, with the small tip, remaining stiff. The belt-straps consist of a woven woollen band the middle of which has been tied to the rawhide backing. At the middle of the front of this rawhide is attached a bird-skin, apparently of a hawk, so that it comes between the pairs of projecting ornaments and hanging strips. Below this, from the middle of the lower part of the rawhide square, hangs an ornament roughly resembling the head-dresses worn in the second dance of the ceremonial series. It is a trapezoidal piece of skin doubled on itself, in one end of which are inserted five eagle-feathers. It seems probable that this piece is also a head-dress, and has been attached here for safe-keeping.

*Women's Dresses.* — A woman's deerskin dress made for the ghost-dance, and seen among the southern Arapaho in 1899, was painted over from the waist up. The ground-color of the painting was blue. Across the dress were two rows of thirteen suns (yellow circles), and, below these, two rows of seven large morning-star crosses. These crosses were yellow with red edges. The back of the dress showed the same painting. For the middle star of the upper row on the front of the dress was substituted a large red crescent moon: the corresponding place on the back of the dress was filled with a figure of the thunder-bird (also in red), four red lightning-marks proceeding from its eyes to the side of the dress.

A little girl's buckskin dress ornamented with beads, painted with symbolic designs, in accordance with several dreams, by a young man who was her relative, is shown in Plate LXXV. Over the shoulders of the dress, on the part of it that is worn highest, is painted the thunder-bird, with lightning issuing from its eye. In the middle of one side of the dress is painted a large red Maltese cross, the morning star. The ends of this cross are green. This green denotes the freshness of the new

world to be. Below one shoulder is a buffalo, the means of subsistence; below the other shoulder, a magpie in green. Flanking the morning-star cross are black trapezoidal figures, the familiar *hiiteni* life-symbols. A figure of a turtle below the cross refers to the origin of the earth. The turtle is painted in a grayish-blue intended to give the effect of fog or mist, the word for turtle (*bääna*) being the same as that for fog. Other figures on this side of the dress are a five-pointed star and the new moon. At the bottom of the dress, a green strip represents the earth in spring. A symbol of a tree with leaves represents a deciduous tree, no doubt the cottonwood, with fresh leaves. The rainbow is represented by an arch of colored bands. A dark cloud is enclosed by it. Another figure of the thunder-bird and of the lightning issuing from it symbolizes early summer, the time of the first thunderstorm.

On the opposite side of this dress there are pictures of the turtle, of two pipes, of two buffalo, and of the crow, the messenger and guide to the new world. A red sun below refers to the new sun that will be. The bottom of the dress is painted dark blue, which indicates the sky, as the corresponding green band on the opposite side indicates the earth. Above this blue are painted two cedar-trees, indicated by tree-symbols without leaves.

To the shoulders, front, and back, are attached several small representations of the netted hoop-wheel used as a game, and more or less revived at the time of the ghost-dance.

Another painted deerskin ghost-dance dress for a girl was obtained, with information as to its symbolism, by Rev. W. C. Roe. The symbolic decoration is the following: On one side (Plate LXXVI), below the throat, a Maltese-cross morning star in green; five five-pointed stars on each side; below these, two figures of crows or magpies (to judge from the painting, the former); — below a horizontal beaded band (which is decorative), in the centre, a pipe, bowl down; on the two sides, a red sun and a buffalo; — at the waist, a crow and three small solid circles representing the heated stones used in the sweat-house to produce steam; below, two crows, a tent, and two trees. The symbolism on the other side

(Plate LXXVII) is the following: A hollow circle below the throat is the full moon; a half-circle in green, below this, the new moon;—to the sides, stars, and crows or magpies; below, two sweat-house stones and (a small solid oval with a line at one end) a buffalo seen from above;—at the bottom, a turtle, a tent, a red semicircle denoting a sweat-house, and a high quadrilateral representing a mountain. Down the shoulders is a stripe of bead-work. Under this on each side, and for the greater part covered by it, is a circle, said to represent the game-wheel, but resembling the usual symbols for the sacred hoop-wheel. The game-wheel, however, is itself regarded at times as a symbol of the latter.

In the Museum collection is a painted canvas tent (No.  $\frac{50}{411}$ ) ornamented in accordance with a dream, and used for the crow-dance. It is decorated as follows: The upper part of the tent is painted green as far down as the ears or upper flaps extend. The lower border of the tent, for about four feet up from the ground, is also painted green. The green area at the top is bordered by a red line; the one below, by an orange line. Down the front of the tent, where the two edges are joined when it is erected, is an orange border. On the sides and back of the tent are five red stripes, each about a foot wide, extending vertically from the upper green portion of the tent to the lower green portion. These red stripes have each seven blue circles painted in outline upon them, and, like the two orange stripes down the front of the tent, are edged with blue.

The door of this tent has painted on it a green bird, apparently a crow. The heart of this bird is represented in yellow, and from it a yellow line issues through the mouth of the bird, and upward to the edge of the door. Under the bird is a figure of a buffalo in green; and beyond this, outside of the hoop forming the frame of the door, is a drawing in outline of a rider with bow and arrow, apparently pursuing the buffalo. At the two corners of the door and in the middle of it, between the crow and the buffalo, there are attached a few crow-feathers and small bells; at one place on the side, a few crow-feathers.



A large number of crow and some magpie feathers have been tied into bunches for attachment to this tent. The wooden pins used for fastening the front of the tent together are painted red, and ornamented with small black feathers wrapped by their bases to the wood in two places near one end. One of these pins is painted green instead of red.

*Drums and Accessories.* — Fig. 122 shows a hand drum. It is somewhat more than a foot across. It consists of a circular piece of skin stretched over one edge of a hoop of wood, and brought around over its other edge. The hoop is

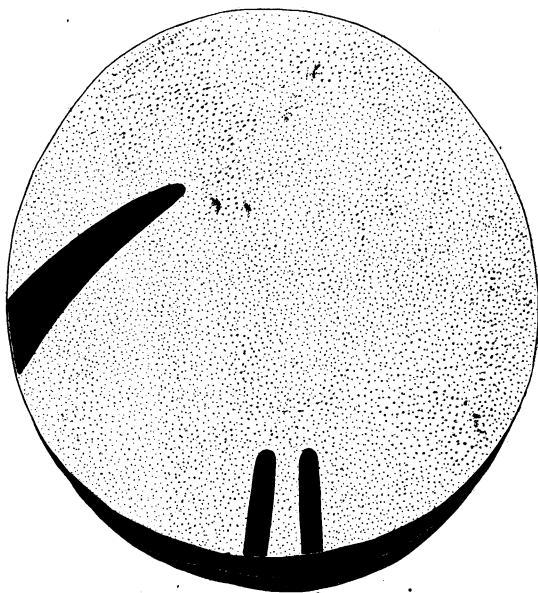


Fig. 122 ( $\frac{89}{97}$ ). A Hand Drum. Diameter, 41 cm.

pierced with holes an inch or more apart; and a thong passing through these and the skin on the inside and outside of the hoop stretches the drum. From four opposite points of the hoop, on the back or bottom, thongs extend toward the centre, where they are fastened together and wrapped with cloth, to afford a handle. This bottom, or inside of the drum, is said to resemble the sacred wheel, because this is also crossed by

two bisecting strings. The inside of the hoop itself is painted dark green. The under side of the skin is painted red. The inside of the drum is called hää"tetc ("the ocean"). The upper side, which is shown in the figure, is also painted red, and is said to represent the sun. A large black figure denotes a buffalo-horn; two smaller black marks, about the size of fingers, represent man and woman.

Fig. 123 shows one of four sticks used to suspend a large drum. The painted ends of the sticks are stuck in the ground,



Fig. 123 ( $\frac{5}{8}$  in., a). Forked Support for a Large Drum. Length, 86 cm.

and the drum is hung from the forks at the top. Two of the sticks are painted yellow at the bottom, and two black. The forks at the top of the sticks are so that one branch comes at almost right angles to the straight stem, which gives



Fig. 124 ( $\frac{1}{8}$  in.). A Drum-Stick. Length, 59 cm.

the entire stick the characteristic shape of the

Plains pipe. The sticks are therefore said to be pipes. The squarely cut ends of the transverse branches are painted red to represent red catlinite. Of the colors with which the sticks are painted, black represents night; yellow, daylight; and green, the earth. Near their upper part the sticks are wound with transparent beads, said to indicate the sun. Eagle, magpie, and other feathers are also tied to them near the top. These

refer to people sitting closely around the drum when it is beaten. The eagle-feathers on each stick (one or two), perhaps through association of the eagle with the thunder-bird, were said to represent clouds.

An object very similar to that in Fig. 129, but quite different from it in use, is shown in Fig. 124. The present piece was obtained from a northern Arapaho, and is a drumstick. The wooden handle is uncovered or unornamented; but the stuffed head is of green-painted skin with a black eagle (quill-embroidered) on one side and a white one on the other, very similar to the crows on the head of specimen Fig. 129. The drumsticks of the Arapaho are not often as thickly padded as this piece, and are not usually ornamented. Sometimes an entirely bare stick is used, and sometimes a stick with a few turns of skin wrapped around one end.

*Whistles.* — Wooden whistles were made in connection with the ghost and crow dance. The whistles typical of the older tribal ceremonies are of bone, often ornamented with a partial wrapping of blue beads, and usually they have no feathers, other than a single projecting plume, attached to them. The ghost-dance whistles are of wood, considerably larger, painted, often carved in relief or outline, and ornamented with pendant feathers at the end.

Fig. 125 represents a whistle, carved, painted, and decorated

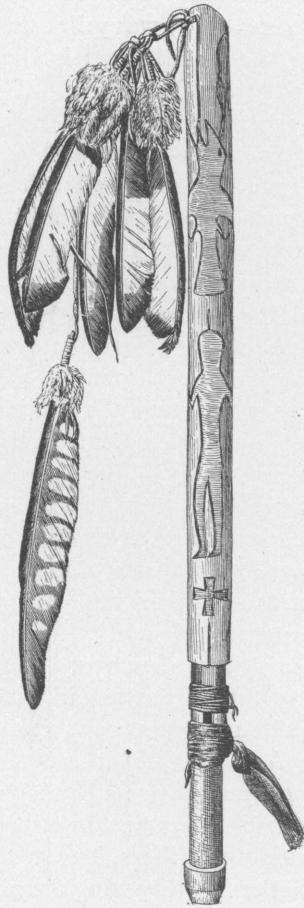


Fig. 125 ( $\frac{59}{100}$ ). A Carved Wooden Whistle. Length, 48 cm.

with feathers. The carvings consist of a cross, which is as usual the morning star, a vertical line from it representing its course as it rises; above it, the figure of a person with a red upright head-feather, representing the sun; above this, the thunder-bird. A straight line issuing from its mouth represents rain; wavy lines are lightning. Of the colors painted on the whistle, red is the blood of humanity, blue the sky, and green the earth. The black and white of the magpie-feathers attached to the whistle represent clouds; and small plumes dyed red, and attached to these feathers, represent lightning. Of the feathers on the whistle, those of the magpie refer to the thunder-bird, on account of the swift flight of this bird. The use of a primary wing-feather of this bird further refers to the flight of the thunder-bird. The blowing of the whistle when it is used represents thunder.

Another whistle of wood (Museum No.  $\frac{50}{880}$ ), painted green, is ornamented along the upper side by a straight line which runs the length of the piece, and has been painted red and blue. On the other side of the whistle are four zigzag incised lines. The lines are symbols of roads. Around the end of the whistle is a strip of otter-skin. From this hang an eagle-feather (stained reddish at the base, and ornamented there with a blue plume), a small barred feather, a few small trimmed iridescent magpie-feathers much worn, a thong ornamented with three small wrappings of red quills, and four thongs each ornamented with quill-work of one color, and tipped at the end with a feather or plume. Two of these quilled thongs are white, one yellow, and one red.

A whistle (Museum No.  $\frac{50}{114}$ , *b*) forms part of a set that includes the cross head-dress shown in Fig. 2, Plate LXXI, and a pair of hair-ties described elsewhere. This whistle is smaller than the others, free from carving, painted red, and ornamented with a single large eagle-feather from which a large section has been roughly cut on one side.

*Objects carried in the Hand.* — Figs. 1 and 2, Plate LXXVIII, represent two ceremonial whips or wands used in the ghost-dance or crow-dance. It will be seen that they resemble somewhat the kakaox, or swords (Fig. 56), of the first of the tribal

series of ceremonies. The flat sides of the wands are carved in low relief, and the incisions are painted. One wand (Fig. 1, Plate LXXVIII) shows on one side a figure representing a "shadow," or spirit. He wears an upright head-dress at the back of his head. Above him is a crescent moon from which grows a cottonwood-tree. This side of the wand is red; the incised lines and areas, mainly blue and black. On the other side of the wand, which is black, is a cedar-tree in red. The other piece (Fig. 2) is black on both sides. It shows on one side two red circles, the sun, towards each of which are directed five or six parallel blue lines, *kakaŭgetca*<sup>n</sup> ("thoughts" or "wishes"). Between the two circles are a red and a blue line, just failing to meet. On the other side are incised similar lines at each end, directed toward a crow and a Maltese-cross morning star, between which is a single line. All the carvings on this side of the wand are red.

From the end of the first wand hang two eagle wing-feathers, a long thong with a yellow-dyed plume, a short thong with a yellow plume, short red and yellow ribbons attached to the bases of the eagle-feathers, a bunch of small bells, and below these a bunch of pheasant and black magpie feathers. The attachments at the end of the other piece are similar. They consist of two eagle wing-feathers with red and yellow ribbons at the base, two long red ribbons, a long thong at the end of which is a red-dyed plume, a bunch of bells, and below this a bunch of about fifteen black-and-white magpie-feathers dyed red.

At the handles of the two wands there are also feather attachments: these are attached to a skin cover slipped over the handle. A few feathers are attached at the forward end of this cover. The hind end falls in a streamer of some length, to which feathers are attached that are lashed with sinew wrapping to thongs passing through the skin, and knotted behind. The first wand has at the forward end of the handle two thongs, ten small crow or magpie feathers, and two tufts of green-dyed horsehair. The skin hanging from the handle is painted dark blue, and ten or a dozen green-dyed feathers are fastened to it. The second wand has at one end of the handle-cover three large white feathers trimmed to the quill

along the lower half of their length, and ornamented with yellow and green dyed plumes wrapped to the quill with sinew. The hanging skin-strip is painted red; from it hang about ten red-dyed feathers; and at the end a bit of blue ribbon and a small purple-dyed plume.

Fig. 126 shows a form of quirt more or less typical of the ghost-dance. As in most Indian whips, the handle is much more prominent than the whip itself. In ceremonial whips such as this, the handle is of course by far the most important

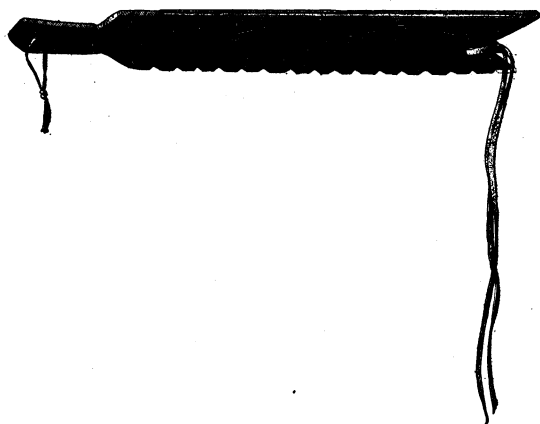


Fig. 126 ( $\frac{3}{8}$ ). A Quirt used in the Ghost-dance. Total length, 98 cm.

portion. This piece suggests the feathered board wands carried by the dancers of the two highest degrees in the first of the series of tribal ceremonies. Such imitations were not rare. The black sword (Fig. 56) described in connection with the regalia of this first dance is actually a ghost-dance model made in imitation of the proper regalia.

The present piece has a different handle. The body is a board about three inches wide and a foot and a half long. The end has one large notch. One edge is grooved, the other notched. The whip proper consists of a thong passed through a hole in the board near the large notch at the end, and then passed twice through a split in itself; so that both ends, which are of equal length, hang loose. The board portion of the implement is painted red on both sides. On one side there is

at the bottom a somewhat irregular area adjoining the handle, which is painted black. This represents a cloud. From this issue three wavy incised lines, two painted black and one yellow, which extend to the opposite end of the board. These are lightning-symbols. On the opposite side of the quirt is a large cross painted black, at the foot of which are several irregular and, in part, bifurcated lines. This pictograph represents the Christian cross with grass growing at its base. Along one edge of the board are notches, which were called both "teeth" and "steps to the sky." A yellow-painted groove along the opposite edge was called a "lightning-flash." The relation of quirts of this type to the feathered wands of the tribal ceremonies is made still clearer by the fact that the owner of this piece stated that an eagle wing-feather should be tied to the end of the implement.

A quirt (Museum No.  $\frac{50}{312}$ ) has a twisted wooden handle, two leather thongs as whip, and a beaded loop of skin to pass around the wrist. The stick is painted red, with green lines following its spiral twist. The red represents lightning; and the green, clouds. The bead-work on the loop is chiefly white, and represents snow. Small ornaments on this are stars. Triangular figures in black, blue, and red beading, represent the sky and clouds. The blue is the sky; the red, the evening sky; and the black around the outside of the triangle, clouds.

A fan of brown hawk-feathers (Museum No.  $\frac{50}{323}$ ) used at the crow-dance and on similar occasions is made of eight feathers set into a trapezoidal piece of rawhide bent on itself, recalling the construction of the upright head-dresses used in the biita-ha"wu dance. This piece of rawhide forms the handle of the fan. It is covered with soft skin painted red, is embroidered with beads, and is slit into a short fringe above. From the bottom a few longer thongs hang down; at the ends of these thongs are a few white beads. The bead-work on both sides of the handle is approximately heart-shaped. On the back it is light blue with a red-and-white border. In the centre is a dark-blue Maltese cross. On the front is a light-blue area in which there are represented in dark-blue beads a bird and two small crosses. Across the breast of the bird is a crescent of red

beads, the ends of the crescent pointing downward. From the lower end of the handle there hang, besides the half-dozen thongs mentioned, two spotted eagle-feathers ornamented at the base with bits of red and yellow ribbon. The edge of one of these feathers is cut into notches a few inches up from its base. The heart-shaped figures of bead-work are said to represent the heart. The bird is said to be the crow. The crosses are no doubt the morning star. The thongs are said to represent rain; and the white beads at their ends, hail.

Hand mirrors, usually mounted in carved wooden frames, are used by the Arapaho, as by the Assiniboiné and by other Plains tribes, in connection with the ceremonials that have

originated in recent times from or as the Omaha, crow, or grass dance, and which also received new impetus at the time of the ghost-dance. A southern Arapaho specimen obtained by Rev. W. C. Roe is shown in Fig. 127. The wooden frame has much the shape of a bootjack. A circular mirror about three inches in diameter occupies the middle of the side not shown in the illustration. Two areas, one circular and one crescentic, are cut through the wood. The mirror and the round hole represent the sun; the crescent, the moon. From the hole a wavy incised line painted green issues, passes by the side of the mirror, and thence in an irregular course down one of the forked ends of the piece. Below the mirror, a Maltese cross is cut in low relief, and painted yellow. This is the inevitable morning star. Between each two of its arms, two or three lines radiate, no doubt indicating its shining. Along the edge of the inside of the fork, on one side only, is an incised



Fig. 127 ( $\frac{50}{8}$ ).  
Wooden Frame for a  
Mirror. Length, 45  
cm.; width, 11 cm.

line painted yellow, the end of which touches the morning-star figure. This line is the path of the morning star. On the opposite side of the object, which is the one shown in the illustration, is a heavy incised line painted white, and nearly



surrounding the crescentic portion cut out of the wood. From one horn of this surrounding crescentic line a smaller wavy, somewhat irregular line, painted white and green, extends diagonally a short distance downward. On the opposite side of this crescentic figure the two lines do not quite meet. One of them ends in an incised line painted blue and extending down the entire length of the following edge. This is the course of the moon. Roughly parallel to this green line, but wavy instead of straight, is an unpainted line, which touches the end of an arm of a human figure in the centre of the board. This human figure, which is in low relief and painted red, represents the owner of the implement; and the line in contact with the end of his arm is the path of his life. The figure holds in the other outstretched arm a pipe with bowl upward, and on its head is a green-painted symbol representing a cedar-branch worn on the head. Along one edge of the piece are a number of notches, painted green and representing steps to heaven. From the top of the frame hang two ribbons and two strips of white fur, apparently of a horse. These, perhaps, are substitutes for weasel-skins.

A feathered stick (Plate LXXIX), *xawaa*<sup>n</sup>, — used in the crow-dance as a signal to start the dance, and stuck into the ground in the intervals between dances, — is covered with skin painted blue or green to represent the sky. The magpie, and, perhaps, crow feathers fastened to it, are people dancing. Dyed bits of plumes and feathers, attached to the ends of the feathers, represent the head-dresses worn by the dancers. Small bells attached at each end of the stick are breath or shouting (*niitouhuut*). The feathers are attached by thongs passing through a pair of small holes in the skin, and knotted. One end of the thong hangs free, the other is lashed to the quill of a feather by a wrapping of sinew.

An interesting cane was obtained among the southern Arapaho (Museum No.  $\frac{50}{745}$ ). It is said to have been carved in accordance with a vision, and it is therefore probably more or less connected with the ghost-dance. It does not seem to have had any special purpose, or to have been used only on certain occasions, but to have been carried whenever

there was suitable opportunity, as at gatherings or dances. At such times, it was said to have been generally repainted. At the top of the cane is a brass cap, and from this hang a number of magpie and other feathers. These are the only ornaments of the stick, other than the carving. The lower third of the cane is carved with four parallel lines winding in a spiral six times around the stick. These are said to represent lightning. Above these spiral lines are two figures of fish, on opposite sides of the cane, so arranged that the tips of their fins and tails are in contact. This arrangement holds also for the figures on the remainder of the cane, which are always in pairs that are in contact. Above the fish come deer-heads without horns, representing does; and above these, in relief, is a plain band about an inch in width. Next follow deer-heads with double-branching horns, kit-foxes, deer-heads with once-branched horns, and again kit-foxes. The feathers hanging from the top of the stick are said to denote people and clouds.

Forked sticks of some length, pointed at the bottom, are used in the crow, and perhaps in the ghost, dance to take meat from kettles. Two specimens from the northern Arapaho are in the Museum. One of these (Museum No.  $108\frac{2}{3}$ ) is higher than a man, and it is wrapped for the greater part of its length with woolly buffalo-skin. Near the point of the fork, and at each of the ends of the fork, an eagle-feather is attached by a yellow thong. The white portion of these feathers is stained somewhat yellow. The three feathers are tipped with red plumes attached with brown cement. From one end of the fork there hangs also a tuft of green-dyed horsehair; from the other, green and red horsehair. Near the lower end, the stick is wrapped with blue cloth instead of with buffalo-hair. At each end of this cloth-wrapped portion of the stick are tufts of red-dyed horsehair. The very lowest end of the stick is painted yellow.

Fig. 128 shows a fork of about half the length of the preceding. The stick is painted orange-yellow, and about the middle, including the entire length of the shorter prong, is wrapped with light-blue beads. Yellow and green bands on this light-blue ground-color are said to denote songs. From

each end of the fork hang two brown-and-white hawk or eagle feathers tipped with unusually long tufts of light-blue hair.

Fig. 129 shows an implement used in the ghost-dance, apparently to aid in the act of hypnotization of the dancer. It consists of a longer and a shorter stick enclosed in a single covering of skin, which holds them together, and forms a joint where the ends of the two sticks meet. At the opposite end of the smaller stick, the skin covering is stuffed to form a head for the implement. It is said that when the object is held at the joint, and a dancer is tapped over the body with it, it makes him dizzy. From the lower end of the specimen hang a few strips of skin. The skin covering is painted dark green. On each side of the head is embroidered a rude representation of a crow. On one side, this embroidery is red for the head and body, and white for the tail and wings. On the opposite side of the head, the two colors are reversed.

*Model of Sacred Pipe.* — Fig. 130 shows a wooden model of the sacred tribal flat pipe with accompaniments, as it was seen in a dream by the maker, and made by him in connection with the ghost-dance. This man, though elderly, had never seen the sacred pipe itself, as he is a southern Arapaho: con-



Fig. 128 (1882). Pointed Stick used in serving Meat. Length, 95 cm.

sequently his pipe differs materially from the actual sacred pipe, which is tubular. On one side of the present pipe is carved a turtle; on the other, a duck. These two animals were the ones that dived for the earth under the direction of "our father," who, with the pipe, at first existed alone. According to the present informant, the duck dived first, but failed to reach the earth at the bottom. The father then called it in his thoughts to the small spot of land on which he was. The duck was the first being to place its foot on this. After this, the turtle dived, and brought back a little mud in its claws. On the same sides of the pipe on which are the figures of the duck and turtle there are also carved small triangles, and, issuing from each of these, a carved line painted in different colors in various parts of its length. The triangles are hearts; and the lines, thoughts (*kakaûçetcana*<sup>n</sup>). Near the mouth-end of the pipe there is attached a bunch of feathers and a china gorget (*bēii*). As the pipe is ordinarily held, this is in front of the smoker's throat. The feathers are from crows, ducks, and geese. The crow is one of the sacred birds of the ghost-dance; the duck is connected with the sacred pipe; and of the geese it is said, that, at the beginning of the world, they flew about looking for land on which to settle, to which action there is also a reference in the sun-dance.

With the pipe are four flat sticks, each somewhat over a foot in length and an inch in width. These are painted, covered with incised carvings, and the incisions are also painted. The pipe is carried in the hand during the ghost-dance, with two of the sticks (which are green) held alongside of it, and the two others (which are red) outside of these. The pictographic carving on both sides of the four sticks is interpreted from below upwards, on each stick, in the following order: —

At the bottom of the first stick (Fig. 1, Plate LXXX) is a picture of the father who directed the duck and the turtle to dive. Following him are figures of the duck and the turtle, and then of a person representing mankind. Above him is



Fig. 129  
(114).  
Hypnotiz-  
ing Wand.  
Length, 43  
cm.

the crow, then there is a rosebush (yēiniici), the first plant on earth.

On the opposite side of this stick is represented the sacred tribal pipe. A black oblong figure is the life-symbol, hiiteni. Then follows niihi ("bird," or sometimes specifically "eagle").

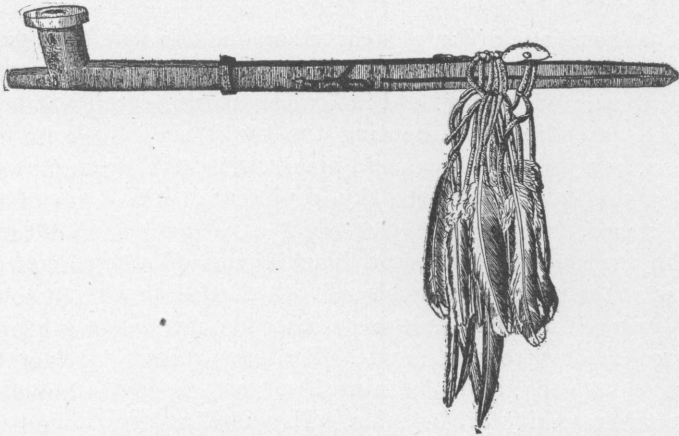


Fig. 130 ( $\frac{59}{7}$ , a), Model of the Sacred Tribal Flat Pipe. Length, 39 cm.

On another stick (Fig. 2) are two figures of women, one yellow and the other red, praying while holding shinny-sticks. A green oblong figure represents the earth; the birds are crows; and a green-triangle in a black rectangle is a woman's heart. A woman's figure in green and yellow represents the mythical character Whirlwind-Woman, who assisted in the making of the earth. Above her are four lines of different colors, — black, yellow, green, white, representing four winds; and a black area at the end of the stick denotes the sky.

On the other side of this stick are represented successively a person; a tent; a buffalo, signifying the sun-dance; a white buffalo, signifying the women's buffalo-dance; a magpie; a crow; a spirit, literally, shadow (bātāāçā<sup>n</sup>), wearing an upright bow at the back of his head in place of the ordinary feather; and a black heart (denoting sleep and dreams) in a green rectangle.

The third stick (Fig. 1, Plate LXXXI) shows in sequence the moon; a bird painted red; a black tent, supposed to be in the sky; a person, denoting mankind; a bow and arrow; the

moon; the morning star and a line from it, which denotes its course as it rises. The first moon is circular; the second, an inverted crescent.

The opposite side of this stick is green, and denotes the earth. There is painted on it a yellow arrow, the means of subsistence.

The fourth stick (Fig. 2) is carved on one side with the figures successively of a weasel; a cedar, which is used for incense; a bird painted yellow, and indicating paint; a yellow and a green wavy line, representing the bird's sight (*çana*<sup>n</sup>); the moon, represented by a solid black circle; the stars, indicated by small dots; and the sky, represented by a rectangular black area.

On the opposite side is a black figure of a pipe. Seven holes at the upper end of this side of the stick denote the seven old men. This side of the stick has a number of notches drawn transversely across it. Some of these pass entirely across the stick, and are painted so as to be red and white; but the majority are smaller. The notches denote lapse of time, — the larger ones, the time of which there is knowledge; and the more numerous ones, the time previous. It does not appear that the notches were intended to represent years or other definite periods. The total number on the stick is a hundred and ninety; but the maker was under the impression that the number was larger.

The owner of this model of the sacred pipe possessed also a guessing-game set with numerous accompanying head-dresses (partly shown in Fig. 1, Plate LXIX; Fig. 1, Plate LXXI; and Fig. 138) and the ceremonial quirt of Fig. 126.

The following is an approximate translation of a prayer addressed to this model of the sacred pipe by its owner's wife on parting with it: —

"Through reverence I have never given you up. I have kept you pure. I have prayed to you. I wish to live in happiness while the sun travels and runs. I wish for long breath while the tent stands fast. I went with you, and you went before me. Pity me, with my dear children and the man, my husband, who lives with me. I know it will be a good and

safe place where you will be, my grandfather. My father, we part from you that it may be good. Remember us. Every morning we will be poor. It is not we who give you up, it is our father. From this time on there may be long life, and a tent, and happiness, and a good heart, until the time made by our father for meeting again with all my children and my relatives, when they will smile on account of the food, and as they meet one another and are together. We have told of your directions to us that are powerful and above us. Pity us, and let the way we travel on the earth be clear, and let it be smooth before our walking. May our life be good and easy during the day; let sickness be far away. This person [the interpreter] who is serving, may he travel where it is good during the day, and sleep at night. I ask this for him. Your body is going away with this white man. Thanks. It is well. I think of you, and shall never forget your purposes and your instructions, my grandfather. My father, it is well. I am glad for food and clothing and horses of different colors. Thanks. I say to you, Pity us. Do not forget us, for I with my children am poor. I do not think too much of myself, therefore I pray to you. Thanks, thanks, my grandfather and my father. During day and night a lasting life — that I ask of you."

THE CROW-DANCE. — The following is an account of part of a crow-dance seen in September, 1899, among the southern Arapaho.

The dance was held in a confined camp-circle near the north fork of the Canadian River. The dancing-place was in the middle of this camp-circle, the ground of which was not quite level. Two or three sides of the dancing-place were surrounded by shelters of sticks and canvas. The old and middle-aged men sat on the west; the dancers, to the south and the north of the dancing-place, spectators standing behind them. At the eastern end was the drum. Here there were four women who acted as servants for the dance. Most of the women were on the eastern side of the dancing-place. The songs were comparatively short, and the intermissions at first of some length, especially when horses were given away, or announce-

ments made. Toward the end of the dancing, however, late in the afternoon, the intermissions grew shorter and shorter. The dancing did not begin until about the middle of the afternoon, and lasted perhaps three hours. The drum hung over four sticks; and about eight men sat crowded closely together around it, singing, and all beating it in unison, with sticks the ends of which were wrapped with cloth. In beating the drum, they moved their entire body. Their singing was in the throat, but very much constrained, and without an attempt at producing a clear sound. As is customary, they also did not sing loudly. They looked either at the drum, or straight in front of them, without watching the dancing. The drummers were all comparatively young men. The drumming and singing for each dance began low. As the drumming rose in volume, the dancers got up from their places.

The dancers were very variously dressed. Some of them wore crow-tails, and others had other feather ornaments. Some were entirely naked, except for a breech-cloth; but these generally carried something in their hands. Knee-bands with rattles, and especially with bells, were worn by many. A large proportion carried ceremonial objects of some kind. One man was painted entirely red over the body; some, yellow; some, chiefly black. One man had hand-marks in red and black slapped over his body. One man was painted black on one side and yellow on the other; another, red above, and blue below. The painting was quite different from the sun-dance painting in its general lack of character. Every man dressed differently, apparently merely following his choice; and there was an almost equal difference in the painting and in the dance-steps.

The dancers moved about at random and irregularly within the square dancing-space, passing one another in all directions. Some of the dancers moved rather violently; others, rather slowly and quietly. The only feature common to the dancing of all was the double-step, with a greater or less forward inclination of the body, familiar from Indian dances. The degree of this inclination and of the gesticulation varied in great measure with the rapidity of the songs and drumming. The



arms were carried at pleasure. A middle-aged man who was regarded as the best dancer was one of the most sedate, and his dancing differed less from ordinary walking than that of the others. He put down his foot almost flat, and raised it only slightly at the heel for the second part of the step, but then set it down on the ground with great tension and some tremor. Some men swung their feet, and others shuffled them; some, after putting the foot down, merely raised themselves on the toe for the second part of the step. The women danced much more slowly and heavily than the men; the second part of each dance-step being only a sinking-down of the body on the foot. One old woman, however, raised her feet, and skipped along with a little swing.

After a few songs, horses were led into the dancing-place, all of them loaded with property. A crier, who wore a sort of flag as blanket, called out the names of the recipients, who received a stick from the donor. In some cases, the horse was not actually brought to the dancing-place. The recipient then thanked the donor and his wife, or, if it was a woman, her and her husband or her children, by passing his hand down in front of their foreheads and faces. Sometimes the donor was kissed, and occasionally embraced. After this, the recipient went back to his place among the spectators. Several old women, after receiving gifts, stood up in the dancing-place, and sang. Many of the horses were given away for ear-piercing or hair-cutting performed on children. The children were brought in and the motions of piercing the ear were gone through with a stick; but the piercing was not actually done until subsequently. The man to do the piercing stood before the drum, facing it, and told a war-story, generally in a low voice, but with gestures. At the mention of the deed, the drum was struck sharply two or four times, and the women cried "Niiiii!" Young men who had not been to war, and were given a horse for piercing a child's ear, got an older man to count coup for them, and subsequently gave him some of the property received with the horse. One young man changed his name. As he stood at the western end of the open place, facing westward, an old man stood behind him, and spoke

loudly for some time, part of his speech being a war-experience. One man gave a horse and buggy for the ear-piercing of a grandchild only a few days old. Three visiting northern Arapaho from Wyoming received many gifts, especially of money, in order to enable them to return home. When the crier himself received a stick indicating the gift of a horse, and called out "Hahou" (thanks), there was a general laugh. Most of the horses brought into the dancing-place to be given away were painted in yellow with spots on the shoulders, a stripe down the back and sometimes across the hind quarters, a circle around the eye, and with the mane and tail yellowed. A few horses of dark color were painted in green.

Within the dancing-place were three poles to which flags were fastened. The middle of these was a favorite place for middle-aged and old women to stand and cry, raising their right hand. The crying was ceremonial, resembling a chant. A Cheyenne woman provided food for all the dancers and spectators, and, in return, property was contributed for her. She received several large bundles of calico and blankets. Altogether, about forty horses were given away. The four women who acted as servants for the dance sometimes drove away the dogs that found their way to the dancing-place.

Toward the end of the afternoon there were several more special dances, — one for food, another with bows and arrows, and a third with spoons. A kettle of food was brought in. The front row of people around the dancing-place rose and danced in their places, thus forming a hollow square. Then three or four crow tail-pieces were laid on the ground to the north and south. At the east, four men stood up in front of the drum, and danced standing there. About ten men got up on the northern and southern sides of the dancing-place, facing each other. These two bodies danced standing. Then each body followed one or two leaders, turning about. Three or four of the leaders took up the crow tail-pieces, and put them on. The singing now became much faster and more excited. The two groups now danced around the dancing-place to meet each other. On coming together, the leaders of each line would recoil somewhat, and make a gesture, whereupon the two lines

would pass each other. At the western end of the dancing-place, one of the lines passed outside of the other. At the eastern end, where they met again in the same way, the outside line would pass inside. This was done four times. After this, the two lines formed at the north and south again, still dancing. Two of the dancers now brought the kettle into the middle. Both the lines now advanced toward it, stretching out their arms, and returned four times. The fifth time they made a rush, and all dipped their fingers into it. Thereupon they returned to their seats. It seems that in this action the dancers represent magpies. The three visiting northern Arapaho were showing this particular dance to the southern Arapaho, and led one of the two lines.

After this, four men made a dance with bows and arrows, only the two leaders, however, carrying bows. The general course of this was much the same as in the preceding food-dance, except that there were only two men on a side. In finally approaching the kettle, the four men stood abreast to the east of it, whereas previously the two lines had been to the north and south.

Four men then danced, carrying spoons. They faced one another, advanced, passed one another, making a gesture toward the kettle of food, and then occupied one another's places. After thus passing one another several times, they stood abreast east of the kettle, moved to it, dipped their spoons into it, and then poured the contents of the spoons on the ground, saying "Hahou" (thanks). Thereupon they took their seats.

Another dance, similar to the last, was then made by four men. The song sung at the beginning of this dance was to the words, "I am holding the sky standing on the earth, says our father."

At the conclusion of this special dance, a few more of the general and more irregular dances that had characterized the first part of the ceremony were held, and food was passed to the spectators by women. Thereupon the gathering broke up. The dancing was resumed again in the evening.

According to an account obtained from an elderly man in

Wyoming, the Arapaho believe that the so-called Omaha dance originated with the Pawnees and the Osages. Both tribes were connected by means of it, and it was a dance signifying friendship. The dance was then brought to the Omaha, and they practised it until one of them was told by the Thunder that the dance belonged to him. He said, since the people were practising it, he would show them how to hold it right. He told them to make tails of eagle-feathers and owl-feathers. The owl-feathers were to be red. The dancers were also to carry a wooden whistle to represent a gun. A man who had been wounded in battle was to carry such a whistle, and wear one of the feathered tails, the red of the feathers symbolizing blood. The Thunder directed that these objects were to be made as he said, and nothing further was to be added to them. A grass was to be used as incense. The Thunder directed, that, when the people were going to eat food at the dance, they were not to hide anything. If a man had slept with his wife since the dance began, he was not to take any of the food. The others were to eat. When a man passed by the food, the spoon was motioned with to the four directions, and then held up. The Thunder also directed that the people should not cohabit during a thunderstorm. A man who disobeyed him was killed by lightning. The Omaha brought the dance to the Sioux. The Sioux brought the dance to the Arapaho and other tribes. They brought it in connection with the *tceāk'ça*<sup>n</sup>, a sacred bundle offered to friendly tribes, and which, if refused, would cause defeat in war. The Arapaho had the dance until, at the time of the ghost-dance, the older limitations as to the kind and color of feathers and the accompanying regulations were given up or modified; and the ceremony was called "crow-dance."

THE GUESSING-GAME. — Rather elaborate sets of a form of guessing-game were made in considerable numbers at the time of the ghost-dance movement. These sets consist of buttons hidden in the hand, of sticks used as counters, and usually of other sticks and feathers which are used as pointers, as symbols of gifts or of food, and in other semi-ceremonial ways. All the sticks not actually used as counters, and many of those

so used, are ornamented with feathers, or otherwise. In addition, head-dresses of the various types described were not infrequently made specifically to be worn in connection with the game. As these do not differ in any way from ordinary ghost-dance head-dresses, they will be mentioned here, only to illustrate the degree of elaboration with which such game-sets were made.

The buttons hidden in the hands, and guessed at, form pairs, or multiples of pairs, up to eight. The pointers form a pair, and the counters and other sticks form two sets of equal numbers, distinguished from one another by their ornamentation, and used respectively by the two sides of players. One set of sticks is usually black; the other, red. The players using the black sticks are called "magpies;" those with the red sticks, "crows." The number of such stick counters seems to be most frequently ten. In one set there are twenty; but the ten sticks used by each side are of two kinds. There is a secondary tendency toward twelve sticks. One set (Museum No.  $\frac{50}{80}$ ) has ten plain counters and two ornamented singing-wands. Another set (Museum No.  $\frac{50}{70}$ ) has ten counters and twelve ornamented gift or food sticks used in connection with gifts and invitations. A northern Arapaho set of invitation-sticks has twelve sticks, besides special ones for the host and the singers. The head-dresses used at these games are frequently made in pairs, and worn by people on the opposite sides.

While there is a general similarity running through all the sets that have been seen or obtained for the Museum, the uses to which similar pieces, especially the sticks, are put, are quite different. One set (Museum No.  $\frac{50}{80}$ ) has feathered sticks which are used as counters; but, as they have small bells attached to them at the top, it is not unlikely they were used also as rattles during the singing accompanying the game. One odd stick in this set, similar to those used as counters, is held by a person who prays during or before the game, and who apparently, therefore, acts as director. In another set (Museum No.  $\frac{50}{80}$ ), the most elaborate in the Museum, and obtained for it by Rev. Walter C. Roe, there

[*May, 1907.*]

are three kinds of sticks, — plain sticks merely rubbed over with paint, and used as counters; similar sticks ornamented with feathers and fur, and given to women who cook for the gathering; and two sticks considerably longer than the others, and forming a third class. These two are more elaborately decorated than the others, and are used as pointers when a player signifies in which hand he guesses that a button is held. In another set (Museum No.  $\frac{5}{302}$ ), sticks ornamented with feathers, fur, and skin fringes, are used as counters; whereas one longer stick in the form of a cross, ornamented with skin fringe, and somewhat recalling the pair of sticks in the preceding set used as pointers, is set in the ground between the two lines of players, in front of the person directing the game. A fourth set comprises plain sticks painted over, and two similar sticks to the ends of which a few feathers are attached. The plain sticks are counters: the feathered ones are shaken as singing-wands by the leaders of the two sides. The set of invitation-sticks mentioned as obtained from the northern Arapaho (Museum No.  $\frac{5}{1097}$ ) closely resembles in appearance the sticks used in connection with the present game among the southern Arapaho. Plain sticks painted over are ordinary invitation-sticks in this set. They are also used to indicate the presentation of a gift, in the way in which any stick is thus frequently used to express the gift especially of a horse. Two similar sticks in this same set are forked at the upper end, and ornamented with feathers and fringes. These are given to the singers, and appear also to be shaken by them during the singing. A single stick of a third class is ornamented like the two singers' sticks, but is unforked and longer. This stick is kept by the host of the occasion, who, of course, directs the gathering. It will be seen that in this respect, as well as in its greater length and in being the only one of its kind in the set, it resembles the longer cross stick mentioned in the third set.

The different classes of sticks thus have, in all, the following uses, — plain sticks, counters, food or gift sticks; feathered sticks, counters, food or gift sticks, singing-wands; pair of forked sticks, pointers, singing-wands; one special stick, direc-

tor's or host's stick. A full set of objects for the game would seem to consist of hiding-buttons in pairs, a pair of feathers for pointers, sticks for counters, ornamented sticks as food-sticks, a pair of specially ornamented sticks for two singers, and a single longer stick for the host, besides accessory head-dresses. Most of the objects would be in two sets of different colors, sometimes red and yellow, but usually red and black. Actually no set has been found so complete as this.

Various sets of this game will now be described separately.

Museum set No.  $\frac{59}{59\frac{1}{2}}$  consists of two buttons, ten plain sticks used as counters, two similar ornamented sticks used as singing-wands, an eagle-feather used as a pointer, a pair of circular beaded head-dresses, and a number of head-dresses, not, perhaps, so directly connected with the game, and of several different types. Of the two hiding-buttons, one is a stone found on a hill where the maker of the set had gone to fast and on which he had seen a vision. It has rudely the shape of a foot or moccasin, and he regarded it as a direct gift to himself. The other counter is a leg-bone of a turtle which he killed on this hill. Around each end of this bone is tied a thong. Of the ten stick counters, the five red ones were said to denote crows, or to be used by players called "crows;" the five black ones, magpies. The red and black sticks are painted respectively black and red at the ends. The two feathered sticks held by the leaders of the two sides during the game, and shaken no doubt as an accompaniment to the singing, are identical with the plain sticks, but for their feather attachments. These consist on each stick of five small black feathers ornamented with red-dyed plumes at the base, and each attached to a red-painted thong. The eagle-feather used as a pointer is ornamented with red plumes both at its base and at its tip. The two circular head-dresses, one of which is shown in Fig. 111, are worn by a certain player on each side, apparently the same man who holds one of the feathered sticks. The framework of the hoops is wood, around which a string of beads is wound. There are four spots of beading of a different color; and two thin sinew strings bisect the interior of each hoop. Four plumes are

attached to each ring, and a thong serves to tie it to the hair. One hoop has yellow plumes and yellow beads, with the four smaller beaded areas in red; and the thongs attaching its plumes are red. The other hoop is dark blue with light-blue beads in four places. The plumes attached to it seem to have been faintly dyed green, and the thongs attaching them are also green. The yellow hoop represents daylight. The four red areas on it denote paint and mankind. On the other hoop the dark-blue beading represents the highest sky, the future world. The four areas of light-blue beading represent the lower sky, apparently the atmosphere. The green of the feathers denotes this world. While this symbolism is entirely one of colors, the two head-dresses are no doubt also world-symbols as regards their shape. Six other head-dresses obtained from the same man, and more or less connected in his mind and in their use with the objects described, are the following: Two head-dresses of trimmed feathers mounted on sticks — one of four crow-feathers (Fig 127) and the other of a single hawk-feather with a few small owl-feathers at the base — appear to have been worn by the leaders of the two sides of players. A pair of head-dresses consisting of dyed and mounted plumes were also worn, each by one player on a side. One of these is white above and red below (Museum No.  $\frac{50}{393}$ ): the other is red above and green below. The colors of these two plumes were said to denote the various colors of the world. The fifth head-dress consists of an eagle-feather similar to the one used as a pointer (Fig. 132). It is ornamented with a red plume at the base, and appears to have lost a similar ornament at its tip. A thong passing through the base of the quill is all that designates this feather as a head-dress, and not a pointer. The sixth head-dress consists of the skins of a blackbird and of a smaller redbird, tied breast to breast, and attached to thongs for wear on the head. A seventh head-dress, which the owner refused to part with, consisted of a white eagle-plume mounted on a stick, and ornamented at the base with red plumes. This owner had been the white-fool in the crazy-dance, and had had a dream in which he saw people passing, and himself following last,



wearing this white plume on his head, just as the white-fool always follows the crowd of dancers.

In the set  $\frac{50}{96}$ , shown in Fig. 131, there are four counters. The first button (*a*) appears to consist of wound and

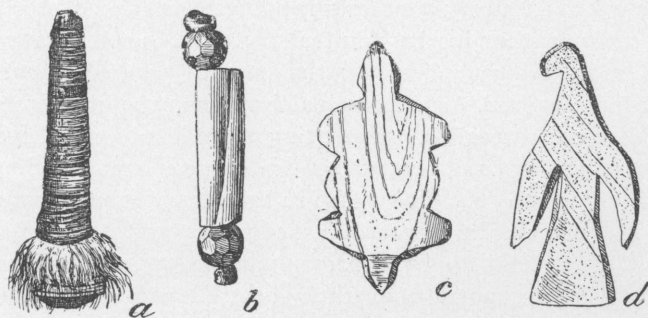


Fig. 131 ( $\frac{50}{96}$ , *a-d*). Counters for a Guessing-game. Length of *a*, 5 cm.; of *b*, 4.5 cm.; of *c*, 3.5 cm.; of *d*, 4 cm.

knotted thong. At the upper end a bit of rabbit-fur is attached. This end of the object is wound with porcupine-quills dyed yellow; the remainder of the surface, with quills dyed light green. The entire object represents the whirlwind, which, it will be remembered, plays a part in Arapaho mythology in the making of the earth. A piece of eagle-quill (*b*) about an inch long, through which a thong is passed, at each end of which is a light-blue bead, symbolizes a white eagle in the sky. The blue beads denote the sky or clouds. A figure of a turtle (*c*) — cut out of a flat piece of wood, and painted red, yellow, and green — refers to the world. A small bird (*d*) — cut out of rawhide lightly painted green, the edges being red — represents a white crow in the sky. It is evident that one pair of the buttons refers to the earth, the other to the sky; also that, in shape and appearance, the four buttons divide into two pairs, one flat and one long, each pair consisting of one earth and one sky symbol. Two dyed feathers are used as pointers in the game-set. One of these is shown in Fig. 132. Both of these feathers have a second narrower undyed black-and-white wing-feather tied over them. The quill of the main feather and that of the superimposed feather are tied together at the base with wrappings

of sinew, and the tops of their quills are tied together with a thin string of sinew. The narrower upper feather is ornamented at the base with dyed plumes. Where the bases of the quills of the two feathers are joined, a braid of sweet-grass is attached to them by a sinew wrapping near each of its ends. The main feather in the pointer shown in the illustration is dyed red, and the plume at the base of the superimposed feather is also red. The principal feather in the other pointer is blue; but, instead of there being a small plume, the base of the superimposed feather seems to have been dyed light green.



Fig. 132 ( $\frac{80}{80}$ ).  
Feather used as a  
Pointer in a Guess-  
ing-game. Length,  
34 cm.

The sticks in this set, of which there are eleven (ten used as counters and the eleventh held up by a person who prays), are thicker in proportion to their length than is customary in these game-sets. Five of the counters are painted dark green, which to the Arapaho is the equivalent of black, and five red. The sticks of both colors are ornamented at the top by a wrapping of fur (apparently of rabbit-skin), by a small brass bell, and by two black feathers (probably of a crow) the bases of which are ornamented with red-dyed plumes, and which hang from thongs passing around the top of the stick just above the fur. Across both transverse ends of each stick are two intersecting notches. These notches in the green-black sticks (Fig. 133) are painted red; in the red sticks, blue. All the sticks are ornamented with carving in low relief. On the red sticks there is at each end a figure of a bird and a Maltese cross, representing the crow and the morning star. The heads of the birds are towards the middle of the stick. The bird at the lower end is painted green; the morning-star cross near it, yellow. The bird at the upper end of the stick is blue, and the cross near it green. On the dark-green sticks (Fig. 134) there are at each end similar figures of the morning-star and the crescent moon. In the middle of these green sticks a pointed figure forms a scroll of a single

turn around the stick. All the carving on the green sticks seems to have been painted red, and then dark blue over the red. While nothing was said in connection with this set as to any reference of the sticks to crows and magpies respectively, it will be noted that the red sticks are ornamented with figures of crows.

The guessing-game set Museum Nos.  $\frac{50}{5}$  -  $\frac{50}{5}$  has been mentioned as the most elaborate of this kind in the Museum. There are two hiding-buttons somewhat more than an inch long, and nearly cylindrical. These are made of skin wrapped with red and blue beads, forming transverse stripes. Two sticks, each about three feet long, are said to be pointers; but their sharpened ends and their elaborate decoration make it appear probable that they had also some other use, which included their being set up in the ground. One of these sticks is shown in Fig. 135. It will be seen that near the base it has a short fork. Above this is tied a strip of fur and a small hoop of wood wrapped with dyed corn-husk, recently used by the southern Arapaho as a

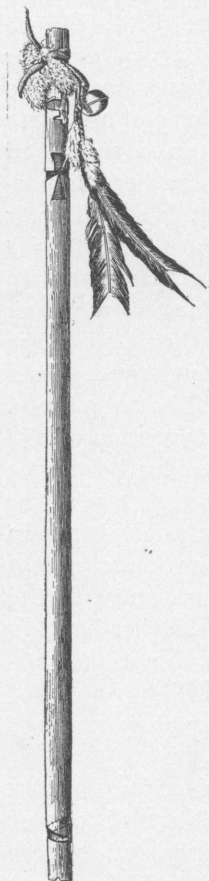


Fig. 133 ( $\frac{50}{5}$ , 9). Counting-stick for a Guessing-game. Length, 46.5 cm.



Fig. 134 ( $\frac{50}{5}$ , 1). Counting-stick for a Guessing-game. Length, 46 cm.

substitute for porcupine-quills. This wrapping is yellow,

except in four places, where it is red. These red areas are bordered by black. Such a hoop is almost invariably a world-symbol among the Arapaho, but may have other signification in addition. The stick itself is painted red. Near the upper end of the stick are attached two pheasant-feathers and ten small brownish-golden feathers. Above these the stick is wrapped, for a distance of about an inch, with a string of blue beads; above these, for a distance of three or four inches, is a wrapping of otter or mink fur. At the lower end of this is fastened a small yellow plume. At the upper end are three longer plumes dyed blue and green, a small red plume, and short iridescent green feathers, apparently from a duck. The other stick of this pair is in general similar. It lacks the fork near the base, but it is not certain whether this is due to accident or to design. At the place on the stick corresponding to the fork on the other stick there is a wrapping of light fur touched with red. Just above this are the fur wrapping and the hoop found also on the first stick. The upper portion of the present stick has the otter-skin, the blue beads, the bunch of pheasant and small feathers, and the green duck-feathers of the first stick. It differs in having red plumes instead of yellow at the base of the otter-skin wrapping, red plumes only at the very top of the stick, and an eagle-feather hanging from the top, which is lacking in the stick illustrated.



Fig. 135 (♂♂, ♂).  
Pointer used  
in a Guessing-  
game. Length,  
99 cm.

The counters in this set are plain painted sticks, ten in number.

The feathered sticks used in this set are twelve in number, and, which is unusual, are of four or five different types. Four of the sticks are painted red; eight, dark green, which is no doubt, in this case as in others, the equivalent of black. One pair of red sticks is wrapped at the upper end with fur, perhaps of a rabbit, touched with red paint. From the upper

end of each stick hang a crescent-shaped piece of hide covered on one side with beads, and a bunch of feathers. On one stick, the beading on the crescent is red and the feathers are red with yellow plumes at the base: on the other stick, the crescent is beaded yellow and the four feathers are dyed yellow. The two other red sticks of this set appear to have a somewhat darker fur wrapping at the top. Attached to one are six small barred feathers, a plume dyed orange with a small barred feather at its base, and part of the wing of a magpie, consisting of four or five feathers ornamented with red plumes at the base. All these feathers are attached to the stick by thongs painted yellow. The other stick appears to have lost most of its feathers, but to have been similar. One of this pair of sticks has near its base the remains of white plumes attached by sinew wrapping. The other shows no signs at the present time of such ornaments. The eight green-painted sticks are of three types. The most elaborate pair is ornamented in the middle and at the lower end with gray down feathers wrapped to the stick with sinew; another type, comprising four sticks, has such down ornamentation only at the base (Fig. 136); and a third type, again consisting of a pair, lacks such down attachments. The two green sticks with double down ornamentation are painted green (only over the upper half), and have attached at the upper end a small eagle or hawk feather, four black feathers, and one other feather, as well as a few gray down feathers of the same kind as those wrapped on farther down the stick. The four sticks with

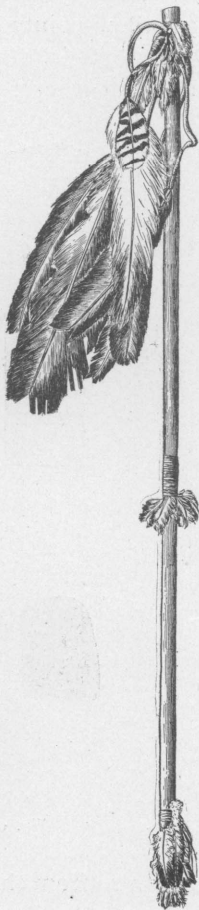


Fig. 136 (58, u). Feathered Stick for a Guessing-game. Length, 51 cm.

gray down only at the base are painted distinctly green, only over the upper third of their length. The middle third appears to have been lightly painted red; and the lower third, again, lightly green. Four grayish-black feathers are attached by yellow-painted thongs to the upper ends of these sticks. On two sticks of these four there are iridescent white-edged magpie-feathers; on two others, dark-green feathers, appar-

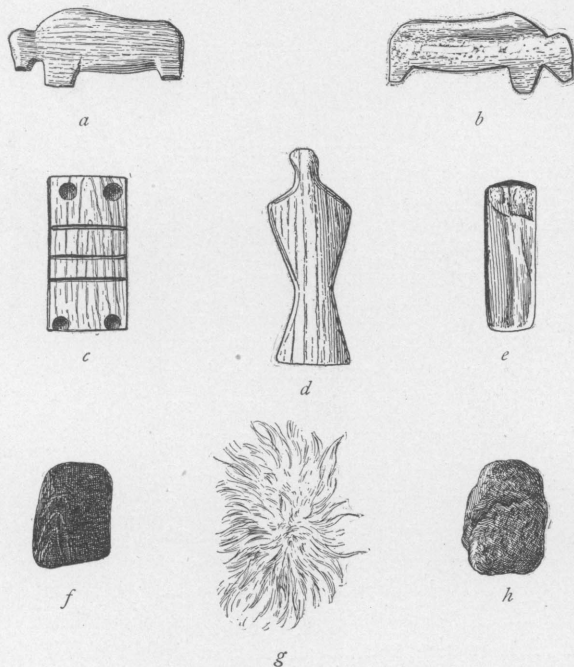


Fig. 137 ( $\frac{59}{393}$ ) Hiding-buttons. Length of *a*, 3.5 cm.

ently also from the magpie. The two green sticks without any down on the handle are exactly like the four last described, except in this particular and in the fact that one of them has a weather-beaten white plume tied to its top. From information furnished with this valuable set by Rev. W. C. Roe, its collector, it appears that these twelve feather-ornamented sticks were invitation-sticks, either to receive or to prepare food.

Museum set No.  $\frac{50}{393}$  lacks the counter-sticks, but is rich in hiding-buttons and accessory head-dresses. An eagle wing-feather is used as a pointer. It is mounted on a pointed stick ornamented at the base with one gray and one blue feather and a red plume, and is tipped with a red plume. The buttons used in this game are eight in number, and are shown in Fig. 137. They consist of a figure of a buffalo cut out of wood (*a*); a similar figure cut out of bone, and representing a white buffalo (*b*); a small oblong slab of stone of natural shape, given the [name of the life-symbol, *hiiteni* (*e*); a rectangular piece of wood, also a *hiiteni* symbol, which on one side is bisected by a red-painted line, on the other side by three such lines, besides having two pits at each end (*c*); a figure of a bird cut out of wood, called simply *niihi*, "bird," or specifically "eagle" (*d*); a small weathered stone (*f*); another similar stone (*h*); and a bit of sage covered with rabbit-fur (*g*), referring to the Piute originator of the ghost-dance, who is sometimes called "he who has a jack-rabbit blanket." This set of objects was owned by the same man who made the objects illustrated in Fig. 1, Plate LXXI; Fig. 2, Plate LXIX; and Fig. 138.

The head-dresses accompanying this game-set consist in part of feathers mounted on sticks, and in part of rawhide crosses. The former class comprises a head-dress of four trimmed crow-feathers, similar to the one shown in Fig. 2, Plate LXVIII; a head-dress of three upright pheasant-feathers, shown in Fig. 2, Plate LXIX (both of these worn by old men); and six head-dresses of down feathers, three dyed red and three yellow (Fig. 111), worn by players on opposite sides. The rawhide head-dresses are all Maltese-cross shaped, painted, and in part ornamented with feathers. Three are of one size, two smaller. The three larger are worn by the drummers in the game, the smaller by the leaders of the two sides, who guess where the buttons on the opposing

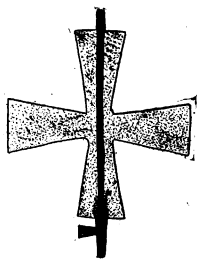


Fig. 138 ( $\frac{50}{393}$ , *d*). Ornament worn by a Player in the Guessing-game. Diameter, 10 cm.

side are held. One of the larger crosses, which is painted white (Fig. 138), was made in consequence of a dream or vision in which the owner entered a tent where gray-headed men were sitting smoking the sacred flat pipe. Being intended to be worn by the oldest men, or because it refers to old men, it is unornamented with feathers: old people dress more simply than the young. The entire ornament, because cross-shaped, of course represents the morning star. Three of the arms, however, the lower one being disregarded, have the shape of the characteristic catlinite pipe-bowl. It will also be observed that two of the arms are in addition so cut at the ends, and painted, as to show an entire pipe bowl and stem. Another of the five ornaments is similar in general shape, but uncolored instead of white (except at the ends, which are yellow), ornamented with a feather plume hanging from the end of one arm, and somewhat different in the details of its painting. A third cross is black with red across the ends of its arms and a yellow spot in the middle, near which a red-dyed down feather is attached. This piece lacks the small pipe of the two preceding specimens. Its black color was said to represent the night, during which the morning star is invisible; the red at the ends of the arms, the morning, when the star begins to appear. The yellow spot in the centre was called the heart. The two smaller crosses are painted to resemble the last two pieces, and similar feathers are attached to them. Where the fastening thongs are attached at the centre of each of these two smaller crosses there is a small stick painted red, representing the sacred straight pipe. The feathers in these small crosses are attached to the middle of the sticks, not to the rawhide itself.

Museum set No.  $\frac{50}{302}$  consists of two buttons, twenty feathered sticks used as counters, and one longer stick set in the ground. The buttons are similar in shape to those of Museum set Nos.  $\frac{50}{302}$ — $\frac{50}{302}$ , and perhaps represent an older type. They consist of sticks a little more than an inch long, and wrapped with thong. One button is painted red, the other black. In the bead-covered buttons of the previous set, red and blue beading are used in the same manner, though



diversified by bands of the opposite color. The stick — which in the present set is set up in the ground between the players, at the ends of the two rows, before the person directing the game — is more than three feet long, and painted red. A few inches from the top a small crossbar is tied to it. The ends of this, as well as the top of the stick and a place a few inches below the crossbar, are ornamented with skin fringes painted red. Both the stick and the crossbar are painted dark blue near the point of attachment of these fringes. It is not improbable that Christian motives have influenced this portion of the specimen. The stick counters in this set are twenty in number, and their lower ends are sharpened, as if for setting into the ground. The sticks are long and slender. The upper fourth of each is wrapped with sinew. Near the lower end of this sinew wrapping, a tassel of a few red-painted thongs is attached. Below this fringe, the sticks are painted, — ten of them red, and ten black. The sinew wrapping is painted of the opposite color from the stick. Each stick is ornamented at the very top with a tuft of dyed wool and with a thong wrapped in several places with porcupine-quills, and having a single sharp broad feather at its end. Of the ten black sticks, five have the tuft of wool dyed red, the quill wrappings of the thong alternately red and green, and a crow-feather hanging from the end of the stick. Five of the sticks have the tuft of wool dyed yellow; the quill wrappings of the thong are alternately red and white; and at the end of the stick is a barred hawk or owl feather. The ten black sticks are ornamented in two sets in exactly the same way. The players using the black sticks, and to whom the black button belongs, were called “magpies;” those using the red sticks and the red button, “crows.”

The set of northern Arapaho invitation-sticks (Museum No.  $\frac{50}{1097}$ ) were used to send to guests who brought food with them. On arriving, the guests each laid their sticks across the vessel of food brought by them. Twelve of the sticks in the set are perfectly plain and straight, except for a very small knobbing at the end, due apparently to their having been cut off at a joint. They are painted red. These

twelve are the sticks sent to the guests. Two sticks of equal length with these, used by the singers, have small branches projecting at an angle for a short distance near their upper ends. The upper ends are ornamented with a hanging magpie tail-feather and with five thongs wrapped with red and white porcupine-quills. The fifteenth stick of the set, kept by the host, has exactly the same ornamentation as the two singers' sticks, but lacks the fork, and is a few inches longer than either these or the plain sticks. The forked sticks (perhaps because they are given to the singers, who also drum) were said to represent the forked sticks on which a drum is often hung. The quilled pendant thongs attached to the three special sticks in the set represent water-snakes; and the wood of which all the sticks are made is called in Arapaho "water-snake wood." The bundle of sticks is kept together by a thong to which a bit of whitish fur is attached.

**THE HOOP GAME.**—Another form of game prominent in ghost-dance times consists of a hoop at which two players each throw a pair of joined darts. Points are scored as certain parts of the hoop, marked by ornaments, lie in contact with the darts after the throw. The hoops are about a foot and a half in diameter; the darts, about two feet and a half in length. The thong connecting the darts of each pair is about half a foot in length. About one-third way from the front the darts are tied with this thong, and the portion of the stick forward of the tying is usually flattened on two sides. The darts are unpointed.

Figs. 139-141 represent models of such a game-set obtained by the Museum through the courtesy of Rev. Walter C. Roe. The hoop is painted red, and where it is joined it is wrapped with fur. There are eight marks on each side of the hoop, produced by incised carving, and painted. On one side, these ornaments are as follows. Two shallow triangular notches—one painted blue, the other green, and forming together an hour-glass shaped figure—were given the name hunch-back. Two incised lines crossing at an acute angle, and painted dark blue, represent a pair of the joined darts used with the hoop. The third ornament, whose symbolism is unknown, is a dark-blue

rectangle notched on one side with five short yellow lines, and on the other with green lines. The fourth is a blue Maltese cross, the morning star. The fifth is again the hunch-back design; and the sixth, a dark-blue crescent moon. The seventh is similar to the third; and the eighth, painted green, is a symbol of a cedar or cedar-branch. On the opposite side, the figures are the following, — a dark-blue arrow, a hunch-back design in dark blue, a light-blue arrow, a light-blue rectangle traversed near its end by two notched white lines, a green

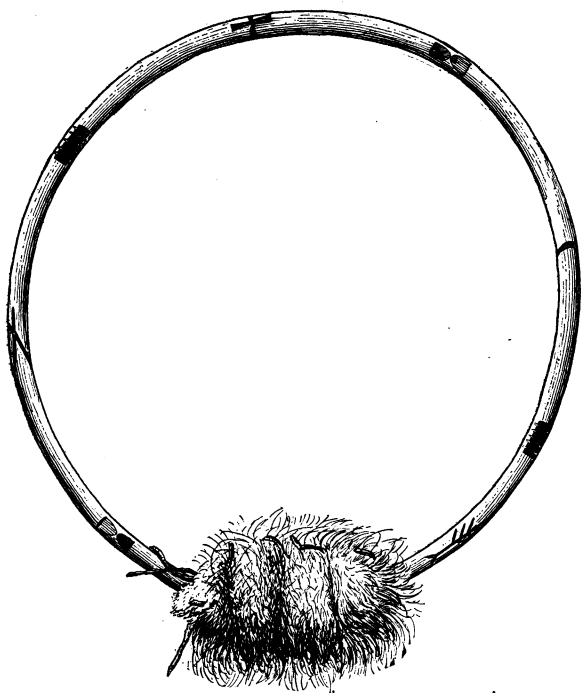


Fig. 139 (<sup>80</sup>/<sub>875</sub>, a). Model of a Game Hoop. Diameter, 43 cm.

arrow, another dark-blue hunch-back, a yellow arrow, and a light-blue rectangular figure identical with the preceding one. It is not improbable that the rectangular figures on both sides of the hoop were the *hiiteni* symbol. It is noticeable that the hunch-back and rectangular figures, which occur in

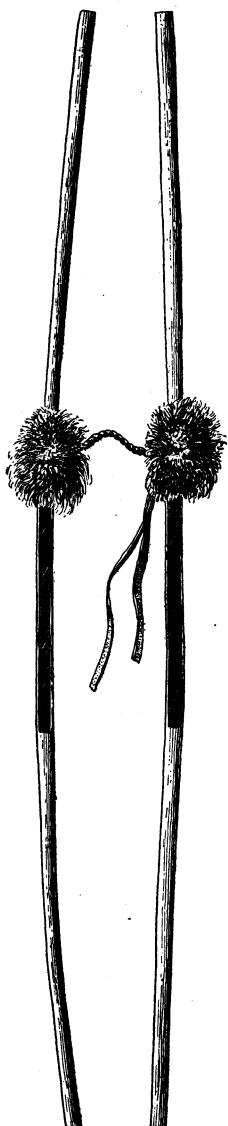


Fig. 140 ( $\frac{50}{879}$ , *b*, *c*). Pair of Red Darts for the Hoop Game. Length, 83 cm.

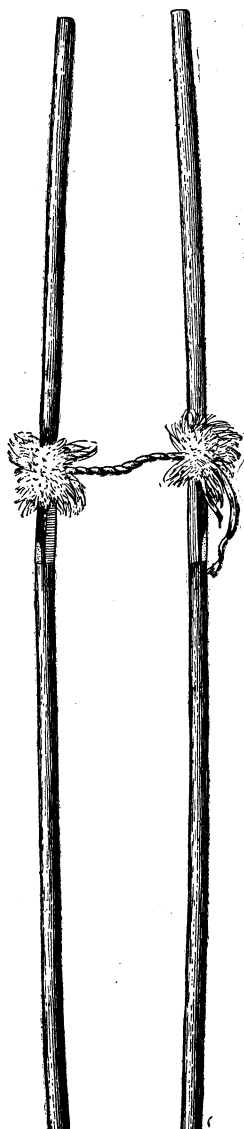


Fig. 141 ( $\frac{50}{879}$ , *e*, *d*). Pair of Blue Darts for the Hoop Game. Length, 85 cm.

pairs, are placed opposite each other on the hoop, and that the four arrows on one side are painted in four colors, and are situated at four opposite sides of the circumference.

Of the darts in this set, one pair is painted red, the other blue. The red pair is connected by a double-twisted thong painted red (Fig. 140). Where this thong is attached, the stick is wrapped with black fur. For a distance equal to about one-fourth the length of the stick, backward from this wrapping, the stick is flattened on two opposite sides, and these painted dark blue. The blue pair of darts (Fig. 141) is joined by a double-twisted yellow thong, at the attachment of which the sticks are bound with white fur. The flattened portions of this pair of darts are less than half as long as in the other pair. In one stick they are painted red; in the other, green. Two small flattened areas on each stick, about the size of a finger-nail, are painted yellow.

Museum set Nos.  $\frac{50}{844}$ ,  $\frac{50}{845}$ , has seen use. One side of the hoop is painted red, the other side lightly with dark green. This is the familiar red and black color-dualism of the Arapaho. The red side of the hoop has carved on it two figures of birds and two rectangles with projecting acute corners, which look as if they might be turtle or more probably buffalo symbols. The birds are painted dark green; the quadrilaterals, red. On the dark-green side of the hoop are two birds and two green rectangles, each crossed by five notched lines painted red. The darts in this set are plain, — one pair red, the other dark green, — connected by twisted double thongs of the same color. The flattened portions are forward of the thongs, and are of the same color as the remainder of the stick.

In Museum set Nos.  $\frac{50}{882}$ ,  $\frac{50}{883}$ , the hoop is blue. The outer periphery is slightly flattened, and painted green. Where it is joined are tied two small bells and two feathers, one dyed, the other cut across the end, and both ornamented with dyed plumes attached by a red-painted thong. On one side, the hoop has four marks; on the other, six. On the former are a pair of figures like the hunch-back symbols of the piece first described. One is painted yellow; the other, blue or green. The other figures on this side are a pair of rectangles, one painted red

the other green. The red one is crossed by seven notched lines: the green one has cut in it a longitudinal zigzag painted blue. On the opposite side of the hoop are the same figures with two added figures of birds, one painted green or blue, the other red. The darts in this set are one pair blue, and one green, with connecting thongs of the same color. The flattened sides forward of these thongs are red. A single feather is attached to each pair where the thong joins it. This feather is dyed red, ornamented at the base with red and yellow plumes, and tipped with a blue plume.

The carved figures on these hoops are much alike in character, consisting chiefly of the hunch-back design, of rectangles with incised lines, and of bird figures. Other designs are less common, and are usually realistic. It appears that, but for lacking feather attachments, these gaming-hoops are virtually identical with the sacred tribal wheel several times referred to, and described by Dorsey.<sup>1</sup>

THE WHEEL GAME.—Netted hoops thrown at with arrows are made by grown-up people for boys. They are properly made of a green stick and a single long thong of buffalo-skin. The wheels are used in several ways, sometimes by two parties of boys drawn up opposite, and sometimes by a smaller number. One way of playing is to throw the wheel so that it will roll over another player's bent back. This player then runs after it to spear it.

Such a netted hoop thrown at with darts is shown in Plate LXXXII. It has a large centre mesh painted red, and called the "heart," which counts four points, if speared. All the remainder of the netting is painted blue. There are two rows of large oblong meshes intersecting at the "heart," and called "buffalo-bulls." The small hexagonal meshes occupying the body of the network are called "buffalo-cows." No points are counted, if either the buffalo bulls or cows are speared. Between the buffalo-cow meshes are small triangular interstices called "buffalo-calves." If one of these is speared, one point is scored. Along the inside of the wooden rim there are hexagonal meshes, called "wolves;" and, where the rawhide thongs turn to pass

<sup>1</sup> Arapaho Sun-dance, *op. cit.*, p. 12, Plate 1.

around the wooden rim, they form small triangular openings which are perpendicular to the plane of all the other meshes, and are called "coyotes." Both wolves and coyotes count one point, if they are speared. The arrangement of meshes in this piece is entirely typical. The darts thrown at this hoop generally have several points, their ends being split.

A game was played by boys by fastening a bow, slanting diagonally from the ground, to a notch in a tree, which held it in place. The taut string was touched with an arrow, which flew back some distance. Another player then struck the string with his arrow, trying to make it fall on the first one thrown. If his arrow fell across the shaft of the first, nothing was counted; if it touched the feather, he made one point; if it touched the head or the sinew binding, it counted two points; while if it touched the notch, he made four points.

DICE. — The dice games played by the Arapaho are of two kinds. One form is played with bones or seeds, the other with sticks. The former will be considered first.

The bone or seed game consists of two or more sets of either two or three dice, and often of a basket in which these are tossed. The dice are sometimes made of plum-stones or similar seeds; in other cases, of bone. Whatever the material, they are usually marked by burning on one side only, though occasionally they are incised, or bored with rows of holes, such marks being then filled in with paint. The shape of the bone dice is most frequently circular, rectangular, or rhomboidal. Sometimes the ends of the rhombus are cut off, resulting in a hexagonal die; and not infrequently the rounding of the rectangle or rhombus gives rise to oval forms. The number of dice in a set, a set being the number of identical dice in a game, is either two or three. The number of sets constituting a game is from two to five, though only two sets seem generally to be used at one time. The count depends on the combination of marked and unmarked sides as the dice fall.

According to a method of counting obtained, the stakes are won when all the dice in both the sets used fall alike, either the marked or unmarked side being up; or when the dice of

each set fall alike, even though the sets differ. When one die alone falls (marked or unmarked), and all the rest are different, one point is scored.

Fig. 142 shows four seed dice. A dragon-fly and a bird symbol are readily recognizable. The fourth die represented is ornamented with a pentagonal figure. It is not certain whether this shape is unintentional, or due to white influence. Fig. 143 shows the five kinds of bone dice forming another game. These are all marked by burning, except the nearly square die with three transverse lines and two rows of dots, the lines in which are filled with red paint, the dots with blue. Fig. 144 shows examples of the three sets, also of bone dice, constituting another game. The larger die in the middle has been marked by burning; the two others, by rows of small holes filled in with paint. Fig. 145 shows three further forms of bone dice from two games, all more or less diamond-shaped, and marked by burning. Fig. 146 shows the forms of the two sets of another game. One of these is cut with transverse diagonal lines in two directions. These lines have been filled



Fig. 142 ( $\frac{1}{2}$ ,  $a$ ,  $c$ ,  $h$ ,  $f$ ). Seed Dice. Length of  $a$ , 2.5 cm.; width, 1.5 cm.

in with red paint. It is probably only on account of this intersection that the name na"kaox (meaning both morning star and cross) was given to these markings. The other die of this game is somewhat larger, and its upper surface is drilled with five longitudinal rows of small holes. These were said to represent rows of buffalo travelling. The holes, being of some depth, look dark, so that this symbolism is entirely analogous with that of certain paintings on parfleches that have been discussed. Dice from five sets of another game, all of them of bone marked by burning, are shown in Fig. 146,  $c$ , and in Fig 147. Symbolic interpretations for the



markings on these dice were obtained from two individuals at different times, — one an old woman, and the other a younger woman, the owner of the set. The older woman called the

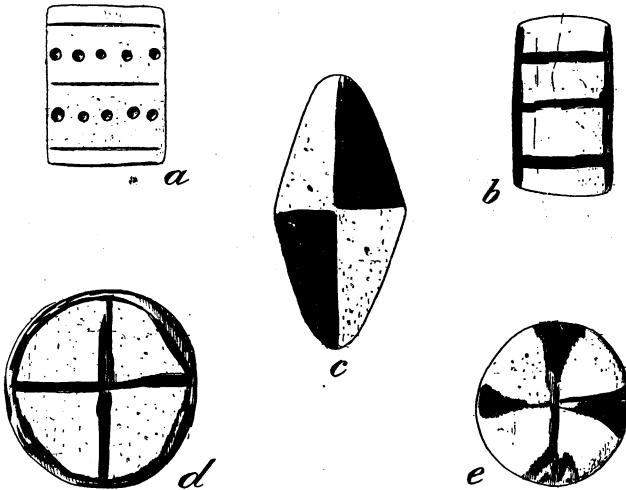


Fig. 143 (♀♀). Five Kinds of Bone Dice. Length of c, 4 cm.

design on the round die with the hour-glass markings, a "tent-ornament;" that of the long oval die with four transverse lines, the "four hills of life." The younger woman called both the latter and the other oval-shaped die, "moccasins." Her

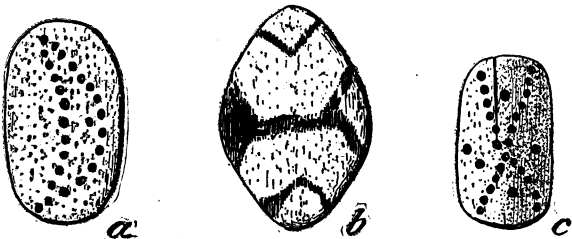


Fig. 144 (♀♀, ♂, ♀). Sample Dice from Three Sets. Length of b, 3 cm.

interpretation for the hour-glass figure on one of the rectangular dice was a "butterfly," and for the H-shaped figure flanked by two parallel lines, a "swing between two poles,"

with persons at each side. While the interpretations from these two informants do not agree, and the last one given is quite fanciful, so that it is very probable there was no symbolic intent when the dice were made, yet the explana-

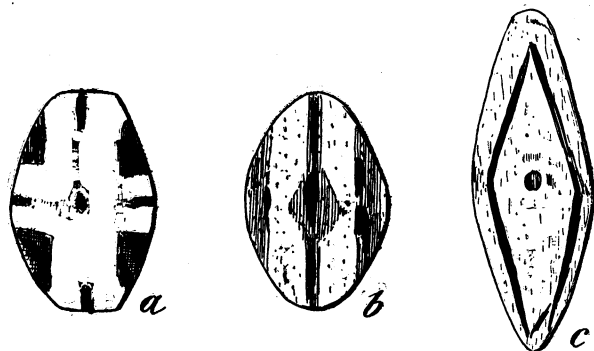


Fig. 145 ( $\frac{55}{39}$ , a, b;  $\frac{55}{127}$ , c). Three Forms of Bone Dice marked by Burning. Length of c, 4.5 cm.

tions given, with, perhaps, the exception of the last, are entirely in accord with the character of the usual Arapaho symbolism, and are no doubt typical.

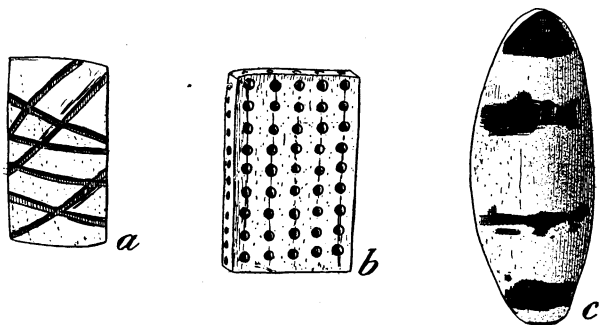


Fig. 146 ( $\frac{152}{28}$ , d, a;  $\frac{152}{88}$ , g). Dice from Two Different Sets. Length of b, 3 cm.; width, 2 cm.

It will be observed from the figures, that there are never in any one game two sets of dice of the same shape and size. There are not frequently two round or two rectangular sets; but in this case, as shown by Figs. 143 and 146, they differ considerably in size. In Fig. 147, c and d, the dice are very nearly of the same superficial shape and size; but the dice of Fig. 147, c, are somewhat convex as compared with the flat

pieces of Fig. 147, *d*. It is obvious that this differentiation in size or shape between the dice of different series is brought about by considerations of convenience during play, so that the dice of different sets may be distinguished at a glance, on their unmarked as well as on their marked sides.

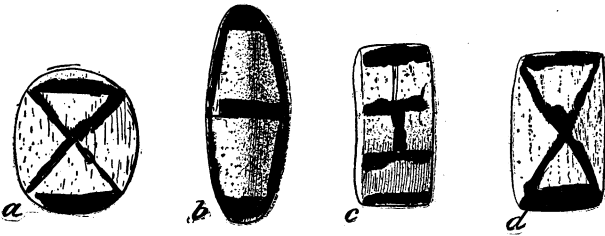


Fig. 147 (1888). Bone Dice with Symbolic Ornamentation. Length of *b*, 4.5 cm.

There are two dice-tossing baskets in the collections of the Museum. In general appearance they are very similar, but in detail of construction they differ in several points. Both baskets are about eight inches in diameter, two inches in depth, with a flat bottom and with sides rising without curvature at an angle of from 50 to 70 degrees from the bottom. In both baskets, the technique is primarily a one-stick coiling, which leaves the centre of the basket open; and in both, the border is a simple wrapping enclosing two rods of the foundation. The two baskets differ as follows. The one shown in Fig. 148 has a one-rod foundation, which is, however, split to have the woof passed through it, each woof-strand itself being split by the woof-strand of the following coil. At the origin of the basket is an opening about a quarter of an inch in diameter. The rod of the outermost coil is considerably heavier than any other in the basket. It is wrapped to the rod of the coil below it, apparently without the splitting of the latter, by a wide and heavy woof-strand, which is, perhaps, of the same material as the woof of the rest of the basket, but contrasts with it in appearance, owing to its greater massiveness. All the rods used for the foundation in this basket appear to be unpeeled. The other basket (Museum No. 58) is a one-stick coiled basket executed without splitting of the warp, and in most cases without splitting of the woof, though

there are some stitches that split the woof-strand below them. The foundation-rods are for the most part peeled, though, near the beginning of the basket, they are unpeeled. The upper and outermost foundation-rod is not markedly heavier than the others. The wrapping which binds it to the rod below is a light-red fibre differing from the woof of the remainder of the basket, and apparently dyed. The bottom of the basket is covered with a piece of skin sewed on by stitches of sinew thread. The centre of the basket is without coiling for a

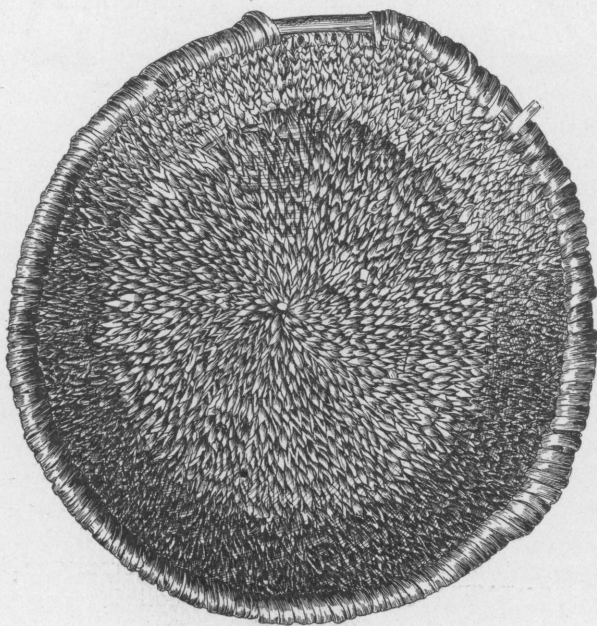


Fig. 148 ( $\frac{50}{297}$ ). Basket for Tossing Dice. Diameter, 21 cm.

space about an inch in diameter. The coiling begins apparently on a rod bent on itself in a hoop of this diameter. The space within this hoop is filled in with an interlacing of strands, which in part pass over the neighboring warp, and in part under the woof. These strands appear to be drawn so that they complete a circumference of the hoop in three stretches. The number of strands in this filling-in of the central opening

is not certain. Two ends are visible in the very centre. The woof-stitches in the body of this basket have some inclination against the direction in which the coil runs. The ends of the woof-strands are turned in the opposite direction, so as to more or less follow the coil, and are held down by from one to four or five wraps of the new woof-strand. The same method of holding the ends of the woof-strand appears to have been followed in the other basket, but, on account of the splitting of the stitches, this is not so strikingly apparent. The materials of these two baskets are not known, except that willow enters into them. The warp of the one shown in the illustration is an ordinary wood; the woof is coarse and fibrous. The warp of the other piece may well be willow, and its woof has all the appearance of being so. These two baskets differ so much, in spite of their superficial resemblance, that it is not impossible that one of them is not of Arapaho origin. It is very curious that basketry should not be made or used by this tribe, except, apparently, for the single purpose of playing dice.

The second form of Arapaho dice, used, like the preceding game, by women, consists of slender sticks from half a foot to a foot in length, split longitudinally, and with the pith removed. The flat side is then painted, the outer (convex) side left white. A game consists of two sets, each of four sticks, of one color. Sometimes a game contains three or four sets; but only two appear to be used at one time in playing (Fig. 149). As only the flat sides of the sticks are colored, the backs are marked, to distinguish the sets, by a simple burnt figure, such as two or three diagonal lines, or a cross. Usually only one of two sets is thus marked. The game itself is much like the game played with bone dice. The eight sticks are thrown, and points are scored, according to the combination of faces up and faces down. If all the dice of each set fall alike, whether the two sets agree or not, the stakes are won. If one is either face up or down and the other seven are respectively down or up, either one or seven points are scored. Other combinations, according to some, earn nothing; according to others, a certain number of points. One game of such

stick dice in the Museum consists of four sets. One set of the four is painted green, another yellow, and two red. The green sticks are marked on the back by two diagonal crossed lines; the yellow set, by two diagonal parallel lines. The red sticks are marked on the painted side by two transverse lines on each side. The entire face or flat side of these

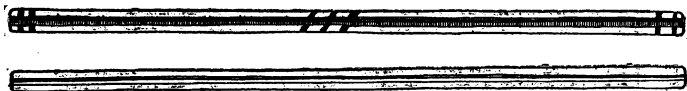


Fig. 149 ( $\frac{5}{310}$ , c, f). Stick Dice. Length, 27.5 cm.

sticks, including the channel left by the removal of the pith, is painted. In game Museum No.  $\frac{5}{310}$  there are eight dice, forming two sets, one painted red, the other bluish-green. In both sets the painting is confined to the pith groove. The red set is unmarked by burning; the green set is marked on the back by three diagonal lines in the middle, on the front also by three diagonal lines, and at both ends by two transverse lines.

**BALLS.**—Stuffed deerskin balls are used by women and girls in another form of game revived at the time of the ghost-dance. They are attached to a string, by which they may be held while being kicked. It would seem that these balls are as much implements for some form of juggling as they are balls to be actually thrown. They are made of two circular pieces of skin. These are apparently stuffed into hemispheres, and then their edges are sewed together by a back-and-forth stitching of sinew. Along this seam, the ball is often painted of a color different from the remainder of the surface, which appears to be almost always colored. Sometimes there are spots of paint on each hemisphere. One specimen has, instead of spots, a hand and five groups of three parallel bars on each side of the ball, the general effect being quite similar to that of the spots. Another specimen has the two hemispheres painted in different colors, with the middle border along the seam of still another color. Each hemisphere has a large symbol painted in the middle. At what may be called the

upper of the seam of these balls, a string, of either single or double twisted thong, is attached. It is by this that the ball is held when it is kicked. At the end of this thong there is often a dyed plume. Sometimes an additional plume is attached to another thong issuing from the lower end of the ball or from the middle of one of the sides. In this case the plume at the upper end of the main supporting thong may be either retained or omitted.

One ball (Fig. 150) is yellow. It has painted on it on each side a black hand, the ball being thrown by the hand. Five groups of three small parallel black bars near the seam of the ball represent face painting.



Fig. 150.

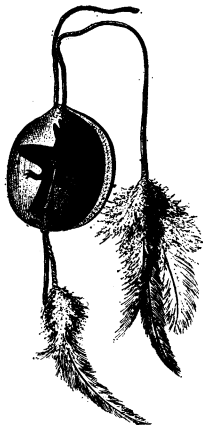


Fig. 151.



Fig. 152.

Fig. 150 ( $\frac{3}{4}$  ft.). Ball used by Women. Diameter, 9 cm.

Fig. 151 ( $\frac{3}{4}$  ft.). Ball with Appendage. Diameter, 7 cm.

Fig. 152 ( $\frac{3}{4}$  ft.). Small Decorated Ball. Diameter, 5.5 cm.

Another ball (Fig. 151) is blue on one side, red on the other, and yellow along the dividing seam. These three colors represent sky, earth, and daylight. On the blue half is painted a red cross, on the red side a dark-blue crow. From the middle of the figure of the crow issues a short thong, at the end of which is a red-ornamented blue plume representing breath. The ball is attached to a larger thong, to the end of which is fastened a group of dyed plumes. This larger thong was said to represent old age or long life.

One ball (Fig. 152), smaller than the others in the Museum's collection, is painted dark blue, with five yellow spots on one side, and five red on the other. These spots denote the striking of the ball. The red color represents dawn, the yellow daylight. The ball is hung from a two-strand twisted thong about a foot long, looped above for the insertion of the finger. From the opposite end of the ball proceeds a very short twisted thong ending in a plume. It was said that, in using this ball, the player or dancer turned himself about, swinging the ball. Then he struck it against the ground so that it rebounded.



Fig. 153  
(1881).  
Bull-roarer.  
Length of  
handle, 61  
cm.

A ball (Museum No.  $\frac{50}{318}$ ) attached to a plume-tipped string, and accompanying an armlet shown in Plate VI of this volume, is yellow, with the seam reddened and a red spot in the centre of one hemisphere. This ball was used as follows. After being whirled about the head, it was struck against the head, on the ground, against the right knee, the left knee, over the heart, and was then thrown, and caught by another player.

OTHER GAMES.—The bull-roarer is a toy among the Arapaho. It is also thought to produce wind. A model (Fig. 153) is attached to a thong about two feet long tied to the end of a stick of equal length. The bull-roarer itself is of bone, a little more than an inch wide, and only four or five inches long. Neither end is pointed. The end to which the string is attached is cut off squarely, and the opposite end is deeply notched. Along each side there are about a dozen notches. If this specimen is typical of the Arapaho bull-roarer, the implement is quite different in form from the longer, pointed wooden bull-roarer of the Gros Ventre.

A bone buzzer made of the foot-bone of a cow, and called, like a bull-roarer, "hateikuuca", is sometimes used in the ghost-dance to start the singing. One specimen (Museum No.  $\frac{50}{317}$ ) has a few small holes in it. Three of these in a row



were said to represent the three stars of Orion, called by the Arapaho "buffalo-bulls."

Tops—some of them flat-headed, and others pointed at both ends—were whipped. The game was called "going to war." Any top that was brought through still spinning, without having fallen, was regarded as victorious in war.

Fig. 154 shows a cup-and-ball game consisting of four hollow deer leg-bones, each about two inches long, strung in sequence and caught on a needle; the bones caught counting two, three, four, and five respectively, according as they are more or less distant. At the end of the string are several loops of beads, each of which, if caught, counts one point. If several bones are caught on the needle at one throw, the number of points is not the total of the separate value of each, but only as many as the number of bones caught. The sides of the bones are pierced with several small transverse holes. If the needle penetrates one of these, the game is said to be won. From the way the game is counted by other tribes, it is probable that this statement refers only to a certain hole near the end of the last bone. Each player continues to play until he misses, or has missed twice, as may be pre-arranged when his opponent receives the implement.

Another cup-and-ball game (Museum No.  $\frac{50}{374}$ ) is similar to the last, except that small hoofs replace the bead loops at the end of the string. The bones in this set count respectively from one to four; and the hoofs, if caught, one point each. In this set, it is said, there was no way in which the game could be won by a single throw.

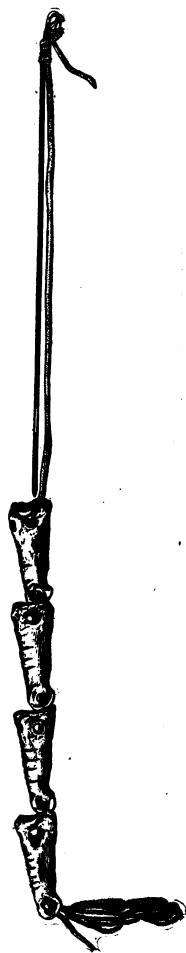


Fig. 154 ( $\frac{50}{374}$ ). Cup-and-Ball Game. Total length, 49 cm.

THE PEYOTE WORSHIP. — The peyote ceremony is comparatively brief. It is held in an ordinary tent, and lasts through a night. After dark the participants enter the tent, and each eats four of the small plants. They may follow this first quantity during the course of the night with as many more as they wish. The night is spent in singing around a small fire. Between this fire and the back of the tent, where the leader of the ceremony sits, is the equivalent of a simple altar on the ground. Only one participant sings at a time, accompanying himself by a rattle. The man next to him drums for him. After four songs, the rattle and the drum are respectively passed to the next participant; and in this way the songs make the round of the tent during the night. The conclusion of the ceremony is marked by certain symbolic actions about sunrise, and the participants then leave the tent, and eat. The day is spent in company at rest in the shade, with occasional irregular singing, but with no ceremonies. The action of the drug lasts until night, at which time the company breaks up.

The peyote cult is not tinged appreciably with ghost-dance beliefs. It contains many Christian ideas, but they are so incorporated that fundamentally the worship is not dependent on Christianity.

The leader of each ceremony is sole director of it. He may make his ceremony in accordance with dreams which he has had, or base it partly on visions during previous ceremonies. In other cases, he follows ceremonies that he has participated in, changing or adding details to suit his personal ideas. No two ceremonies conducted by different individuals are therefore exactly alike; but the general course of all is quite similar.

The following account of the peyote worship is based on a description obtained from a worshipper and on two ceremonies seen. These three sources of information have been combined in a single description, which may be regarded as applicable to the ceremonies typical in the tribe about 1899. The informant from whom the account was obtained took part in both the ceremonies seen. The first of these ceremonies had only three participants, besides a woman. In

the second there were about a dozen men (some of whom were Cheyenne, and all considerably younger than on the previous occasion) and again a woman.

The course of the ceremony is as follows.

Toward evening the man who is to conduct the ceremony selects a suitable place for a tent. He stands facing westward of where the centre of the tent will be. Raising his right hand, he prays. The grass is scraped from the ground, being cut first from west to east, and then from north to south. The tent is then put up, facing, as usual, the east. The wood that is to be burned during the night is stacked inside the tent to the south of the door. Small sticks of a wood that will burn without sparks are used. The leader of the ceremony takes a blanket, and, gathering red or reddish-brown earth or sand, brings it into the tent, or perhaps sends some one to do this. This reddish earth is put in a semicircle around the fire-place in the middle of the lodge, the centre of the crescent being toward the back of the tent, opposite the door. The diameter of the semicircle is perhaps four or five feet. Sage is pulled out, and laid on the ground around the inside of the tent, to be sat upon. The men sitting on this can stretch forward and reach the semicircle of soil. Sometimes the participants bathe just before making the ceremony. In the water they make one plunge against and one with the current of the stream. On coming out of the water, they may rub themselves with sage. The clothing and head are sometimes rubbed with teaxuwine<sup>n</sup> or waxuwahan, scented plants that are chewed.

The mescal-plants, *hahaayā"x*, which are wooden-looking disks an inch or more across, tufted with dull white (Fig. 155), are soaked in water. When the dry plants are very hard, the soaking renders them sufficiently soft to be chewed, but with some difficulty. Before the tent is entered for the ceremony, the plants are taken from the water, which has become brownish, and are laid

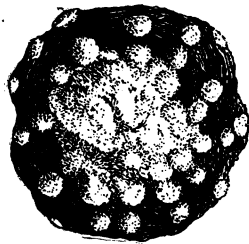


Fig. 155 ( $\frac{1}{2}$  in.). Mescal prepared for the Ceremony. Diameter, 4 cm.

in a cloth. The dirty and very bitter liquid remaining is passed around to the participants, each of whom takes two sips of it, though this is not obligatory.

The drum consists of an ordinary small earthenware pot over which is stretched a piece of buckskin, or sometimes canvas, which is kept wet through the night by a little water inside of the jar. The skin is stretched by a rope. This rope, however, does not pass through holes in the skin, but is wound around seven glass marbles which have been rolled up in the skin. This device prevents the stretching of the skin, or the tearing out of perforations in it when the string is tightened. The seven glass marbles also play a part in the symbolical rites the next morning. The drum is made on the evening of the ceremony, and hours are sometimes consumed in adjusting it. When at last the right degree of tension is secured, together with the proper saturation of the skin, the effect is a tone moderately loud and deep, and very resonant. The drum is usually beaten very rapidly so that the reverberations from the separate blows fuse.

Inside the drum are a small quantity of ashes and three small billets of pine-wood. The introduction of these is purely for ceremonial reasons.

The rattle which is held by each man as he sings is a small gourd stuck on a stick, and containing ordinary small glass beads. As compared with the clattering sound produced by the gravel contained in some Indian rattles, the noise of these peyote implements is a swish rather than a rattle.

Pocket-knives and other sharp instruments must be left outside the tent in which the ceremony is conducted. Not even forks may be used with the food eaten in the tent, or at the mid-day meal on the following day out of doors. The symbolism of this observance seems to be the idea that the ceremony is an occasion of peace and good-feeling, which must not be disturbed. For the same reason, perhaps, all food eaten in connection with the ceremony must be cooked entirely without salt. This ceremonial idea is, however, found in many regions without being based on any specific reason.

The participants in the ceremony gather outdoors; and the

leader of the ceremony, the one in whose tent it is held, selects a fire-tender, called hictānā<sup>h</sup>tcā ("fire chief"), silently pointing to him with an eagle wing-feather. This feather the fire-tender uses as a fan for the fire during the ceremony. The place of the fire-tender is just inside of the door, to its left or north. The fire chief goes first, and starts the fire inside the tent. When this begins to be illuminated, the other worshippers gather their blankets about them, and in single file walk to the tent. The fire chief kneels or stands on the prairie, outside the door, with his head bowed, facing the tent, or, according to one account obtained, in the opposite direction. The conductor of the ceremony, who has led the row of men, stands, and prays in a low voice, and then enters. He is followed by the others singly. The fire chief goes last, and closes the door of the tent. The worshippers then sit down, the director of the ceremony always at the middle of the back of the tent.

Usually corn-husk cigarettes are first smoked, and are lighted with a stick taken from the fire by the fire-tender. The leader of the ceremony then produces from a small beaded purse or pouch a mescal-plant, which he keeps permanently, often carrying it on his person. The plant selected is usually large, round, and even. He carefully smoothes a little space at the middle point of the crescent of reddish earth before him. Breaking eight short stems of sage, he lays them on this spot in the form of two superimposed crosses, the ends of the stems pointing in the cardinal directions and between. On this sage his mescal-plant is then laid (usually a head feather plume, which may have been worn in the hair on entering the tent, is stuck in the ground so that its tip nods over the plant); then, starting from the plant, the leader makes a crease along the top of the crescent of earth, first to the right, then to the left. This is continued at its two ends by the worshippers sitting on each side of the leader, and their neighbors carry it farther until the end of the crescent is reached. This crease or line is made by pressing the thumb into the loose earth. It represents the path by which the thoughts of the worshippers travel to the mescal-plant.

After this altar, as it might be called, has been completed, the peyote is eaten. The director gives to each of the participants four of the plants, which he takes out of the cloth or handkerchief. They are exceedingly bitter, and still quite hard. They are ground between the teeth, one at a time, until they crumble; and the chewing is continued until they are fine. The mass is then pressed by the tongue into a round ball, which, being soft, is easily swallowed. Most of the furry tufts on the face of the plant are spit out during the chewing. In a tent full of worshippers, a constant sputtering breaks the silence for a few minutes. After these first four plants have been eaten, more can be called for in the course of the night, whenever any one wishes them. Four are generally eaten at a time. The average number taken varies considerably, but seems to be about twelve. Sometimes more than thirty are eaten.

Sometimes, just before receiving the plants, the worshippers chew sage, and rub themselves with it. The director passes the cloth of soaked plants four times over cedar incense. He takes one himself, and gives one to the man on his left, who will drum for him. After they have eaten these, the director gives each of the participants four plants, first stretching his hand toward the east.

After the first four plants have been disposed of by all, the leader takes up his rattle and begins to sing. Sometimes he rests his left hand upon a staff, holding in this hand an eagle-feather fan. Such a fan is quite commonly used in the ceremony. The man at his left drums for him. Just before the singing, the drum, rattle, fan, and staff have been passed four times over cedar incense. The leader passes the rattle to his left-hand neighbor, and drums. After four songs, the third worshipper takes the rattle. It goes about the tent from left to right, from right to left, as the worshippers sit, making circuit after circuit, each man singing four songs. Except in the case of the singing of the leader, the man on the singer's right always drums for him. About midnight, on the completion of a round of singing, the woman present, who is usually the wife of the leader of the ceremony, leaves the tent.

She soon returns with a jar of water, which is placed before her husband. He then, at least on some occasions, takes an eagle-bone whistle with which he imitates the cry of an eagle as it gradually descends from a great height to the ground in search of water. The gradual approach of the bird from a distance is very vividly indicated, ending with a climax of shrill cries. The end of the whistle is then dipped into the water. After this the leader drinks from the jar. The water is then passed about the tent from left to right in regular ceremonial order, and every one drinks four swallows. The effects of the peyote make the participants very thirsty, but this occasion is the only interruption in the ceremonies of the night. From this time on until sunrise, the singing and the drumming go on continuously.

Sometimes, it is said, the leader goes out of the tent before the water is brought in at midnight, the worshippers remaining in the tent, and praying. Facing the east, he prays to the morning star; then, facing west, he prays to the peyote, which is in the tent, west of him. On his return, cedar is put on the fire as incense, to carry the prayers up. The fire-tender scrapes the ashes into a crescentic shape, inside the crescent of earth, and then stands and dances. His dancing consists of a shaking. The leader of the ceremony sings and rattles; the man at his left drums; and a third participant, it is said, blows the whistle, imitating a bird. At the end of four songs, the fire-tender, still carrying his eagle wing-feather, goes out. He returns with the water, which he sets before the director.

During the night, the songs usually refer to the peyote itself, to the birds regarded as its messengers, and to the long duration of the night. In the morning, as the tent begins to become diffused with light, the songs refer to the morning star and the end which it brings to the ceremony. At sunrise the woman leaves the tent, and after a short time re-appears with four dishes of food and drink, which she places in a row on the ground, between the fire and the door. On one occasion, the woman on this re-appearance wore a symbolically painted buckskin dress. Soon after her entrance, the last round of sing-

ing is completed, the rattle is laid aside, and the fire is allowed to burn out. The drum is then loosened and taken apart; and each portion of it is passed around the ring of participants. A little of the water still remaining in the jar is drunk by each worshipper. Every man, in turn, wrings the wet skin, and, as the rope with which it was stretched is passed to him, he throws a loop of it over his foot, and tugs at it. This is a symbol of the roping of horses. The seven glass marbles are pressed by each man against his chest, his shoulders, and other parts of his body, in order to ward off disease. One man has been seen to roll all seven out of his palm into his mouth, and then drop them back one by one. The leader's fetish, which has lain all night at the back of the crescent of earth, is passed by each man to his neighbor, and is held and looked at for a short time. When it has made the circuit and returns to the leader, he puts it back carefully into his pouch. He distributes to the participants the bits of sage-stems on which the plant has rested. The worshippers then wash the paint from their faces, and comb their hair; water, a towel, a mirror, and a comb also making the round of the tent. Then at last the drinking-water is passed around the circle, and is followed by the dishes of food, one after the other. After the food has gone around several times, and none of the dishes are any longer touched by any one, the worshippers rise, stretch themselves, shake their blankets (which have usually lain behind them during the night), and, one behind the other, leave the tent in the same order in which they entered it the night before.

It is perhaps eight in the morning when the tent is left. For the rest of the day the worshippers lie on blankets in a pleasant spot under trees, under a shade, or in the house. From time to time one of them sings, shaking the rattle softly. The drum is no longer used. Occasionally more than one man will sing different songs at the same time. The effect of the drug is still very strong. The physiological discomforts have usually worn off, and the pleasurable effects are at their height. It appears that new songs, inspired perhaps by the visions of the night, are often composed during



this day. At noon a meal is again served, most of the food at which is sweet. At this meal only one spoon is allowed in the company, and food requiring the use of this is therefore passed around from one participant to the other. At dark the worshippers saddle their horses and ride home, or go to bed if they live at the leader's house.

One of the recent modifications of the peyote ceremonial was devised by a firm devotee, to cure a sick person. The originator of this new form of the worship believes himself to have been cured by the drug. In this ceremonial, which was repeated four times, the tent seems to have represented a sweat-house, and a path led from the entrance to a fire outside, as before a sweat-lodge. The ritual, while remaining a peyote ceremony, conformed more or less to the ordinary processes of doctoring a sick person.

The objects used in connection with the peyote worship have a distinct decorative character of their own. The most typical color on them is yellow, with which their wood and skin portions are almost always painted. The feathers most frequently used are those of the yellow-hammer and other species of woodpeckers. The bead-work on peyote objects is on the whole predominatingly yellow, but most frequently consists of a mixture of small areas of different colors. Very frequently there are bands of different color encircling stems and similar objects. In almost all cases the ornamentation is geometric.

The objects most used in the peyote ceremonies are gourd rattles, fans, pouches for the peyote-plant, head-dresses of yellow-hammer or woodpecker feathers, and wrist-bands.

The peyote rattles are made of small gourds, which are usually painted yellow. The stick handle projects through the gourd, and is ornamented with dyed horsehair at the top. In some cases, the handle is wrapped around with beads, and almost always decorated with attachments at the lower end of the handle. Small glass beads are used to produce the sound.

The fans are often quite elaborate. Plate LXXXIII shows a peyote fan. It consists essentially of a short bead-covered

handle and of four eagle-feathers, which can be grasped so as to present a somewhat fan-like surface. The bases of the quills of these feathers are wrapped with beads, — one white, one green, one blue, and one yellow. On each of these ground-colors there are narrow bands of the three other colors. Above the bead-wrapping at the base of each feather proper are a red plume and a few fringes of skin. These four eagle-feathers are attached to the upper end of the handle in such a way that when this is held up they fall, and extend horizontally. Where they are attached to the handle are a number of trimmed yellow-hammer or similar feathers. These are ornamented with red and green plumes, — most of them at the base, but those that are longest, halfway up the feather also. The handle of the fan seems to be of skin. The beading enclosing it shows many bands, none of which is more than two rows of beads wide. There are all together six colors of beads on the handle. At the lower end of the handle is tied a strip of fur; and below this hangs a fringe of strips of skin more than a foot long, painted yellow.

The pouches used to contain the peyote-plant have room for only one of the disks, which is usually carried more or less as a personal amulet in addition to being the centre of worship during ceremonies. The pouches are beaded, and usually fringed and otherwise ornamented. Plate LXXXIV shows such a pouch. It is attached to a necklace of strings of black beads. The flap to the pouch consists of two strips of skin wrapped with beads at the end, and then fringed. The pouch itself is surrounded by a row of metal buttons and by a fringe of skin. This fringe, like all the unbeaded skin of the pouch, is painted yellow. A circular area of bead-work covering the front of the pouch itself, is said to represent the appearance of a peyote-plant while being worshipped. In the centre a cross of red beads represents the morning star. Around the edge of this circular bead-work are eight small triangular figures, which denote the vomitings deposited by the ring of worshippers around the inside of the tent in the course of the night. The yellow fringe around the pouch represents the sun's rays.

Accompanying this pouch are four bunches of small feathers of yellow-hammer, sparrow-hawk, and similar birds, containing each from one to three dozen feathers. These feathers are ornamented at their bases with dyed plumes or small barred feathers. They are attached to thongs, which are gathered into a single large knot, and enclosed by a covering of skin or wrapping of sinew. It is said that these bunches of feathers are hung on the tent-poles — at the northeast, northwest, southeast, and southwest — during the peyote ceremony, and that they are also used to brush the bodies of the worshippers when they are tired. It is not improbable that they may also have been worn as head-dresses.

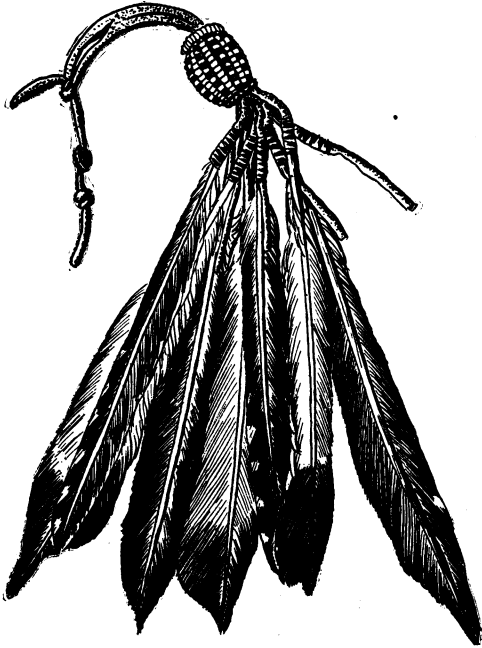


Fig. 156. ( $\frac{15}{12}$ ). Feather used to brush the Body. Full length, 22 cm.

Another bunch of feathers of this type (Fig. 156) was said to have been used both as a head-dress and to brush the body. The yellow parts are faded yellow-hammer feathers. Only seven remain on the specimen. Where the thongs to which

they are attached are gathered together there is a bulb covered with skin. This bulb is further covered by red and yellow beads. As usual, two thongs are used to attach the head-dress to the hair.

Specimen Museum No.  $\frac{59}{819}$  is another head-dress consisting of a bunch of feathers, and apparently intended for the peyote worship. To nine yellowhammer-feathers is tied a small eagle or hawk feather ornamented with a green plume at the base and with some red paint on the white portion of its surface. The thongs of all the feathers are painted red. Instead of the ball of knots there is in this specimen only a bit of weasel-skin. This head-dress would seem to have been



Fig. 157 ( $\frac{59}{819}$ , a). Head Ornament. Full length, 28 cm.

worn, at least in part, as an expression of a wish for the acquisition of a horse. When worn tied to the hair over the temple, it represents the blinders of a horse. The one larger feather, the upper end of which is black, is said to represent a black-eared horse; the bit of weasel-skin, horsehair.

Specimen Museum No.  $\frac{59}{820}$  consists of a dozen yellow-hammer or similar feathers tied together by yellow-painted thongs. The large knot is lacking; instead, a small hemispherical metal button is attached, said to represent a peyote-plant.

Very similar is part of another head ornament (Fig. 157). This also consists of a dozen yellow-hammer or similar feathers on thongs gathered in a large knot, and ornamented with a curved metal button representing the peyote-plant. The yellow feathers are said to denote sticks in the fire during the ceremony. Perhaps originally a separate object, but now attached to this bunch of feathers, is a miniature fan of six bluish feathers wrapped with beads where they are gathered at their bases. Below this beaded handle is a fringe of a dozen thongs painted yellow, and at the base of the blue feathers a red-dyed plume. This red is said to represent the fire in the ceremony; the bluish feathers, ashes; and the approximately cylindrical bead-covered handle of the fan, a peyote-plant.

Another object was used as a bracelet (Fig. 158). It seems

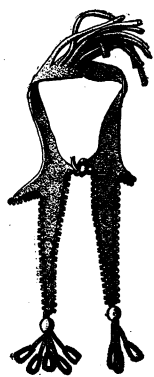


Fig. 158 ( $\frac{59}{820}$ , a).  
Bracelet. Full  
length, 37 cm.

originally to have formed the forked cover-flap of a peyote pouch, like that shown in Fig. 144, but to have been cut off and put to another use. The edges are bordered with green and yellow beads. At the end of each of the two strips is a large blue bead from which issue five loops of small beads. These bead attachments represent the hand with its five fingers.

Another such wrist-band (Fig. 159) consists primarily of



Fig. 159 ( $\frac{59}{820}$ ).  
Bracelet made of  
Twisted Cord.  
Length, 18 cm.

two strands of thongs painted yellow, and twisted together into a single string. A thong fastens this together after it is passed around the wrist, and lets the two ends hang loose.

These ends consist of a cylindrical button covered with bands of beads, and of a yellow skin fringe. Attached to the fringe at one of the ends is a flat piece of pearl in the form of about two-thirds of the area of a circle. This was said to represent the moon, and to enable the wearer of the bracelet in the peyote tent, ceremonially of course, to detect the approach of morning by its reflection.

Specimen Museum No. 49, obtained from Rev. Walter C. Roe, is described as a bracelet made of hair taken from a captive. The specimen has every appearance of being a peyote object. The hair is light brown and braided, and in the middle bound with an ornament consisting of a cylindrical button of beads of several colors and a short yellow fringe. At the ends of the braid are similar smaller cylindrical buttons of light-blue beads, each with a yellow band at each end. From the lower ends of these bead ornaments hangs another yellow fringe. A two-strand yellow thong ties the bracelet together just above the two ornamented ends.

There seems to be considerable trading and giving of peyote objects. Many of the specimens described in different parts of this work might have been made by Indians of other tribes, and very probably some are of foreign origin. The possibility of this varies with the class of objects. The regalia of the age-societies are certainly always purely Arapaho, although many similar types occur among other tribes. Articles of clothing and implements may in some cases have been made outside the tribe; and the same holds true of the ghost and crow dance objects. The peyote paraphernalia are perhaps most likely to be imported. The ceremony is said to be derived from the Kiowa, and men of different tribes not infrequently now participate in the same worship.

#### CHARACTER OF CEREMONIAL OBJECTS.

*Number and Color Symbolism.*—It will be seen that the general character of the modern ghost-dance and related ceremonial objects is quite distinct from that of the regalia formerly used in the tribal age-ceremonies. The fundamental difference is, that the latter are fixed and the variations between

individual pieces of the same kind are due to circumstances, and unintentional; whereas the modern ceremonies — not being based on established ritual to any extent, but dependent primarily on purely personal supernatural experience — impose on the objects used in them only a tendency to similarity, and in fact no two such pieces are ordinarily entirely alike even in intent. This difference is perhaps best exemplified by the coloring of the two classes of regalia. The tribal pieces are red, white, or yellow, with occasional small black or green embroidered or painted ornaments, or a little blue beading: the modern pieces are of all colors, used together indiscriminately without restriction. As regards form, many kinds of objects of each class are not found in the other. The two types of buffalo-dance head-dresses, belts of this and of the second age-dance, crazy-dance robes, dog-dance scarfs, the bunch-feather head-dresses of the dog-dance, the star-dance rattles, the wooden war-clubs of the first dance, and the bone whistles of several of the dances, — are all without parallel in the modern regalia. The board wands of the first dance, and perhaps in a degree the club of the highest degree of the second dance, the upright rawhide and feather head-dresses of the second dance, the quilled thong pendants of the dog-dance whistles and of other regalia, and the small quilled hoops of the buffalo-dance, have more or less close parallels or imitations, especially in the ghost-dance objects. The lances of the second dance, which have so wide a distribution on the Plains, especially the feathered crooks, do not seem to have close analogues in modern ceremonial objects, the only similar piece in the Museum collection being the short feathered stick shown in Plate LXXIX. On the other hand, practically every one of the many types of ghost-dance head-dresses, the crow-belts, the hand mirrors, the painted dresses, the feathered necklaces and belts, and other classes of objects, are, among the Arapaho, altogether modern.

From what has been said, Arapaho color and number symbolism, and their relations, can now be summarized. The Arapaho sacred numbers — as appears from innumerable references both in ceremonial and other connections, and from

the traditions that have been published — are four, five, and seven. Six and ten do not occur. Seven is much less frequent than four. The Arapaho sometimes say that in certain matters, such as the membership of the highest age-society, four is the older number, seven the newer; but this is probably nothing more than a speculative supposition based on the greater inclusiveness of seven. Objects, names, and conceptions (ceremonial and mythological) are not infrequently seven in number, episodes in traditions occasionally, ritual actions hardly ever. Of the two other numbers, it may be said unqualifiedly, that five occurs only as based on four: it is, as an idea, the summing-up of the four, spatially the centre of the four. The idea of five as a significant number itself is as foreign to the Arapaho mind as that of three or of ten, except in so far as this is connected with the fingers and mathematical operations. On account of being the fulfilment of four, five is particularly common in ritualistic actions, perhaps exceeding four in frequency; but its relation to four is even then almost always clear to the Indian as well as to the white observer, especially in cases of visible spatial expression. Four, then, is the primary number with meaning to the Arapaho. They are unable to depart from this thought, and it enters into their life, even where there is no direct ceremony involved, to an extent and with an inevitability that may be equalled by certain peoples, but is perhaps scarcely surpassed by any, even in America. The material life of the Plains is probably not so conducive, directly and indirectly, to a concrete expression of this tendency as is that of the Southwest; but this is compensated for by the rigidity of the adherence of the Arapaho to four as compared with the great development in the Southwest of concepts also of six and seven. The difference in this point between the two culture-regions is evidenced in that the Arapaho begin and end with four, develop it frequently to five, and occasionally, by a leap, to seven. The southwestern Indians, with considerable frequency of four, seem to be trying always to reach seven, and their abundant six gives the impression of being only a step, a means of reaching seven more significantly. The Mexicans



appear to agree more nearly with the Arapaho in having four as their primary number, but differ from them in the strong tendency to the use of higher numbers, such as thirteen, no doubt in connection with the greater development of their culture. It is remarkable how uniformly the exclusive significance of four as the lowest and most fundamental numerical base in the American hemisphere contrasts with that of three, or of numbers higher than four, in the Old World. Where the American Indian departs from four to five there is almost always a minimization of ritualistic and symbolic ceremonialism.

The connection of four with the conception of the circle is wonderfully deep in the Indian mind, and finds full expression with the Arapaho. Of course, this connection is given in nature by the four quarters determined by the sun, whose manifestations form the greatest visible phenomenon in the world, and there probably is more or less causal relation; but the connection extends to human matters not in any direct relation with nature. The idea of the circle as such, as we of Old-World civilization have it, is very slightly developed in the Indian; but it may safely be said that the idea of four is almost invariably inherent in the idea of the circle, at least in the mind of the Arapaho. A circle is to him a four-sided or four-ended thing: it is *per se* four-determined and four-containing. The rhombus, the rectangle, the cross, are all equivalents of the circle; and when, as often, the connection or identification is not directly made, it is almost always not far away.<sup>1</sup> Where we think geometrically, the Indian thinks symbolically; where we are realistically visual or spatially abstract, he is pictographic. Whether in North or in South America, this holds true, of course in varying degree; and in the Old World, savages and cultured nations — Europe, Africa, Asia, and Oceania — are in fundamental tendency a unit

<sup>1</sup> On p. 144 it is stated that, in the primarily decorative art of the Arapaho, the figure of a rhomboid has ten different significations. Six of these are of objects that are naturally round, or would naturally be represented by a circle by any people,—the navel, a lake, a turtle, a buffalo-wallow, the area of a hill, the floor of a tent. The seventh, a person, is no doubt an enlargement in idea of the navel; the eighth, the eye, is partly round, partly more realistic; the ninth, a star, is probably based on the cross, the rhomboid being a cross with its points connected; the tenth, the abstract symbol *hiiteni*, appears to have its primary significance in being four-cornered.

in this respect. Of course, the connection of this tendency as regards the conception of the circle, with the straight-lined character of American art (what we falsely call geometric) as contrasted with the overwhelming preponderance of the curve in the Old World, is not far to seek.

From the prevalence in North America of color-direction symbolism, and the extent among the Arapaho of direct color-symbolism, of world-quarter and of four symbolism, it might be expected that they, too, connected certain colors with certain directions. There is as yet apparently no trace of any such color-direction symbolism.<sup>1</sup> While there may be instances of it, they are certainly sporadic, and contrary to the general trend of Arapaho symbolism, and would only prove the innate deep-seatedness of such an association.

There is a certain connection of different colors with the number four, especially in ghost-dance ornamentation. A typical quill-embroidery in white, yellow, red, and black, has also been described (p. 65) as referring to the sacred four. In the few cases of ghost-dance objects observed, the colors have always been black, red, yellow, and green, blue sometimes replacing black. There is, however, no fixed order in which these successive colors come, so that it is evident, that, while taken collectively they may contain the idea of the four-directional world, there is no definite attribution of particular colors to certain directions. Taking the colors as they occur from left to right, or in sunrise circuit, their order in the several cases is black, yellow, green, red, black, green, red, yellow, with white as the central fifth; black, green, red, with white as the fifth; and blue, red, yellow, green. So that, whether the several series are read forward or backward, the same order cannot be obtained. One of these cases is that of four different winds represented by lines of different colors. The winds are often equivalents of the world-quarters in America, so that we are here apparently not very far from association

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<sup>1</sup> The sun-dance connection of red and black with north and south is primarily a reference to day and night, not to directions. As matter of fact, the red (representing the day and the sun) is to the north; the black (standing for night, the moon, and winter) is south. According to Dorsey (*Arapaho Sun-Dance*, p. 125), the Arapaho state that the original symbolism was the reverse of this.

of colors with directions; but the only idea in the mind of the maker of this piece seems to have been that of four, and the colors served only to emphasize this idea as such.

Still less importance can be attached to the color-sequences as connected with directions when the technical and purely stylistic limitations of Arapaho art are considered. Mixed colors, such as the spotted or striped of the Southwest, do not occur; blue and dark blue are regarded as equivalents for black; light blue is comparatively little used, and was less so before the introduction of glass beads and civilized dyes, and, as if to still further minimize the rôle played by blue, it is sometimes the equivalent of green. This leaves only five colors, — red, yellow, green, black, and white; and as white is the normal color of the unornamented surface (whether skin, rawhide, wood, or quill), it is natural that it should be regarded as less distinctly a color than the others, and find its chief function in expressing the containing fifth, leaving the combination of red, yellow, green, and black as almost a necessity.

Decorative factors are also intimately connected with the white, yellow, red, black combination. A rich medium blue such as best brings out its quality as a distinct color is not used by the Arapaho, except in old blue-and-white bead-work in beads no longer employed, and to a certain extent in modern *parfleche* painting. Modern bead-work uses either distinctly dark or light blue; old rawhide painting lacked blue; wood and skin are not so often painted blue as red, green, or yellow, but if so, in dark blue; porcupine-quills for embroidery and modern ghost-dance feather-work are dyed in colors that are nearer purple than blue. It is in connection with this fact that blue is so neglected in color-combination, though whether technological reasons caused the stylistic development, and this affected symbolism, or the reverse took place, or the matter is stylistic in origin, cannot be said. Green is now frequently used as a well-marked color, though sometimes so dark a shade of the color is used that it is substituted for black. Green is at present not rare in objects ornamented in the tribal, that is, non-individual style, such as robes and cradles; but it is difficult to see how the native greens formerly

available could have sufficed to produce a color artistically satisfactory, especially when they were applied to quills. In modern parfleches, green is one of the commonest colors; but in the old pieces—especially such as medicine-cases, where styles would be likely to be more conservatively adhered to than in household articles—the green is uniformly extremely dark. While this may be due in part to changes in the pigment, it seems that this old green must have been originally darker than that now used, and that it was employed as a more pleasing substitute for black, with red and yellow, on the naturally white background of rawhide. The tendency to use blue and green as substitutes for black goes very deep among the Arapaho. In all the regalia of the age-societies, there is scarcely a black line painted; and embroidery in black is limited to lines and small bars. Black beads are very unusual in any class of objects. There is scarcely an Arapaho article in existence painted with soot or charcoal. Outside of body-paint and certain ceremonial paintings, especially in the sun-dance, an actual black seems to have been avoided.<sup>1</sup> With blue and green so largely reduced in function to serve as its equivalents, especially in the older days, the white, yellow, red, black, blue, green, combination is also almost reducible to non-symbolic causes.

Along with these apportionments of colors into groups of fours, there is a color-dualism in certain circumstances,—the deep-seated contrast, which we, too, have not outlived, between black and red. This finds, perhaps, fullest expression in the sun-dance, so that black and red seem to be regarded as the distinctive sun-dance color-combination. Apparently it occurs also in the older age-society ceremonies, as in the body-paints used by the dog-dancers, and probably by the still older men. Sacred bags contain red and black paint. In the ghost-dance movement there seems to have been a new development of this idea in the division of the guessing-game sets into black and red halves. That blue or green replaces

<sup>1</sup> It is doubtful whether charcoal was ever used, except as a body-paint on the return of a victorious war-party. Black body and ceremonial paint was usually, if not always, mineral; black embroidery was by means of naturally black vegetable fibres; and the blackish outlines of rawhide paintings are made with vegetable juices.

black as soon as the artistic consideration takes a place beside the traditionary and old ceremonial, does not in the least impair the dualism to the Indian. It is curious that, in the ceremonial regalia of age-societies, the black and red combination is conspicuously wanting. There are frequent pairings of colors; but they are white and yellow, white and red, and yellow and red.

In connection with the ghost-dance movement there is a frequent color-dualism symbolizing heaven and earth, or the future or the present world; but the colors used vary. Blue and probably yellow denote only the sky; red, only the earth; green, both. When yellow and green are paired, the former is daylight and therefore the sky; green, vegetation and hence the earth. As between red and green, the former, denoting blood, man, paint, and earth, is this world; the latter, as an equivalent of blue, is the sky.

The average color-symbolism of the decoration of useful objects, which has been discussed on p. 149, is not very different from that of objects exclusively ceremonial, so that nothing need be added here to what has been said, except a few generalizations as to the scope of this symbolism. It will be seen that the significations of colors are taken from visible nature, — earth, sky, sun, night, light, rocks, water, snow, vegetation, blood, buffalo, sunset. There is virtually no designation of anything abstract; and any connection of colors with states of mind — such as grief, friendship, love, jealousy — is foreign to the aboriginal Arapaho way of thought. Black is a sign of victory, but expresses a fact rather than a feeling. It thus differs from our use of black as a mourning-color in dress: it is nearer the black crape on doors, which, whatever its origin may have been, is now not a direct expression of grief, but an indication of a fact. Like this, the use of black as a sign and then as a symbol of victory, and therefore of war, is entirely conventional; but its wide distribution in North America is remarkable. White is occasionally a symbol of old age; but here, however abstract the significance, the concrete visual basis of the symbolism remains clear. Red also sometimes implies age. The association of ideas in this case is

through the use of the paint itself. Red is the paint *par excellence*; and it is the old people, who most paint themselves for religious motives, who direct the painting of the young in ceremonies and its use on objects. Then, too, old people, leading a simpler life, discard the other colors of youth, and paint themselves in red. Their clothing and their personal articles are usually unornamented with beads or embroidery, or anything but red paint. Here, again, a visible series of facts is the basis of the symbolism. The semi-abstract reference of red to man is similar in character. Red is blood: it is also paint, which man uses, and by means of which he lives. Even the designation of the earth by red is of this nature, though it is no doubt founded in part on the frequent redness of the soil in the Arapaho habitat. Red is paint, which comes out of the earth, and often is earthy: therefore it is the earth. It will be seen from this, that, where the representation of red is not of visible phenomena or objects, its symbolism is of the pigment and its uses, not of its color-quality; so that the symbolism is a matter of association of facts, not of a color as such with an abstraction as such.

#### PERSONAL SUPERNATURAL POWERS.

Supernatural power of whatever kind is believed among the Arapaho to be usually acquired at a time of fasting and isolation. The custom of more easterly tribes, for young boys to go out soon after the age of puberty, and fast in a given way for a certain number of days, is not known by the Arapaho. The men who go out to obtain supernatural power are usually fully adult, and sometimes of middle age. A man does not necessarily have supernatural experiences only once in his life. The places chosen are most frequently hills or mountain-peaks. The duration of the fast varies from two or three to, in some cases, seven days. Four days as the Indians reckon, which is perhaps usually seventy-two hours, seems to be the most common period. The being that appears to the faster, and becomes his guardian spirit, is usually an animal, most frequently, it would appear, a small animal. This fact is per-

haps connected with the practice in which a man uses the skin of the animal, his supernatural helper, as his medicine-bag. During the vision, when the worshipper is instructed, the spirit most often appears in human form; only when it vanishes is it seen to be an animal. Supernatural powers effective in medicine or war, or of any other value, are not differentiated in method of acquisition by the Arapaho. It appears that the great majority of middle-aged men went out to receive supernatural communication, and were successful. Even at the present day, this holds true of the men of some age. A distinct profession of medicine-men or shamans can therefore not be spoken of with any approximation to correctness, any more than can a caste of warriors. The differences between individuals in kind and degree of supernatural power were apparently not greater than in matters of bravery or distinction in war.

The following paragraphs give accounts of supernatural experiences, descriptions of implements connected with such experiences, of amulets, and of medicines, and statements of a general nature made by Indians on such matters.

A man fasted on a hill for four days, crying. The fourth morning, at sunrise, he saw a badger. The badger stood up on his hind legs and turned into a naked man painted red over his body. This badger-man looked like an image of the man who saw him. He was, of course, an untrue person, or spirit. He directed the faster to use a badger-skin for his medicine-bag. To the badger belong all medicines that grow on the ground. The man did not build a monument of stones on the hill where he fasted, as is the common practice. He found a buffalo-skull, and used it as a pillow when he slept. His medicine-bag, which accordingly was of badger-skin, contained the following medicines: —

1. A red bag of niäāta<sup>n</sup>-root, used against cough. Pinches of the powdered root are put into a vessel of water at four sides, proceeding in order from left to right. A fifth pinch of the root is then dropped into the middle of the vessel, the fingers being raised somewhat higher than before. The water is then boiled, and the medicine drunk by the patient.

2. A little bag of medicine called waxubaa,<sup>n</sup> which is said to grow in the present habitat of the northern Arapaho. This is a medicine for stomach-ache.

3. A smaller yellow bag of hāçawaanaxû, the root most frequently used in the tribal ceremonies of the Arapaho. By this man the root was mixed with earth when used. Five pinches were dropped into a vessel of water, boiled, and drunk. This was to cure pains in the back and in the chest.

4. A small red bag containing a pebble-like formation found by the owner in the side of the body of a buffalo, and called hānā<sup>n</sup>tcā<sup>n</sup> ("buffalo-bull"). This stone is laid on sores in order to cure them. The bag also contained a root, which, like the preceding remedies, is boiled in water and the decoction drunk. It is used as a cure for hemorrhages or lung-disease.

5. A turtle-tail worn as a head-dress by young men, being supposed to aid them in retaining good health. With this was the heart of a turtle, with which the owner refused to part. This heart is pounded fine, and drunk in water as a remedy for pain in the heart.

A well-known medicine-man, who, with much real devotion, has many of the qualities of the charlatan, told the following about his supernatural experiences.

Once he fasted four days. On the third day he saw fighting. A man painted green over his body, his hands red, and his face yellow with red streaks passing down from his forehead to his jaw, was on foot in the fight in the midst of the enemy. He wore a necklace from which hung medicine and an owl-feather, and which was swung around his back. This person ran between the two fighting-lines four times. The enemy shot at him with arrows, but did not hit him once. Even when he was near them, their bow-strings would break. Then his dream or vision changed, and the people he had seen were small birds flying in flocks, called waotānictcēci; and the man running between them was a yellow-jacket or wasp, flying back and forth. After his fast and return home, the informant dreamed that he saw a man wearing on the front of his head a small figure representing the man he had seen in his vision.

After he had begun to have medicines, a person appeared



to him in a dream or vision, bringing him a badger-skin medicine-bag.

On another occasion he fasted on a hill near a lake on the Cimarron. It was the third night. As he was lying on the ground he heard footsteps. A man called to him to come to his tent. He thought some one was trying to deceive him, and he paid no attention. The person continued to call him. The fourth time he said, "Hurry and come. Other people are waiting for you." Then the informant consented. He went in his thoughts, but he himself did not get up from the ground. He went downward from where he was lying, into the ground. He followed the man who had called him, and entered a tent. On the right side in the tent sat four young men painted black with yellow streaks. On the left side in the tent sat three young men painted yellow with red streaks. The man who had possessed the medicine sat at the back of the tent. He himself sat down at the left side, so that there were four on each side of the man at the back. This person was painted red. In front of him lay a pipe with its head to the north (the left). The head of the tent put mushrooms on the fire as incense, and then shook his rattle, in imitation of a rattlesnake, while the young men sang. Then he passed the pipe, and they smoked. After this, he rubbed and cleaned the pipe, and told the visitor that he must do in the same way. Then he folded his arms, bent his head, and two snakes came from his mouth, coiled on the ground, and darted their tongues. Then the man who had vomited the two snakes blew on them, and they disappeared. At first the visitor did not know where they had gone. Then he realized that they were in his own body. He declares that he keeps them there now, one on each side. Through virtue of this dream he now cures rattlesnake-bites. A pipe is sent him, and after smoking it he goes to doctor the person that has been bitten. If he receives this pipe, he is able to effect a cure. While he is doctoring, the patient can see the two snakes projecting out of the medicine-man's mouth. When the medicine-man comes across a snake, of whatever kind, he catches it, strips off its skin, and eats its meat and internal organs raw.

It appears that the supernatural being that gave him his snake-medicine was the same that he had seen in a dream of the battle. Apparently this same person took him away in a dream and showed him the plant which he was to use when he doctored rattlesnake-bites. After having been shown the proper plant, he looked for it until he found it.

This man's medicine-bag was a badger-skin (Museum No.  $\frac{50}{300}$ ), and its contents were the following:—

A small figure made of skin painted green, with a yellow head and with red hands, throat, and vertical stripes on the face and legs, and with a small bag of medicine and an owl's feather attached, represents his supernatural helper as he saw him in the fight (Fig. 160). The small medicine-bag attached to the figure is painted with blue stripes, and contains a mixture consisting of a root called *hiitcauxû-ûwaxu*, of amalgam from a looking-glass, and of the excrement of wasps. A feather somewhat painted with green hangs from the medicine-bag. The body of the figure contains parts of two white plume feathers with quills. Hair is attached to the back of the head. The entire figure is worn on the head as a battle-amulet.



Fig. 160 ( $\frac{20}{300}$ , c). Figure from a Medicine-bag. Length, 14 cm.

There is also in this collection of medicines and amulets a stuffed mole-skin to which are attached a bag of medicine and a small ring of red catlinite (Fig. 161). To touch a mole, or even the earth thrown up by one, gives the itch. The medicine kept with this mole-skin is used to cure this itch, as well as the bites of insects, or diseases supposed to be caused by them. It is therefore called *biisānoxu* ("insect medicine"). The medicine in the bag consists of scented leaves called *tcaaxuwina*,<sup>n</sup>

of charred tobacco, of hard red seeds called na<sup>n</sup>wubāei ("southern berries"), of the plant called biisānoxi, of the dust, probably the spores, of small mushrooms, which are supposed to fall from the sky with the rain, and of powdered bone of hiintcābiit, the water-monster. Bones of a very large mammal or reptile

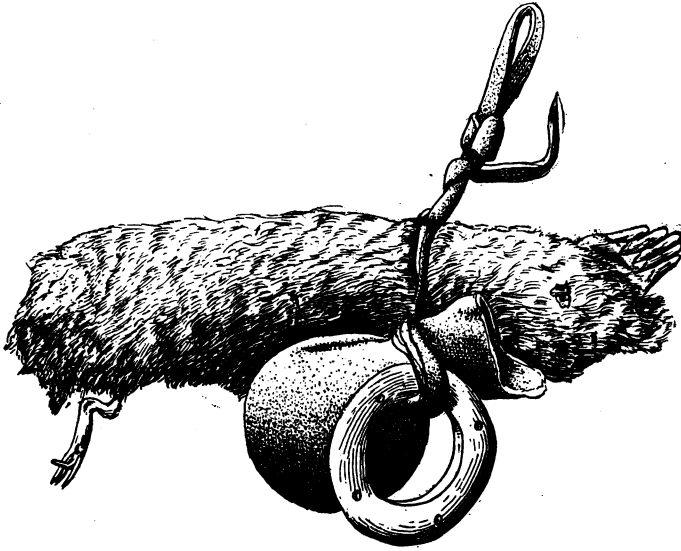


Fig. 161 (  $\frac{50}{300}$ , *d*). Stuffed Mole-skin. Length, 11 cm.

are not common on the river-banks of the Arapaho reservation in Oklahoma, and are looked upon as the bones of this monster. The small bag containing this mixed medicine has the shape of a mushroom, it is said. Four small pits have been bored in the catlinite ring, giving this the appearance of a world-symbol.

Another amulet worn in fighting consists of a bracelet or armlet of badger-skin, painted green and yellow inside, to which are attached a gopher-skin, an owl-claw, several bells, feathers, some of the red seeds called "southern berries," and a few skin fringes painted yellow, with green ends (Plate LXXXV). The badger-skin wrist-band is used to increase the speed of the horse that is ridden; the claw helps the wearer to seize the enemy; the motion of the feathers drives away the

enemy; and the bells represent the noise of the fight. In case of need, one of the red seeds is broken open and chewed. Besides a battle-amulet, this object is also used as a rattle in doctoring the sick.

Two elk-tails on handles are used, first to point out the diseased spot while the doctor sings, and afterwards to brush away the pain in that part. They were both seen used in a dream. One of these tails is decorated with a small ring of catlinite, a brass clock-wheel representing the sun, and a piece of a Ute scalp (Fig. 162). To the other are attached several of the red southern berries. Water in which these berries have been boiled causes vomiting.

A small medicine-bag contains horse-medicine and amulets

to cause mares to have colts of a certain color. The medicine in the bag is given to the mare, and she is then patted, and rubbed on the flanks with a bean of a certain color. The use of a red bean will make the colt roan or bay; of a white bean, white or buckskin. Others, spotted beans which the owner valued too highly to part with, are used to produce a painted colt. The medicine with these bean amulets consists of horse-fetlock used as incense and of the root of a plant called *hiwaxuhaxhiwaxu* ("horse-root"). This is given internally to a sick horse, or is rubbed on the nose of a tired horse to refresh it. The



Fig. 162 ( $\frac{50}{300}$ ,  $\nearrow$ ). Tail of an Elk used in Doctoring. Length, 42 cm.

medicine used by this man to cure rattlesnake-bites consists of a root called *ciiciyenaxu* ("snake-root"), of snake-scales, and of the red southern berry.

A one-legged man among the northern Arapaho, noted for his ability to do conjurer's tricks, said he thought the

time would come when the great beings would meet in the new world and contend to see who could do the most. He thought that he would win with the feats he could do.

The paraphernalia of this man were the following.

Two stones used as amulets, representing, one the earth, and the other meat.

A rawhide rattle, shown in Fig. 163, made of the scrotum

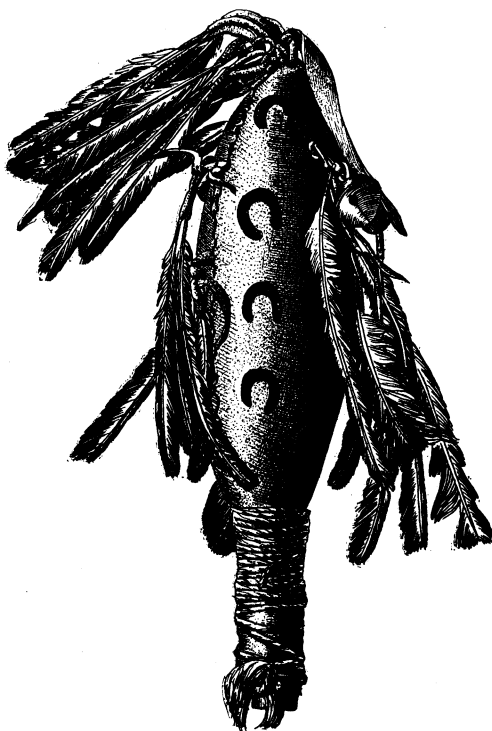


Fig. 163 (1891). Rattle with Symbolic Decorations. Length, 26½ cm.

of a buffalo-bull. This rattle is elliptical instead of globular, as is more often the case; but occasionally rattles of even slender shape are made. The owner was fasting on a hill. Toward the end of his fast, his grandfather, the sun, directed him to make this rattle. The rattle is painted red, and marked with dark horseshoe-shaped figures, symbolizing both the sun

and horse-tracks, and with small figures shaped like a Y bisected in the fork, which represent bird-tracks. Yellow-hammer or similar feathers and little brass bells are attached at four places, and again at four places below, this time without bells. At the top is a larger bunch of feathers and another bell. These attachments are made by a thong passing through a small raised area of the skin without perforating it to the interior. These thong-holes are perhaps made by a skewer left in the fresh hide. The handle of the rattle contains a stick, and is wrapped with twine. This rattle is used to cure the sick. It drives away the spirits, and aids the medicine that is administered.

A fossil shell found on the occasion of the owner's fasting on a hill represents a monument or pile of stones (*çiäya*). It is used to touch patients, and is also taken into the sweat-house. Incense of *ibaa*"tou, fir (?) needles, is used with this stone.

A scaly turtle-tail or fish-back mounted on stuffed buck-skin, to one end of which are tied feathers, is used both as a war-amulet and in doctoring (Fig. 164). In the latter case the sick person is fanned and brushed with the feathers. In going to war, the piece is worn on the head, on the chest, or on the side, hanging from a strip passing over one shoulder. The feathers produce swiftness, and the hard scales cause invulnerability.



Fig. 164 (1893). A Turtle-tail, used as a War-amulet. Length, 27 cm.

A root called *neniitcicaxaa*", or pith-root, is used by this medicine-man as a cure especially for fits, but more generally for other illnesses. The root is eaten whole.

A head-dress of split and in part trimmed feathers contains eagle and perhaps other gray-black feathers and a single plume dyed red (Plate LXXXVI). A small short stick is the foundation to which the ends of the quills are tied. Three central

quills trimmed to the tip and the red plume are stiff, and stand when the head-dress is held up: the other feathers fall, because their quills have been split. It seems that the head-dress was worn in the ghost or crow dance, hanging down as illustrated. Feeble or weak people, and children, were brushed with it during the dance.

A man who at the time of the ghost-dance excitement fasted for seven days subsequently made the following objects, and told this story of his experiences.

The informant stated that he gave himself up to the ghost-dance, and tried to see visions. He put all his thoughts on the matter, but failed to have any visions. Then he made a vow to fast on Coyote Hills. He went up on the hills naked, except for a blanket, and during the night prayed and cried. For four days he saw nothing. He heard only the noise of the people talking near him and other things to distract him. But the last three days were more satisfactory. He saw supernatural things plainly, as if in full daylight, not as when asleep. A spirit came. He did not look at it; but it told him, "If you do as I tell you, it will be well." He continued not to look at it. It seemed to be bright day. The spirit directed him not to find fault, or be critical of other people, but to be generous and pleasant. It told him that the birds and animals would be his friends, and protect him; that, whenever there was a new moon, he would have a dream which would show him the future. It told him to have fortitude; for the sun would give him strength to complete the seven days of fasting which he had vowed. This spirit appeared on the fifth day. It brought nothing, but said that after the seven days were completed, when he went back, the clouds would go with him, threatening rain. It told him then to think of the above, of the star exactly overhead, and of the morning star, which is the last to rise in the night. These would protect him while he was asleep. It told him also, that, when the day of the new world came, there would be signs in the morning, and the following colors would be visible at the rising of the sun, — black, green, red, yellow, and white. Finally the spirit told him to run when he went home

after completing his seven days of fasting, but to stop if he met any one.

When the informant had fasted for seven days, he returned. As he ran it seemed to him that he was not touching the ground, but he saw that his feet were on the earth. As he ran he kept his hands open. Then there was an even, round hill in front of him. On it stood a man with a dark-blue blanket. Then he thought of what the spirit had told him, and stopped and went to this man. This person had one arm hanging out of his blanket. The arm was naked and fleshy. He held a black cane with a golden head, and stood facing the west. This person said, "I am not the father nor the messenger, but I am whom you have heard of and talked of, — the turtle. I own the rain. When you want rain, pray to me, for I am the fog. I know about your fasting, that you have a strong heart, and I will help you if you want rain. You have done well to fast for seven days, for Above-Nih'ā'ça" thinks well of that number. When you are at a feast, let the people take a little food and give it to me. Let them do this whenever they can, and I will remember them and protect them. You have done right to obey the spirit and stop here. Do not speak evil of people. You will have no difficulties hereafter. Everything will be pleasant." When the turtle spoke to him thus, it was a stout man, but, after it had finished, he saw it as a turtle.

It appears that there is a symbolic reference to the turtle in the round hill.

The following objects were made and kept by this man as the result of his experience.

A white flag or handkerchief (Fig. 165). The figure of a person painted on this represents the first spirit seen by the informant. This spirit carried a yellow and a green handkerchief, had his face painted yellow, and wore a red head feather. The turtle painted on this cloth is his real supernatural helper. The moon is represented, because the first spirit told him that every new moon he should dream of the future. The crescent is placed horizontally, which to the Arapaho is an omen of health and prosperity. When one horn of the moon is much higher than the other, it is believed that there will be general



sickness. The Maltese cross on this handkerchief represents the morning star, which the spirit said would protect him. A five-pointed star is painted in black, green, red, yellow, and white, the five colors that were to be visible on the morning of

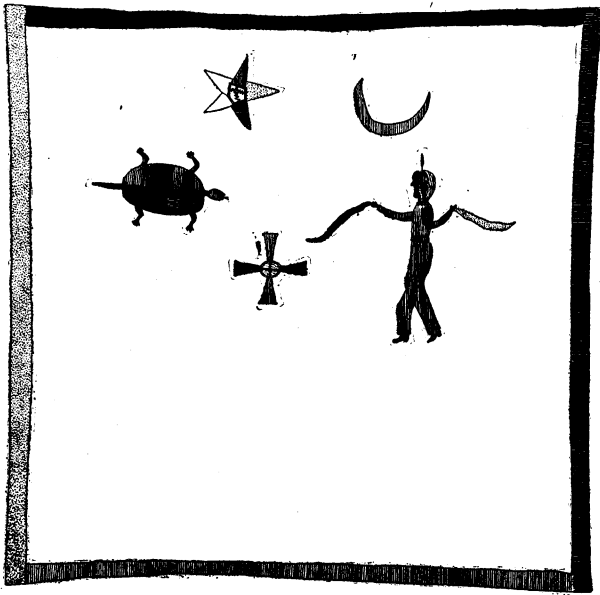


Fig. 165 ( $\frac{80}{33}$ ). Painted Cloth representing a Dream Experience. Length, 88 cm.; width, 91 cm.

the last day. Zigzag lines across the central portion of this star represent its rays or twinkling. The white handkerchief is bordered by margins of four different colors,—black, green, red, and yellow; making, with the central white, the same five colors prophesied.

A small human figure of buckskin (Fig. 166), with five crow-feathers attached along one side of the body and a red-painted fringe along the other, also represents this man's supernatural helper. It is fastened to strings so as to be worn as a necklace. At the back of the head is hanging hair. At the tip of the hair are red-dyed plumes. The body is painted yellow, with red and green face and a red stripe down and one across the body. The rear side is painted black and red.

The head of his supernatural being was further represented by this man in carving at the end of a club-shaped stick (Fig. 167). The greater part of this stick is wrapped with fur; and eagle, magpie, and perhaps crow feathers (some of them partly slit from the quills) are attached to the head. The being's hair is represented by furry buffalo-skin covering the



Fig. 166.

Fig. 166 ( $\frac{50}{28}$ ). Necklace bearing an Image of a Supernatural Helper. Length, 72 cm.



Fig. 167.

Fig. 167 ( $\frac{50}{38}$ ). Carved Stick representing a Supernatural Helper. Length, 58 cm.

back of the figure's head. Such three-dimensional carving as in this piece is very unusual among the Arapaho at the present day, and it is doubtful to what extent it was practised in aboriginal times.

A rawhide ornament in the shape of a Maltese cross represents the morning star. This cross, including a white china disk (a modern substitute for the old shell gorgets) fastened to its middle, is of the same five colors — black, yellow, green, and red, with white in the middle — that appear on the handkerchief. Shell gorgets of this type are used as offerings at the stone piles on mountain-tops. This one is an offering to the morning star. Attached to the ends of the cross by thongs are red, yellow, and black down feathers representing the clouds, the red in the morning and the evening, the yellow during the day, and the black before rain. The arrangement of colors of the down feathers in relation to the colors of the cross-arms to which they are attached, is the following: black arm, red; yellow arm, yellow; green arm, black; and red arm, red.

A head-dress of long, black upright feathers attached to a stick, the feathers being partly trimmed to the quill, is one of seven made by Sitting-Bull, the originator of the ghost-dance among the Arapaho, together with seven ghost-dance shirts or dresses, some of which are still religiously preserved.

An iron chain to which a number of amulets and medicines are attached is worn over one shoulder (Plate LXXXVII). The various objects on this are the following: —

A turtle-tail ornament at the base with a charm of blue beads. This is worn as a head-dress when the owner sees a cloud that appears dangerous, in order that the cloud, which is the turtle (under the turtle's control), will not injure him. The blue of the beads on this head-dress represents the sky. The turtle-tail itself is said to be a cloud.

A horse-fetlock, with which the owner rubs his body when he is about to break a horse.

A horse-tooth.

Another turtle-tail.

A piece of horse-hoof. When one is kicked by a horse, this is used to moderate the swelling.

A deer-tail.

Two deer-fetlocks.

Another deer-tail. These last four pieces are all from animals that were hunted a long time before being killed.

Another turtle-tail, regarded as the foremost of all the objects on the chain. It is the largest piece attached to it, and the chain is worn so that this hangs at the bottom, "like a heart."

Another horse-tooth.

A horse-fetlock and a piece of otter-skin, worn as a head-dress in order not to be thrown in breaking a horse.

A red-painted turtle-tail and a slightly blue whitish plume mounted on a short stick, and worn at gatherings or feasts. The hardness of the scales of the tail represents the owner's health; and the feather plume, his lightness.

Another horse-tooth. The informant was once bitten through the finger by a horse, but a fresh nail grew over the wound.

Another deer-fetlock.

Another deer-tail.

Another deer-fetlock.

Strips of deer-skin.

A deer-tail secured when he was a boy or young man.

A deer-fetlock.

Another horse-tooth.

A man who was middle-aged at the time of the ghost-dance had the following dream: He saw himself standing alone on a green prairie, looking to the east. On his left, to the north, he then saw a person seated, dressed entirely in black silk. He thought that this was the messenger. The man wanted to approach him and touch him; but his thoughts were not strong enough, and he was unable to move. Then this person in black spoke to him. He knew all the man's thoughts. He told him of the new world that was to be, and that they were now on a cloud. Then the informant saw the earth below him and the sky above him at an equal distance. The person in black, who was the crow, then showed him a rainbow extending from east to west, and another from south to north. The informant was then taken by him to the spot where the two rainbows crossed one another. There he stood, and the crow told him to look up. He then saw where the father was, and saw the thoughts of all mankind reaching up to him. He saw also birds of all kinds. Two of these were the foremost,—

the eagle (niihi, literally, "bird") and the crow. He saw also the sun, the stars, and the morning star.

This dream was painted by the informant on a white sheet worn as a blanket (Fig. 168). The extremities of the two lower corners are half filled in with red, representing the earth, the rest of the sheet representing the above. A pipe in one corner, with a blue bowl, represents a black soapstone pipe; one painted in red, in the other lower corner, a more ordinary, less sacred, catlinite pipe. Near the centre of the sheet is a red circle from which yellow lines radiate. This is the sun. The

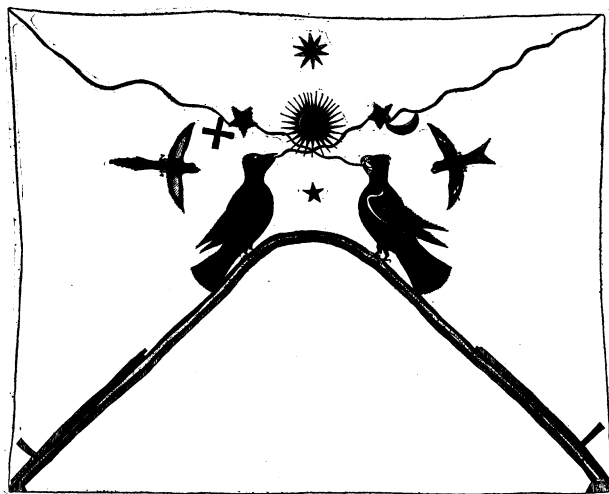


Fig. 168 ( $\frac{50}{32}$ ). Painting representing a Dream Experience. Length, 2.13 m.; width, 1.68 m.

interior of this figure consists of several rings of different colors, representing the rainbow. The rainbow is also shown in a long arch passing across the lower part of the blanket, painted in stripes of four colors. The upper and outermost color is blue. It was on this, where the two rainbows crossed, that the informant stood and looked up to the highest heaven. On each side of the upper part of this rainbow-arch is the figure of a large bird. One of these is the crow; the other, which has much the appearance of a parrot, represents niihi ("bird," or "eagle"). This word here evidently denotes the thunder-bird.

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This bird was said to be supposed to be in a cloud. Behind is a bull-bat, which is also indicative of rain, because this bird flies before rain. Behind the crow is a flying magpie. From the mouth of each of the two large birds a wavy line issues diagonally upward across the sheet. These lines are the voices of the birds. Each of the lines is in contact with a five-pointed star, which indicates that the birds' voices reach the sky, and are heard. The five-pointed star is evidently not aboriginal with the Arapaho. Above the figure of the sun is a ten-pointed star, larger than the others. This is, no doubt, merely on account of its size, the morning star. A yellow five-pointed star below the sun is an ordinary star. The two stars in contact with the voice-lines of the birds are surrounded by small lines indicating their shining. A cross behind the head of the crow represents the morning star, and a blue crescent in corresponding position behind the head of the other bird is the moon.

A man noted for his long hair was told in a dream to preserve all his hair as he combed it out. In consequence, he braided together all this loose hair until (at the time the specimen was obtained from him, when he was beginning to be an old man) the rope had reached a length of thirty feet, with a thickness of about half an inch.

An old woman stated that she had once been attacked and bitten by a bear. From that time on, she dreamed much of bears. In one of her dreams, a bear told her to wear bear-claws, to paint in a certain way, and to use certain plants for medicine and incense, and she would become a doctor; but she refused the supernatural gift.

A blind southern Arapaho, having been asked to show his supernatural powers, refused, on the ground that the people were then camped together for a dance, and that he would do nothing disturbing to good feeling and happiness. The following day he offered to vomit brass rings and bullets. Being refused, he offered to produce the bullets and some lime for a smaller payment. After some negotiations, this was accepted, and without preparation he began to cough and retch, finally spitting out four round bullets. Soon he began again, sucking

inside his cheeks more than before. He then spat out a pink substance looking like wet slaked lime. After a short time, he began coughing, and sucking internally again, this time producing a blue substance in the same manner as before. The performance ended, he appeared to swallow the bullets again.

One of a pair of wristlets of otter-skin, ornamented with yellow-hammer or similar feathers and a plume, and possessing magical properties, belonged to this man, and is shown in Fig. 169. Attached to the wristlet is a small medicine-bag painted red. This was said to contain a mixture of powdered black iron ore, copper filings, gopher-eyes, snake-eyes, and the medicine *tcetcaätcei*-root, used in the crazy-dance, and thought to possess the power of paralyzing. With this small medicine-bag is a steel needle wrapped to a thong like a small feather. Some of the medicine being thrown on the ground, the needle at once pierces the heart of any one desired. The owner affirms that he once killed an antelope from a distance in this way. It fell down dead while running. Its heart contained his needle. At the other end of the wristlet are an iron and a catlinite ring.



Fig. 169 ( $\frac{40}{10}$ ,  $\delta$ ). Wristlet.  
Full length, 45 cm.

An elderly man among the northern Arapaho made the following statements in regard to the acquisition and transfer of supernatural power.

When such power was given by the spirit or some object in nature, certain restrictions were usually imposed. The supernatural being might say, "Do not eat the heart or the kidney, and do not pierce or stick any food that you are eating." Or, again, "There is one thing that I do not want you to eat, that is the head. If you do, your teeth will soon fall out, your strength will not last, and you will not become old." If a

man who had received such powers supernaturally began to transfer them to others, he did not give them all away. After having begun to transfer his powers, he was even more careful, than before to observe the restrictions. He would not drink from the same cup that other people did. Generally, when such powers were transferred, they were either sold, or given to sons or nephews. A young man might pray to an old man for his power. Then, instead of going out on the hills and suffering hardships to acquire it, he received his power by instruction. He paid the old man for each sitting with him. He learned the old man's medicine-roots and their uses, his way of painting, his songs, and so on. By the time the old man was dead, the young man had his power. A man's medicine-bag was generally repainted every year, when the new grass came up. Sometimes the supernatural power given to a person is bad for his family. The spirit does not mention this to him; but the recipient's family die off one by one, leaving him alone. Sometimes a man takes such power when he should refuse it on account of the effect on his relatives.

An old man who had horse-medicine taught it to his son and several other young men. In teaching it to them, he drew on the ground, with red paint, a horse facing to the left, and with yellow paint, another horse or a mule, somewhat smaller, facing the north. While this medicine was in a tent, no peg or other part of the tent might be removed, lest there should be a storm.

A famous medicine-man called Hānātcā<sup>a</sup>hanaati, who died about twenty years ago, and who had particular power in bringing the buffalo, lived in a tent painted red, with black buffalo, the morning star, the sun, and other designs upon it. Children were not allowed to approach this tent for fear that sticks might be thrown against it. On his ceremonial rawhide medicine-case this medicine-man used the curious symbolic design of crescents and forked upright figures, that has been described on p. 134. He is said to have originated this design, but this seems improbable. He taught many men part of his medicine, among them being Little-Left-Hand, Sage-Bark, Young-Bull, Night, and Howling-Man. The ceremony of calling the buffalo was



called na<sup>n</sup>tanää. Men stood in two long lines while the medicine-man went between them, leading the herd. A certain man tried to perform this feat, but failed. His failure was attributed to his making the attempt only in order to secure a girl he wanted to marry; and the loss of an eye which he suffered not long afterward was attributed to his failure.

After a certain chief, called Bänääseti, was buried, his grave settled, until there was a depression in the ground. It was said that the thunder had taken him up out of the ground, and thereafter people were not afraid to travel over the place where he had been buried, whereas they always avoided other graves.

A woman who was bitten by a rattlesnake was treated by a medicine-man as follows. He took the snake's head, chopped it up, dried it and powdered it, mixed it with dried blood of the snake, and added a medicine-root and some pepper. The mixture was then sprinkled over a cloth. The medicine-man abraded the skin in the wrist until it bled. Then he tied the cloth around it, put on a piece of fat, and kept the place warm with a hot stone.

When persons, especially children, suddenly become sick with pains in the side, or back, or neck, they are thought to have been shot by a ghost. The object which has entered the body, and which may be a bone, tooth, hair, or piece of skin of a dead person, is called a "ghost arrow" (çiikanaçi). The doctor says to the patient, "A ghost has shot you, çiiktcäbiin." When the doctor sucks out the object, which sometimes proves to be liquid or filthy, either he or the patient swallows it. If the doctor swallows it, it increases his power of sucking objects of this kind.

People fasting on hills frequently set up piles of stone there. It seems that these monuments are made either to symbolize persons, or are thought to resemble them.

Children often wear a walnut on a string around the neck, or, while they are very small, around the wrist. This nut is thought to resemble the face of a skull, and therefore to be effective in keeping off ghosts. The tree is called täbiiçabiic ("cutnose-bush").

The root called *niäätä*<sup>n</sup>, used otherwise as a component of incense and on the regalia of certain age-societies, is also put around children's necks as a general amulet.

A root called *haakahaa* (Museum No.  $\frac{50}{101}$ ) is said to be used to put into the ears of crazy-dancers, making them deaf, it is thought, and at the same time crazy. Mushrooms are also used for this purpose by both the Arapaho and the Gros Ventre.

The bones of large mammals or reptiles, found especially on river-banks, and thought to be the bones of the *hiintcäbiit* or water-monsters, are frequently used by the Arapaho as ingredients of medicine, as well as for sucking out diseases, the porous bone being applied to sores or wounds.

For bites of centipedes or tarantulas, these animals are crushed and then mixed with a plant (after it has been powdered) known by the whites of Oklahoma as "shoestring" (Museum No.  $\frac{50}{109}$ ).

Children's diarrhoea is thought to be caused by bad milk, and is cured either by sucking the breast or by drinking a decoction of a plant called *beçenetcaana*<sup>n</sup> ("breast-liquid," *beçenetc* being milk). This plant grows a foot or two feet high, has round leafless stems, and contains an abundance of white, thickish juice, which no doubt has been the cause of its use for this purpose. The woman drinks the medicine when stooping on her knees, so that it may run into her breasts. A mouthful of the decoction may also be sprinkled over the child by the medicine-man in order to cool it.

While the chief physical means of cure employed by medicine-men was sucking, bleeding was also practised. Pieces of "black glass" were fastened to sticks, and these were laid over a vein after the skin had been wet. The stick was then struck with another piece of wood, so that the blood spurted out. Bleeding was performed in spring and autumn, apparently for general indisposition rather than for specific pain.

Two small buffalo-horns in which are cut figures representing the sun, the moon, a star, and sun-rays, are used as points to throwing-sticks slid on the ice in play, as well as for doctoring. In case of rheumatism or similar ailments, a hole is cut in the

skin, and the hollow horn set over the cut. The horn is then supposed to suck the wound of itself, dropping off, like the last specimen, when full of blood. One of these horns, and the designs carved on the other, are shown in Figs. 170, 171.



Fig. 170.

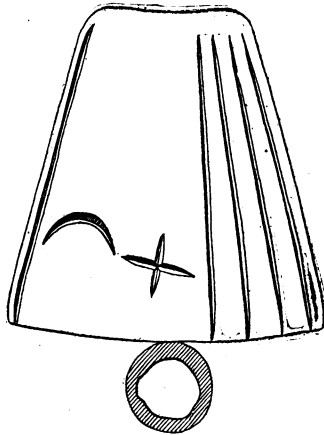


Fig. 171.

Fig. 170 ( $\frac{50}{308}$ ). A Cupping Instrument. Length 8.5 cm.  
 Fig. 171 ( $\frac{50}{309}$ ). Design on a Cupping Instrument.

A similar small buffalo-horn used in doctoring (Museum No.  $\frac{50}{1093}$ ) is put over a hole in the skin in order to draw blood. This horn is completely perforated, so that it can be sucked through; but when it is in use the hole at the upper end is plugged with medicine. The horn is said to remain hanging to the wound until it is filled with blood, when it drops off. It is used especially on the head.

A woman's mortar and pestle (Museum No.  $\frac{50}{940}$ ) were used by the northern Arapaho for grinding medicine. The mortar consisted of part of a quartz-like concretion, the central concave portion of which held the medicine. The pestle was a smaller entire concretion, approximately globular, but quite irregular.

In one family half a globular concretion, hollow inside, was seen. This was kept to be dipped into water containing medicine, then to be put on the head of a woman about to give birth to a child, in order to ease her delivery.

A river mussel-shell (Museum No.  $\frac{50}{48}$ ) was used for various purposes, — to catch the blood of newly killed game to be cooked and eaten, as a spoon for medicine, and, on account of its smoothness or slipperiness, as an amulet to help a woman in labor.

A necklace worn as a charm in battle is shown in Plate LXXXVIII. The body of the necklace consists of large round beads which represent bullets. A brass ball strung on the necklace also represents a bullet. A number of pieces of iron, mainly hammers and triggers, are taken from various guns. Their purpose is to cause the enemy's gun to fail to go off. At the bottom of the necklace, over the breast of the wearer, is a ring three or four inches in diameter, and covered with white beads. This ring represents earthwork defences. There are four spots of blue beads among the white. These represent clouds of smoke from the guns, which serve to make the fighters invisible. Inside the ring, threads covered with white beads form a loose network representing a spider-web. The spider-web is so fine as to be often invisible. Beings can fly through it without injuring it, and it is a trap. From the ring hangs a little cluster of objects. In this there are several strips of weasel-skin or a substitute fur, whose yellowish color denotes smoke. There is also a piece of red cloth concealed by gray cloth. The red is completely covered in order that the blood of the person who wears the necklace shall not be shed. There is, further, a small bag of medicine. The medicine in this was said to contain a grain of gunpowder and a little dried flesh of a kingfisher. The kingfisher-flesh is used because this bird swoops and strikes. Actually the medicine consists, so far as can be seen, of a species of seeds. Tied to the medicine-bag is a piece of round pearly shell, which is held up against the light so as to reflect against the enemy. When the reflection strikes the enemy, they become unable to escape. Where the groups of objects are held together, there are a few turns of light-blue beads, indicating smoke, or haze, or fog.

Fig. 172 shows a necklace consisting of an iron chain to which are attached several red pear-shaped stones (apparently natural formations), two iron rings, and an arrow-head. The

stones, being shaped much like small medicine-bags, are used as medicine. They are rubbed over the body, or, in case of intoxication, held in the mouth. The iron rings, because hard and indestructible, preserve the wearer in sound health. The arrow-head symbolizes the old life.



Fig. 172 ( $\frac{50}{111}$ ). Necklace bearing Amulets. Length of chain, 112 cm.

Specimen Museum No.  $\frac{50}{111}$  consists of a piece of red sandstone similar to those attached to the necklace just described, and, like them, apparently an unworked double concretion. In this case the larger portion of the stone far exceeds the smaller in size. A sinew is wrapped around the neck, and this holds in place the two ends of a thong which serve as a necklace for the amulet. The stone was called a turtle.

Specimen Museum No.  $\frac{50}{111}$  is a small antelope-horn used as an amulet for children, to cause them to grow fast, and learn to walk. It is worn from a string around the neck. It is said to be used also to make horses run fast.

An elderly woman used as an amulet a number of small

pebbles, which she kept tied up in a cloth or bag. A few of them are shown in Fig. 173. Some of the stones are naturally pointed, others more round. The former represent canine teeth; the rounded ones, molars. The stones, being loose, represent teeth that have fallen out from old age, indicating the possessor's wish to reach that period of life.

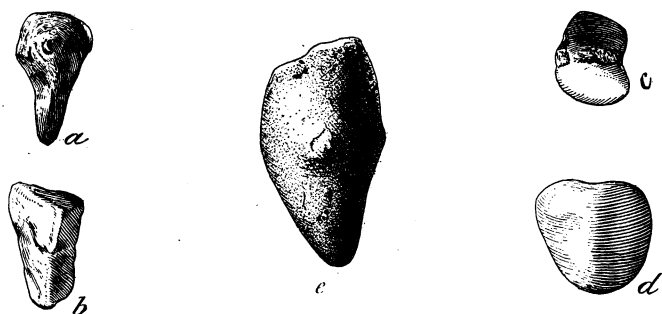


Fig. 173 ( $\frac{500}{349}$ ). Amulets representing Teeth. Length of *a*, 2 cm.

Three stone amulets of natural shape (Fig. 174), evidently kept on account of their resemblance to animals, were thought to be similar to a turtle (*a*), a bird (*b*), and a skunk or horse-hoof (*c*). The turtle stone was said to have been found inside

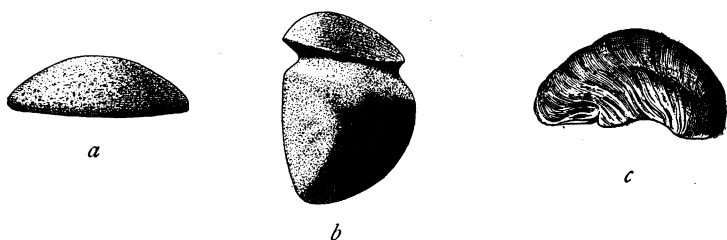


Fig. 174 ( $\frac{500}{352-354}$ ). Amulets representing a Turtle, Bird, and Skunk. Length of *a*, 3 cm.; *b*, 3 cm.; *c*, 5 cm.

a horse's body. In case of diarrhœa, it was placed on the abdomen to warm the intestines. The bird amulet was placed at the head of sick persons, while the skunk stone was held in the hand by sick persons while sleeping.

Two small translucent pebbles containing small black figures, and used as amulets, are shown in Fig. 175. Amulet *a* was said to have reference to water. The entire stone is thought to resemble a lake. The parallel lines were said to look like

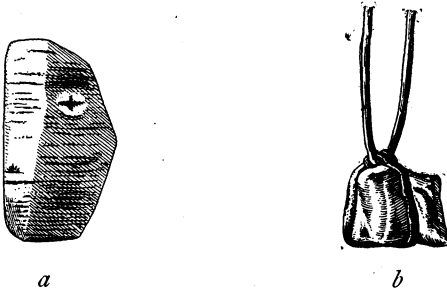


Fig. 175 ( $\frac{50}{826}$ ,  $\frac{50}{827}$ ). Translucent Pebbles used as Amulets. Length of *a*, 2.5 cm.

waves, and a heavy double figure was called an island with trees on it, while near the upper end of the pebble a cross is regarded as the morning star, and above this are horizontal lines said to be clouds. Amulet *b* is fastened to a thong, so that it can be worn in the hair. It is worn when riding race-horses. Small black figures in the interior of this pebble are thought to resemble cedar-trees.

Fig. 176 represents one of two natural stones resembling the black fossils used by the Blackfeet as buffalo-stones. They were called centipedes. They are painted red, and were kept by the owner in a bag of incense. At the sun-dance he would take them out and lay them near incense.

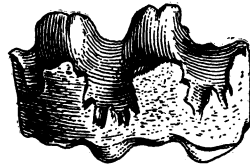


Fig. 176 ( $\frac{108}{27}$ ,  $\frac{2}{2}$ ). Amulet representing a Centipede. Length, 2.5 cm.

Besides the two medicine-bags of badger-skin whose contents have been described, the Arapaho collections in the Museum contain medicine-bags of skunk, squirrel, prairie-dog, and beaver skin. The beaver bag is from a young animal. None of the bags are ornamented with embroidery, or in any other way, except that the portions of the skin free from hair, such as the inside of the throat and the tail (which some cases

is split along the bottom), are painted red. The only one of these medicine-bags, other than the two previously described, that contains medicine, is Museum No.  $\frac{59}{44}$ ,—a skunk-skin bag obtained through Rev. Walter C. Roe. This skin is filled with twenty medicine-bags, some of skin, some of cloth. These all consist of square or circular pieces of material, in the centre of which the medicine is gathered, and which are then folded around the medicine, and tied above it with a thong. Some of the bags are painted red. The medicines are in most cases ground or powdered, and are unrecognizable. None of the twenty bags contains a large quantity of medicine, and in many the amount is very minute. The owner of this bag having died before it was secured, no information was obtainable as to the composition and uses of the medicine.

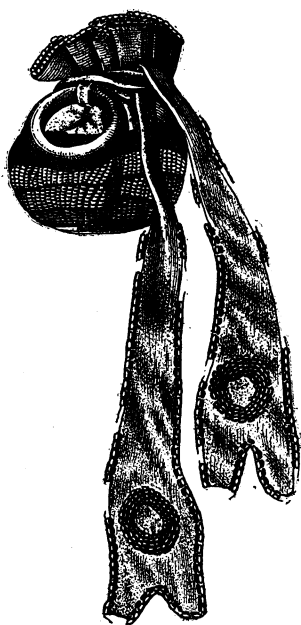


Fig. 177 ( $\frac{59}{44}$ ). Medicine-bag.  
Height of bag, 7 cm.

Beaded medicine-bags similar to the small pieces of skin generally used as bags for holding medicine, but also different from them in more elaborate ornamentation and in holding a somewhat larger quantity of medicine, are sometimes made by the Arapaho. They seem to be used for what may be called "household medicines," in distinction from the medicines with more specifically supernatural connections, and perhaps for incense also. Such a bag (Fig. 177) was obtained through Rev. Walter C. Roe. The bag itself is a circular piece of skin painted red outside and yellow inside, and edged with a row of blue and a row of white beads.

When the bag is gathered together over the medicine, this border is brought together at the top. At the very centre of the back, on the outer side, is an



ornamented area about an inch in diameter. Around this are four concentric circles of bead-work in contact with each other, each about a quarter of an inch wide. Their colors are respectively greenish-blue, yellow, white, and a dark blue. The thong with which the medicine-bag is gathered has tied to it a ring of catlinite. The thong is wound several times around the bag. Its two ends widen out, and at the very end are notched once. These wider ends are edged by rows of greenish-blue and of yellow beads, and there is on each a small circle of greenish-blue beads. The contents of this bag consist of conifer-leaves, apparently fir-needles, which are used by the Arapaho as incense. There are also a small red pebble and a smooth orange-colored haw in the bag.

Another bag of the same type (Museum No.  $\frac{50}{1015}$ ) was obtained among the northern Arapaho. This contains snuff made of lichen growing on conifer-bark, and used for headache. It is also circular, and little more than half a foot in diameter. The outside is painted yellow. One half of the circumference is edged with a row of red beads, the other half with blue beads. The blue was said to represent the sky, the red the clouds. Near the middle of the outside of the bag, in the portion which actually encloses the contents, are five small beaded figures, — two blue crescents, two red crescents, and a red cross. The cross is the morning star; the blue crescents, the moon; the red crescents, the sun.

Rawhide rattles of a shape typical on the Plains — consisting of a spherical or somewhat elongated head two or three inches in diameter, and a straight handle about six inches long — occur among the Arapaho. Rattles of this character seem to be used by the seven old men constituting the highest society in the ceremonial organization. On the whole, however, the use of rattles of this type is characteristic of the medicine-man and his individual supernatural powers, and not of the tribal ceremonies. In most of these ceremonies, rattles are either not used, as in the crazy-dance, or consist of bunches of hoofs attached to sticks, as in the dog-dance. Rawhide rattles are used in the star-dance, the first preliminary to the series of tribal ceremonies; but these rattles are small, kite-shaped,

and flat, thus differing very distinctly from the globular or oval, or even sausage-shaped rattles, of the medicine-men. Among the Gros Ventre the same distinction exists between the star-dance rattle and the ordinary medicine-man's rattle,



Fig. 178 ( $\frac{5}{16}$ ). Rattle representing a Person. Length, 52 cm.

though the Gros Ventre star-dance rattle is quite different from that of the Arapaho. The medicine-men's rattles under present consideration are made of two pieces of hide firmly sewed together, the stitched seam passing up one side of the handle

and the head, over the top of the head, and down the other side. The head is apparently sewed when the hide is green, and dried over a filling of sand. The rattling is said to be produced by gravel. A stick is inserted in the handle, and the handle is almost always wrapped with cloth, skin, or thongs. Usually, feathers or similar ornaments are attached to thongs at the very top of the rattle; and in many cases cloth, skin, or other hanging substances fall from the lower end of the handle. Most of the globular rattles are streaked with vertical lines or incisions. It is not clear how these are produced. In some specimens they are sufficiently marked to cause the head of the rattle to have a distinctly corrugated appearance. In one case they would seem to have been burnt in.

The rattle shown in Fig. 178 was said to represent as a whole a person with a head-dress; the globular portion of the rattle, of course, forming the head, and the bells and feathers attached to the top, the head-dress. Among the feathers there are two white plumes lightly dyed red: these, because white and light, are said, as in many other instances, to represent cleanliness, and, because dyed red, to represent red paint. At the very top of the head of the rattle, where the bells are attached, is a circular area painted green: below this are concentric rings painted respectively red, blue, yellow, green, blue, and yellow. This painting represents the sun and rainbow, and occupies about the upper half of the head of the rattle. The lower half is occupied by vertical depressed lines painted yellow: these are sun-rays. The entire handle of the rattle is enclosed in a feathery owl-skin; two claws and the tail hanging below the end of the handle. Screech-owls are ghosts; and these feathers are here used in order to drive away ghosts when the rattle is used.

The specimen shown in Fig. 179 has a somewhat larger head to than usual. The top is ornamented with a bunch of thongs to which yellow-hammer or similar feathers appear to have been attached, and of which a few fragments remain. The handle is wrapped for the greater part of its length with thong, and this, again, has been wrapped for the greater portion of its length with string. The handle, as usual, contains a stick.

On one side of the rattle a depressed vertical black line or stripe, apparently produced, like all the other markings on this piece, by burning, extends from the middle of the top two-thirds or more of the distance down the head. Below this

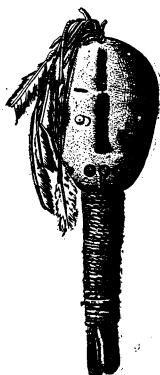


Fig. 179 (§§). Rattle representing a Face. Length, 37 cm.

stripe are three small circles in a row. On each side of the stripe is a similar single circle, and above each of these circles a horizontal line. Still farther to the sides, near the stitched edge, are two circles. This entire described half of the head represents a person's face; the vertical striping being the nose, the row of three circles the mouth, the pair of circles with lines above them the eyes and eyebrows, and the two sidemost circles the ears. On the opposite side, or back, are three straight vertical lines extending the length of the head of the rattle, and, on each side of these, two wavy lines, making seven in all. These lines represent hair. Still farther to the

sides, near the stitched edges, are a number of small circles the significance of which is not clear. This valuable specimen, which is a medicine-man's rattle used in singing over the sick, is said to have been made of hide of a buffalo-calf, and was obtained through Rev. Walter C. Roe.

Specimen Museum No.  $\frac{50}{854}$  is a plain rattle. The head is painted entirely red. It is streaked with the usual vertical depressions to a marked degree. The attachment at the top consists of a single feather at the end of a thong. The handle, which contains a stick, is covered with black cloth, the ends of which hang below the handle. This cloth is wrapped to the handle by cord.

Specimen Museum No.  $\frac{50}{855}$  was obtained from the same individual, and is of about the same shape. The handle is very similar, being covered with black cloth, the end of which hangs free, and the upper portion of which is wrapped to the handle with white cord. The head of the rattle is painted red. Horizontally around its middle extends a green-

painted ornament consisting of eight hanging loops or festoons. This rattle is further ornamented by four vertical rows, each of four thongs, fastened to the rawhide of the head. These thongs are passed under a small raised portion of the skin without appearing to pierce it entirely. They are knotted once after passing through the skin. The shorter of the hanging ends has a white plume tied to it. The longer end hangs free. The thongs are painted green.

The rattle shown in Fig. 163, and obtained from the northern Arapaho, resembles the last specimen in having feathers attached by thongs to its head. It is longer in proportion to its diameter than any of the preceding forms, being made of a buffalo-scrutum. It has been described in connection with the other implements belonging to the medicine-man who was its owner.

Specimen Museum No.  $\frac{5.0}{938}$ , *a*, also from the northern Arapaho, is still more slender in proportion to its length than the last piece. The head merges imperceptibly into the handle. The total length is about the same as that of the southern Arapaho globular-headed rattles, but the transverse diameter is only about one-half as great. This rattle is entirely unornamented, except that it is painted red. A fossil uni-valve shell is tied to it by a red-painted thong.

Medicine-men's hoof rattles, consisting of a number of hoofs separately attached to thongs, as distinguished from the hollow rawhide rattles, are also used. The specimen shown in Fig. 180 is from the northern Arap-

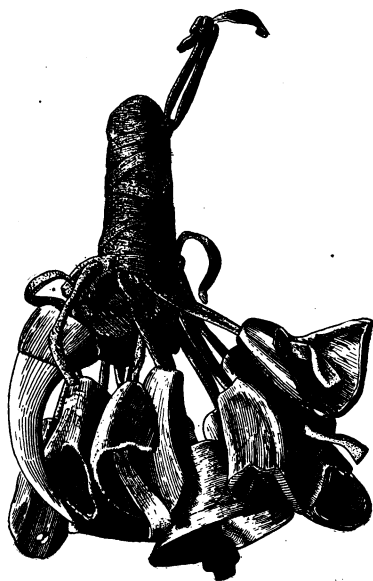


Fig. 180 ( $\frac{1878}{1878}$ ). Hoof Rattle. Length, 16 cm.

aho. This was said to have been used in the sweat-house. It consists of about a dozen elk-hoofs, a bear-claw, and a brass bell, attached to a handle by red-painted thongs. The interior of this handle, which is all together about three inches long, consists of a braid of sweet-grass. This is surrounded by folded skin painted red, and this, in turn, is wrapped with red-painted thong. A similar rattle, also from the northern Arapaho, is exhibited in the United States National Museum. It is, perhaps, more than a coincidence that both of these hoofrattles, and both the elliptical rattles in the American Museum, are from the northern Arapaho, and all that are globular-headed from the southern Arapaho.

*Characteristics of Individual Supernatural Power.* — As has been stated, the most characteristic way in which the Arapaho acquire shamanistic or individual supernatural power is by going out to seek it, more often as adults than at the time of puberty. To the seeker there appears a spirit, in the form of a person, from whom he receives instruction. As the spirit vanishes, it is seen to assume the form of some animal. Parts of this animal are often used as fetishes or medicine by the shaman. In many cases its skin is employed as his medicine-bag, and often there seems to be an idea that the peculiar powers of the animal have been acquired. The prospective shaman's purpose must, however, be serious and high-minded, and he must not be actuated only by desire or wish of gain; else his power may react for evil, as is evident from the instance given of the man who failed to call the buffalo. The appearance of the spirits takes place in waking visions as well as in dreams. While such is the most characteristic method of the acquisition of shamanistic power by the Arapaho, especially when they are compared with the people of different types of culture both in America and elsewhere, yet it is noticeable that this method is not the only one followed by them, and that the system of belief upon which these practices are based is not consistently or rigorously followed out.

First of all it will be seen, from the instances given, that power may be sold or freely transferred to a relative. Then,

too, animals and spirits visit people without solicitation, as appears from the case of the woman who dreamed repeatedly of bears. The offer of power that they bring may be rejected; or, on the other hand, power may be accepted, but may be so harmful in its effects on the recipient or his people, that it should be rejected by him, or would be, if he knew its danger. It is evident that these conceptions are quite at variance with the more fundamental one, that a man, of his own accord, seeks the aid of a spirit in order that he may acquire power that will be helpful to him.

It also appears, from the instances given, that, while the usual source of the medicine-man's power is his original communication with his spirit animal, yet there is at times a conception that his power lies in his keeping supernatural disease-objects within his own body. The shaman who cured rattlesnake-bites had two snakes in his body which he showed to his patients. A medicine-man who sucks ghost arrows increases his power, if he swallows and retains these objects after extracting them from the patient's body. It is probable that such beliefs are connected with the feeling that the ability to produce various objects at will, by vomiting, is an evidence of supernatural power. It has been stated in one case, and seems to be generally believed, that medicine-men with this power keep such objects permanently in their bodies.

Another principle that appears quite plainly is, that certain afflictions are cured by the homœopathic application of their cause. The rattlesnake itself is used as a medicine for curing rattlesnake-bites; centipedes and tarantulas, for injuries done by these animals; and a mole-skin cures the itch supposed to be produced by this animal. No cases are, however, yet known of this idea being extended to any causes of disease other than noxious animals.

Medicinal roots and plants are considerably used. Some of the most frequent of these are employed also in the tribal age-ceremonies. Such are *niäätä*\*, *tcetcäätcei*, and *heçawaa-naxû*. It appears from several instances that the quantity of a medicinal root or plant given to a patient is often quite minute, so that its effect can be only through the imagination.

While the taking or application of medicines, and sucking by the shaman, are the principal means of curing disease, there are a number of other methods of an entirely different nature not connected with these more usual practices. Blood-letting and a form of cupping are performed. The sweat-house is used. Sometimes the medicine-man brushes the body with an object of fur. Porous bones are used to suck disease from the body; and warm stones are applied to swollen or diseased parts.

In addition to all these physiological, or supposed physiological, means of curing disease or accomplishing other results, amulets have an important use. Their employment may be designated as pure fetishism, though this fetishism is not of the direct kind,—in which the power of the fetish is simply inherent, or is derived from contact with some other object,—but is invariably dependent upon symbolism. It is in this symbolic resemblance, and association with something else, that the virtue of the Arapaho fetish chiefly rests, although in some cases rarity of the object, its curious shape, or its supposed supernatural origin,—as in the case of the pebbles believed to have been found in the interior of animals,—in other words, some abnormal feature, also contributes to the endowment of the fetish with power. It is noticeable, however, that even in such cases the symbolism is never absent, even though it may really be superadded and secondary. It is probable, for instance, that the black fossil-like objects described as having been used by a northern Arapaho were secured and kept primarily on account of their striking appearance; but it is significant that they were identified with centipedes on account of some slight resemblance. It is in symbolism, that is to say, the identification of distinct but similar objects, that the entire abundant fetishism of the Arapaho has its basis.

The instances of this fetishism are numerous. Beans of different colors are used to produce colts of certain colors; the horn of an antelope makes a horse swift; a nut which bears some resemblance to a skull keeps off ghosts; feathers and claws of owls, which are ghosts, also drive away ghosts;

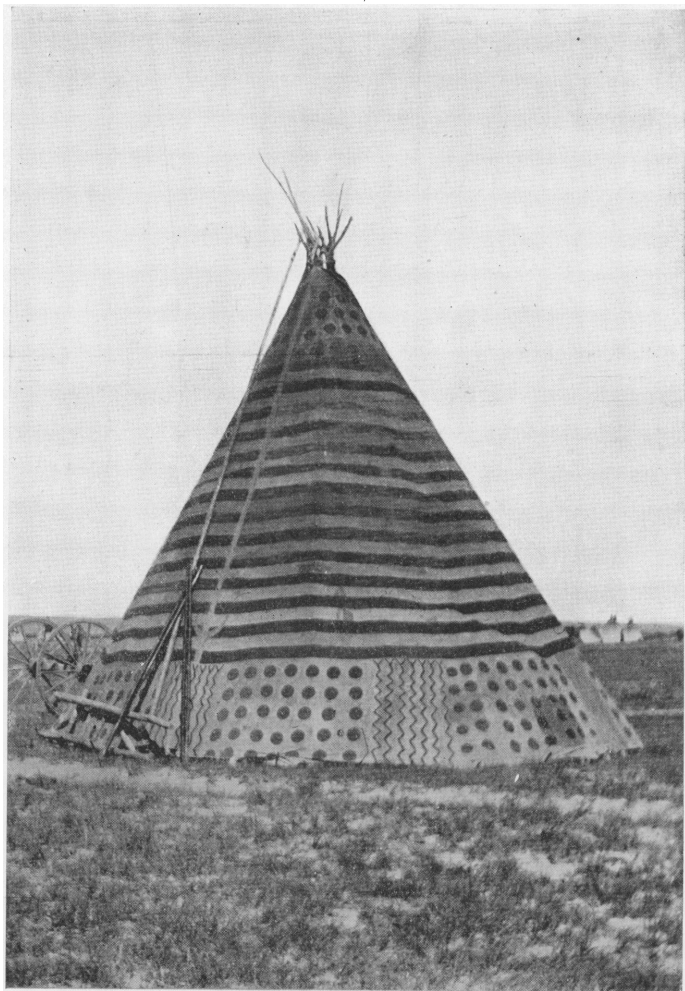


a plant which contains a milky juice is medicine for milk; a shell that is smooth and slippery aids in delivery; triggers worn on a necklace cause the enemy's guns to fail to shoot; light-blue beads, whose color resembles that of smoke, make the fighters invisible; beads in the shape of a spider-web render the wearer, like the web, impervious to missiles, and at the same time insure the trapping of the enemy, as insects in a web. The covering-over of a bright-red cloth with that of another color prevents the shedding of the blood of the wearer. Pebbles resembling teeth are kept, so that the owner may live to an age when his teeth fall out. An iron chain or ring, being hard and indestructible, insures sound health. Reddish pear-shaped stones, resembling small buckskin medicine-bags painted red, are efficacious, if rubbed over the body, or held in the mouth.

It is interesting that some of this symbolic fetishistic power is positive in its supposed action, some negative. A red bean causes the color of a colt to be bay. On the other hand, a nut that resembles a skull does not bring, but drives away, ghosts; and the same is the effect of feathers of birds, that are supposed to be incarnate spirits. The horn of a swift-running animal makes a horse swift, and a plant with a milky juice is a medicine that improves milk. On the other hand, the wearing of triggers is not an amulet for better shooting, but for producing failure of the enemy's trigger to act. Logically there is in these instances a direct inconsistency. The principle underlying and uniting such opposite modes of thought seems to be that the fetish has the power of producing the desired end to which it has reference, though the means by which it achieves this purpose may be in one case causative and positive, and in the very next instance prohibitive and negative.

It is obvious that all this symbolism or fetishism is at bottom unconnected with shamanism, that is to say, the receipt of power directly from spirits. The two are based upon fundamentally different ideas. Still further, shamanism itself is of different kinds. While its power is usually sought, it may be received unsought. It may be received directly

from spirits, or from living persons who are in possession of it. The guardian spirit naturally is in most cases helpful, but sometimes he is harmful. So the medicines that are used are sometimes pharmaceutical, sometimes of pharmaceutical effect only through the imagination, sometimes based upon crude supposed homœopathic principles, and at times purely symbolic. Even in this case their action may be either positive or negative. It is evident that analysis of the Arapaho concepts as to the source and operation of individual supernatural powers does not reveal a single consistent system of beliefs and practices, but a mixture of many unrelated and sometimes incongruous ideas.



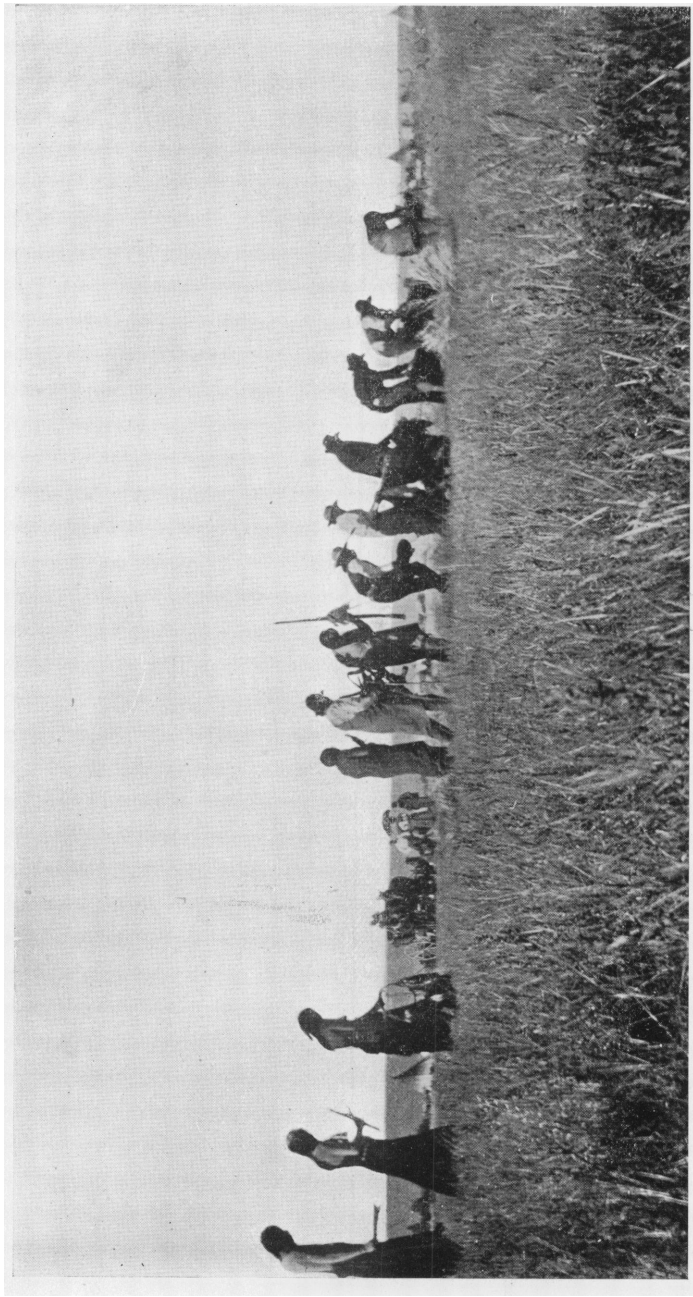
TENT FOR THE KEEPER OF THE SACRED PIPE.





THE CEREMONY WITH THE BUFFALO-SKIN.

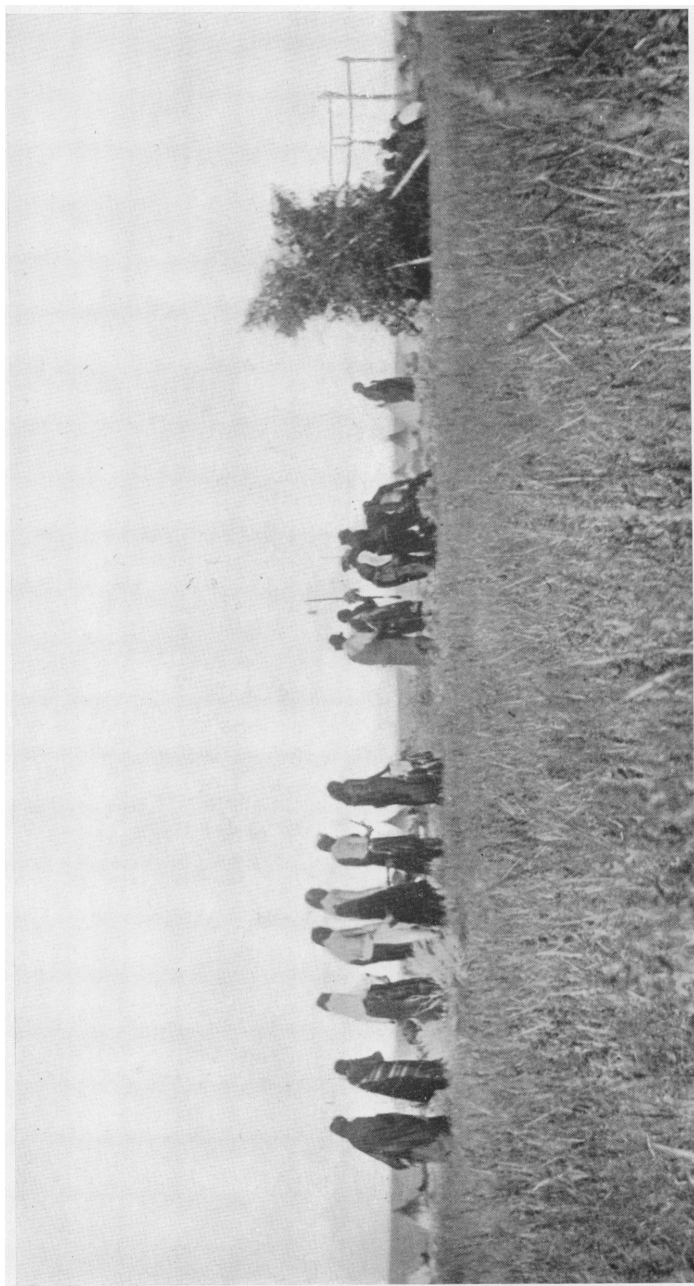




FIRST VIEW OF THE PROCESSION FROM THE RABBIT-TENT.

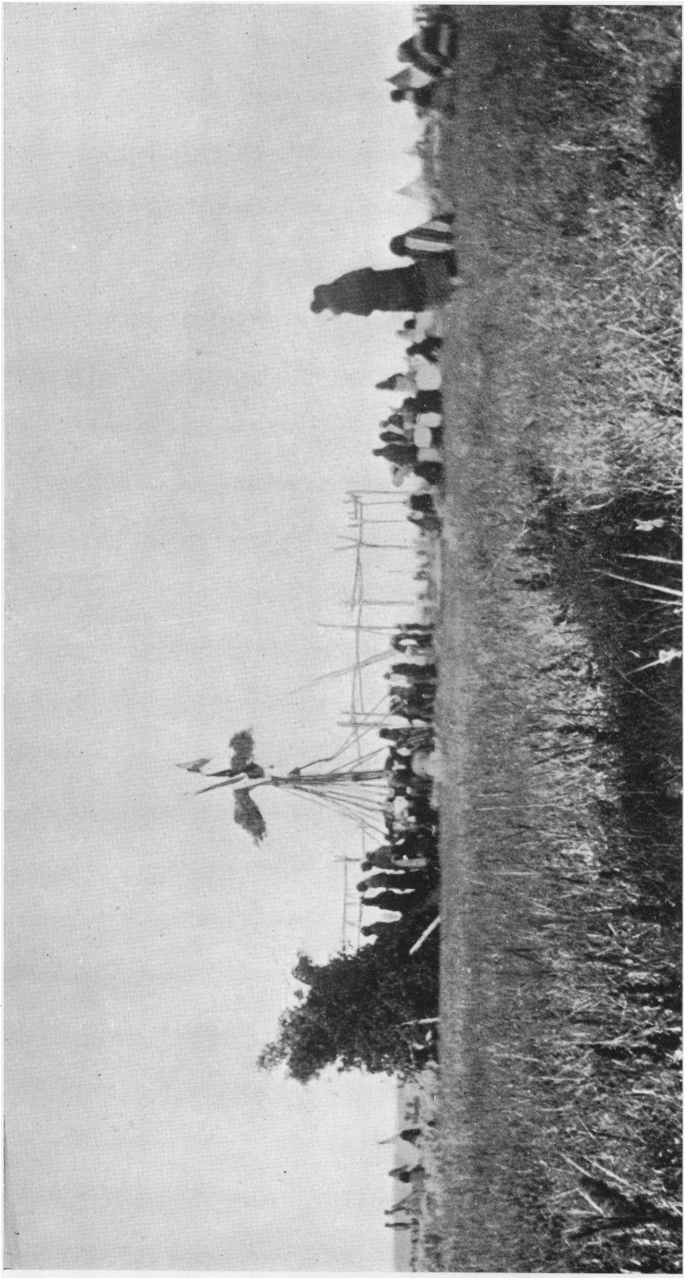




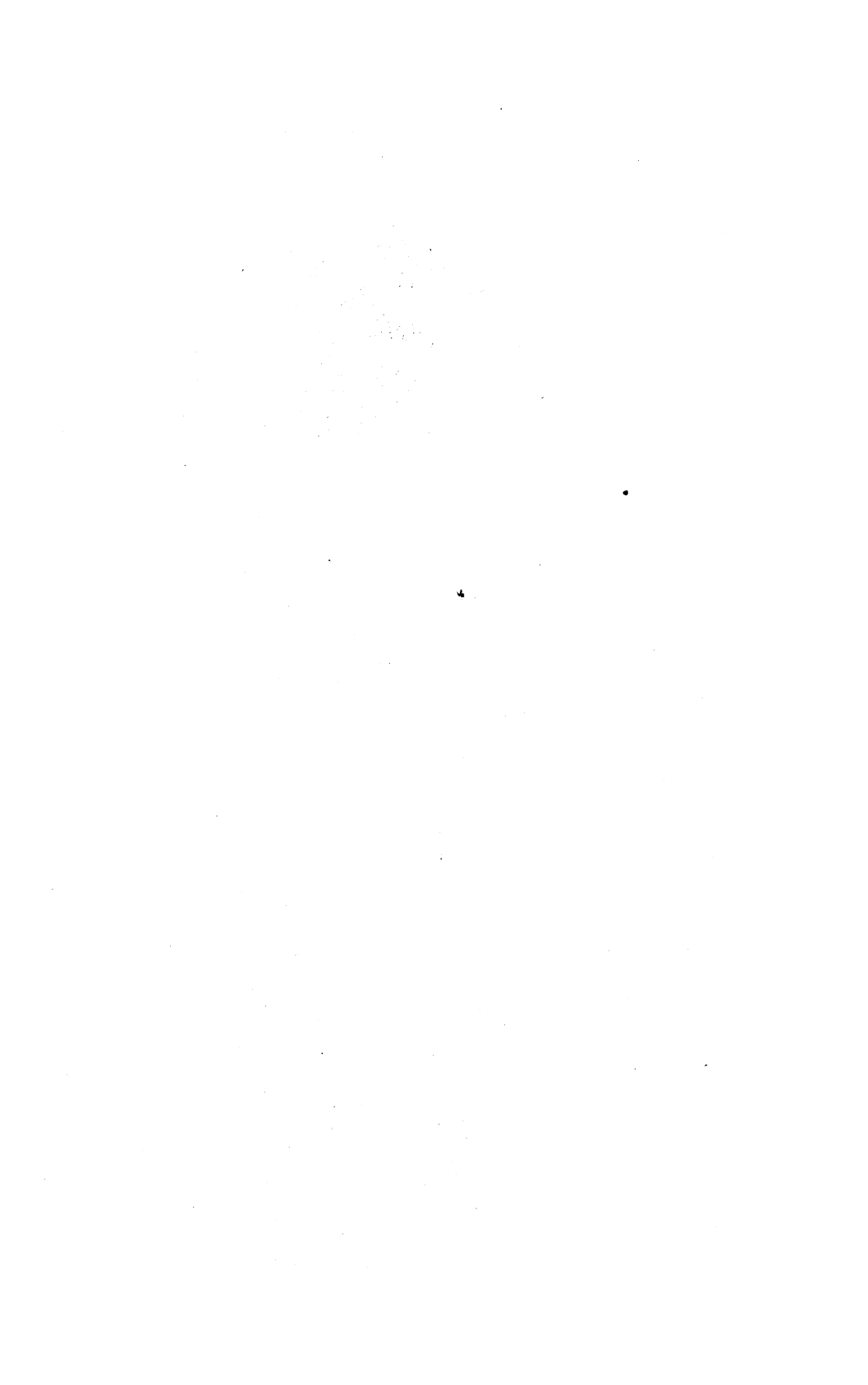


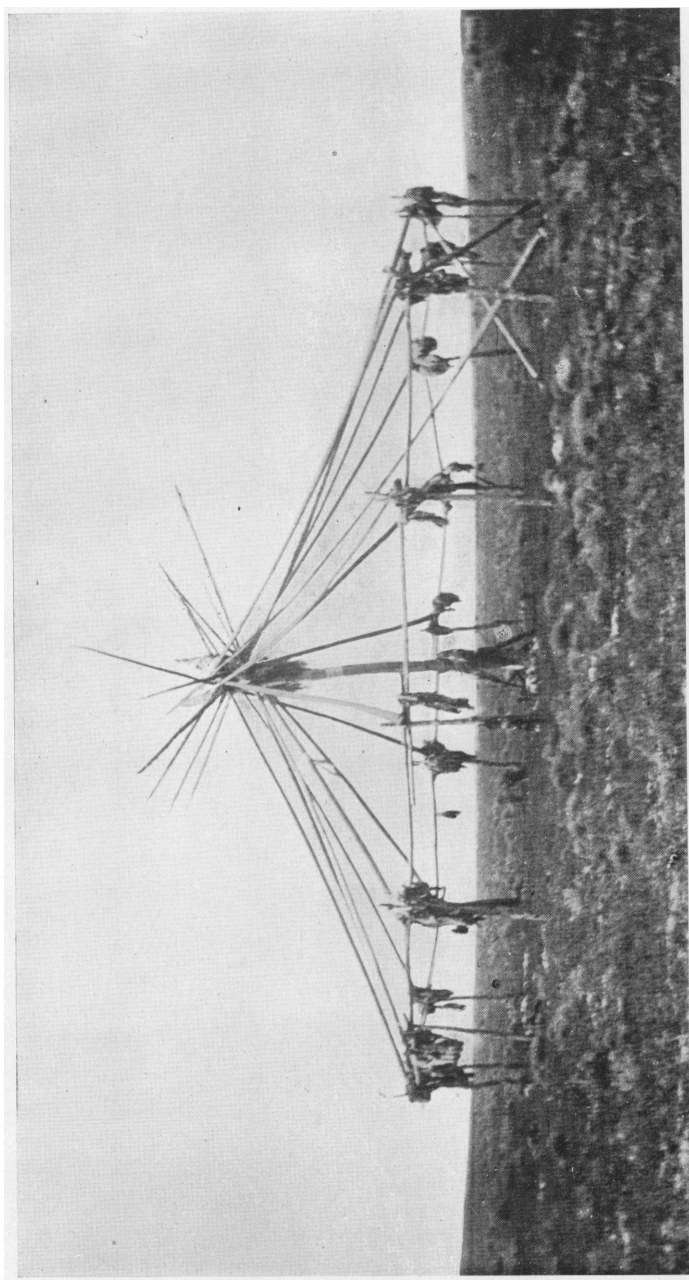
SECOND VIEW OF THE PROCESSION FROM THE RABBIT-TENT.





RAISING THE CENTRE POLE.





DANCE LODGE OF THE PRECEDING YEAR.

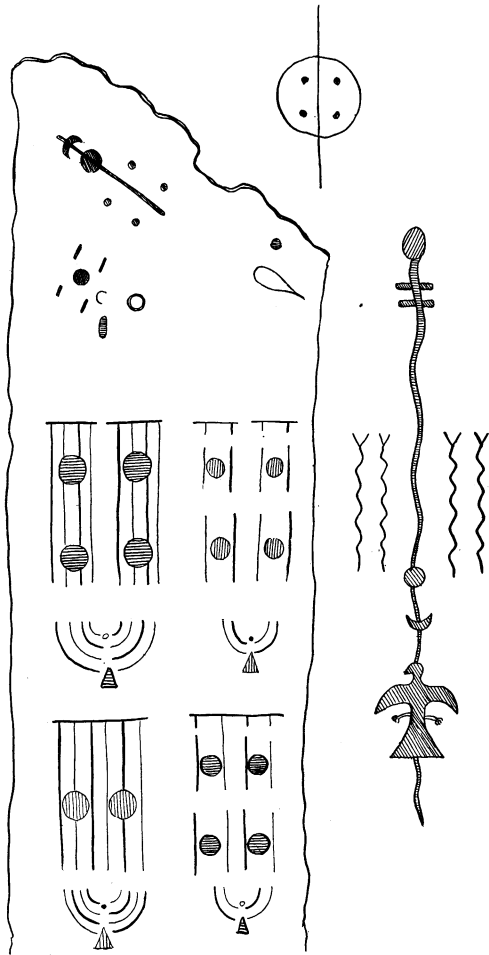




CONTENTS OF A SACRED BAG.

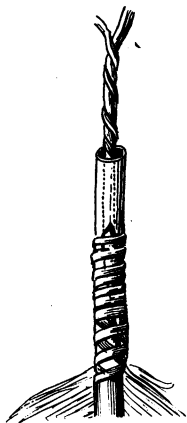




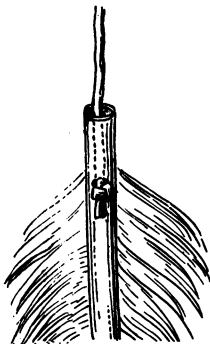


DESIGNS REFERRING TO MYTHS OF CREATION.

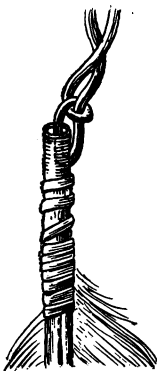




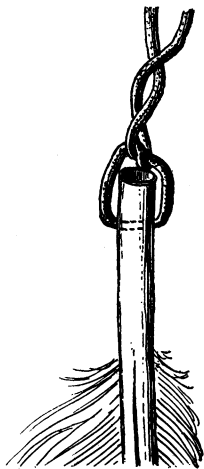
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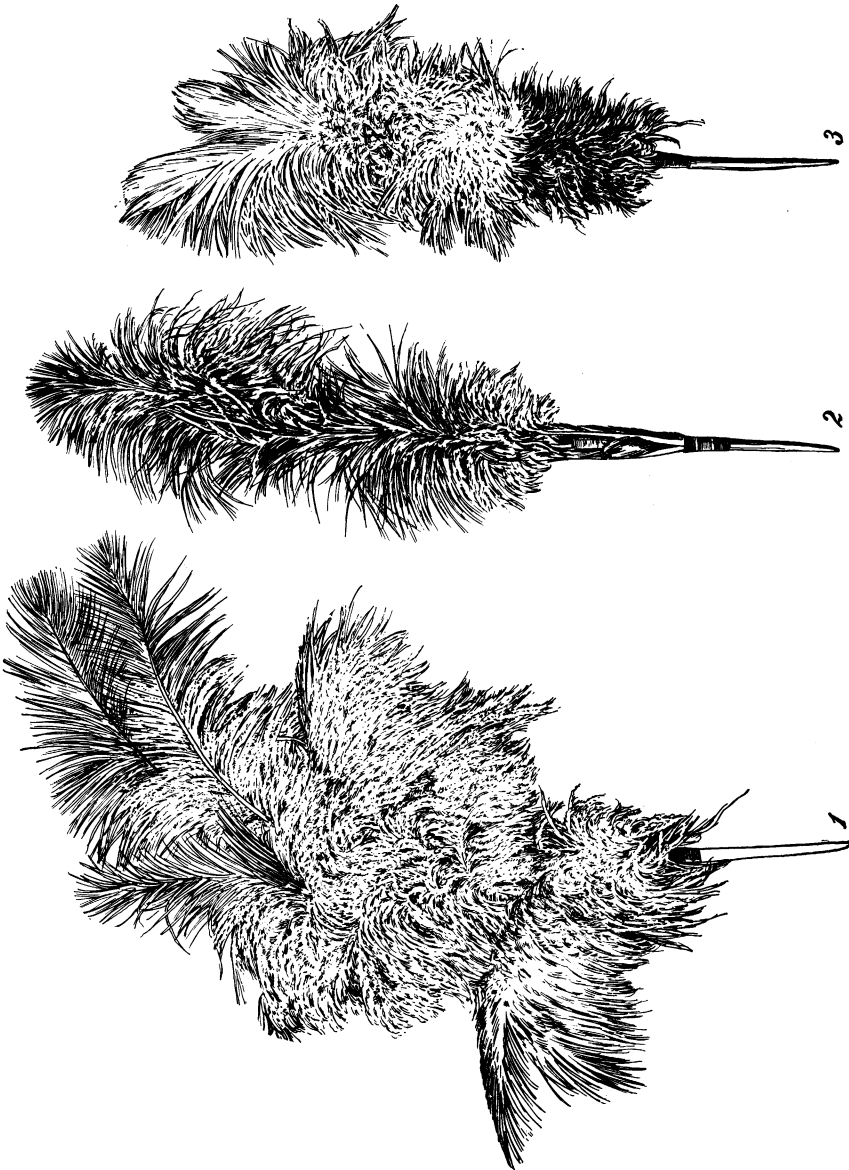
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4

FEATHER ATTACHMENTS.





FEATHER HEAD-DRESSES.

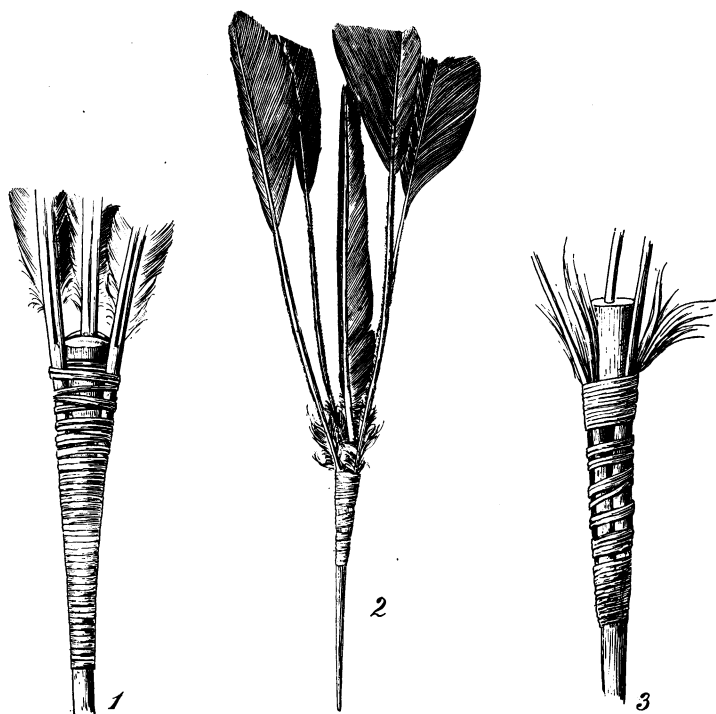




FEATHER HEAD-DRESSES.







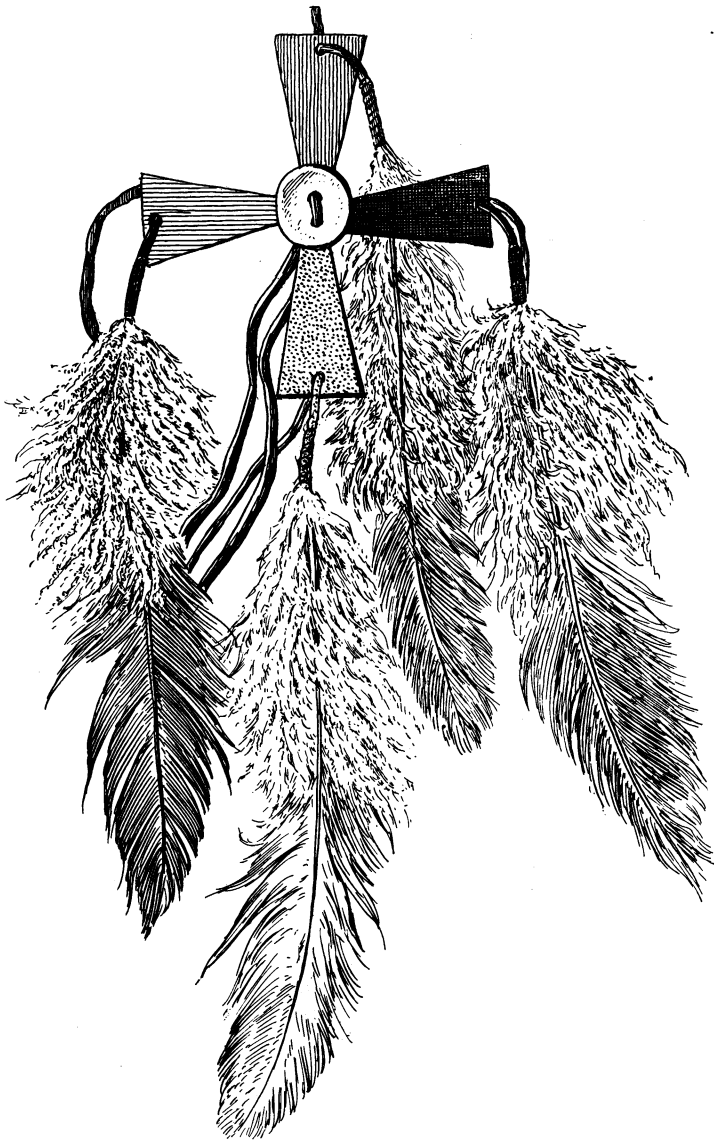
DETAIL OF ONE FORM OF HEAD-DRESS.





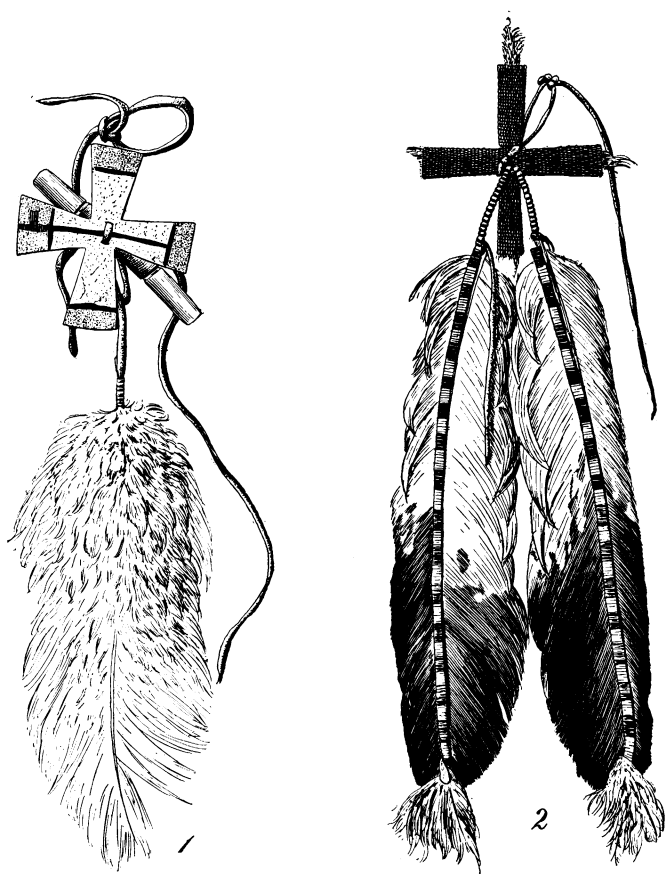
FEATHER HEAD-DRESS.





A CROSS HEAD-DRESS.





A CROSS HEAD-DRESS.







HEAD-DRESS OF CROW-SKIN.





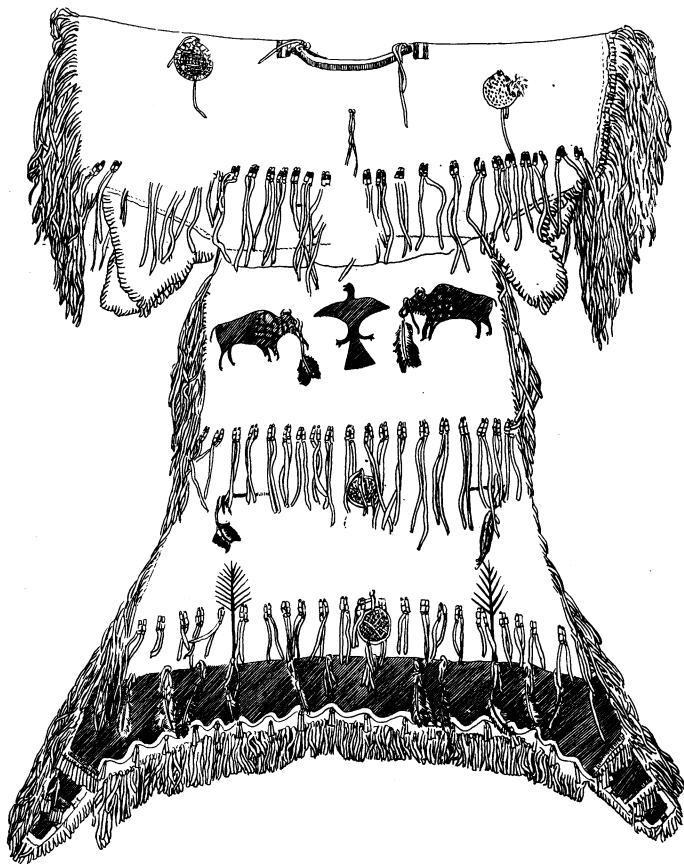
NECKLACE OF FEATHERS.





CROW BELT.

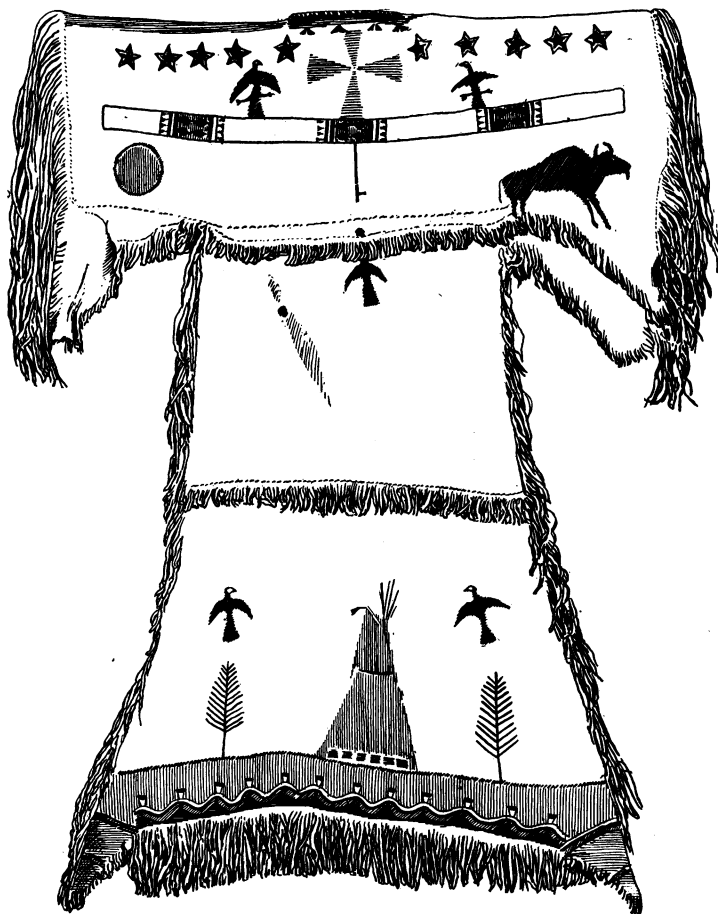




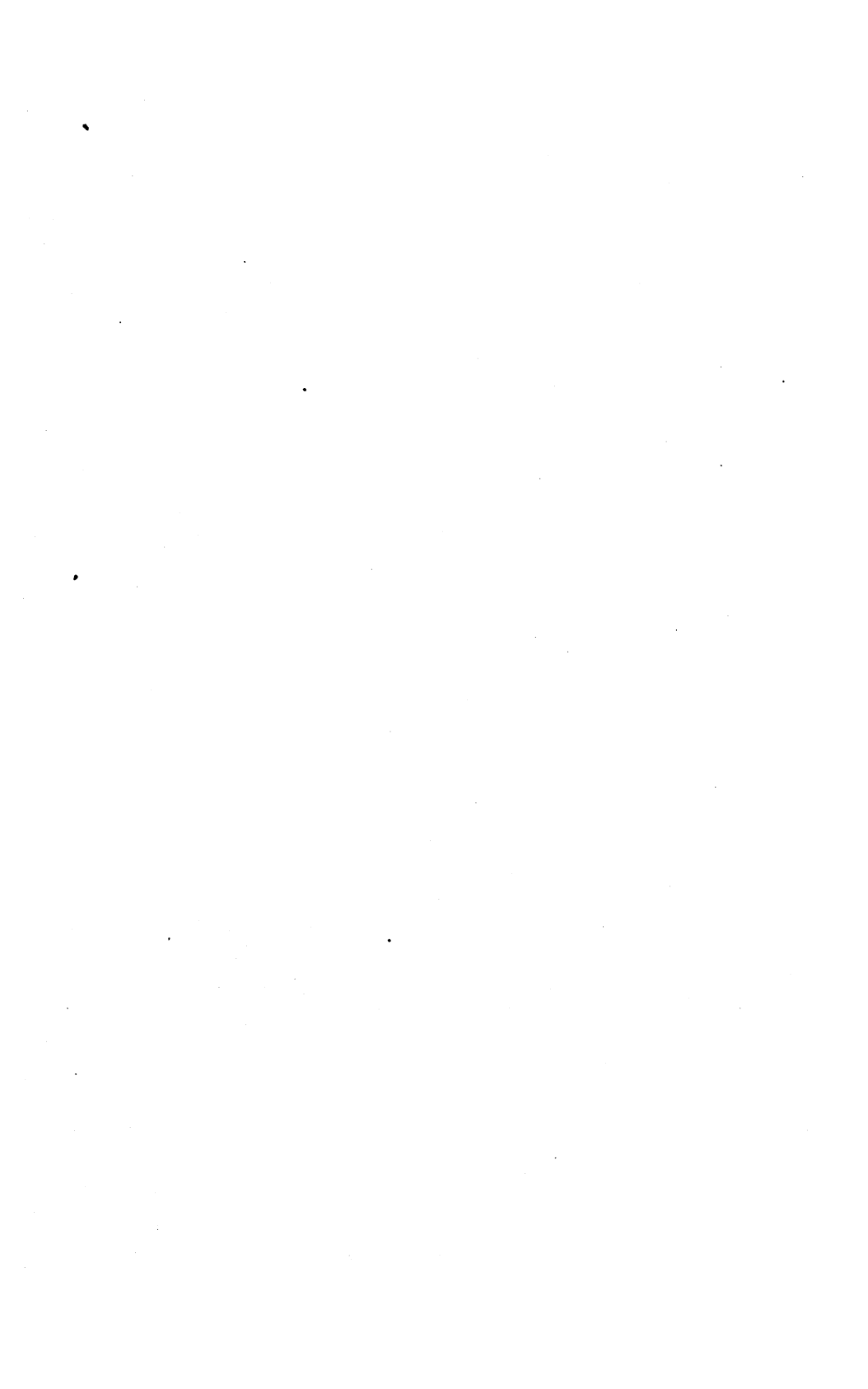
GIRL'S CEREMONIAL DRESS.

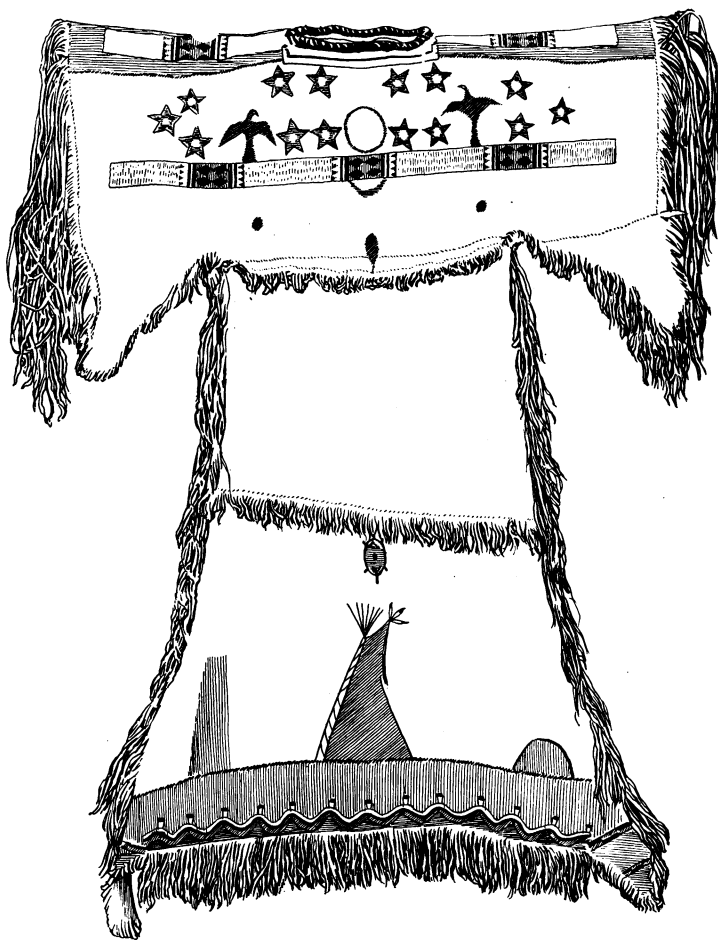






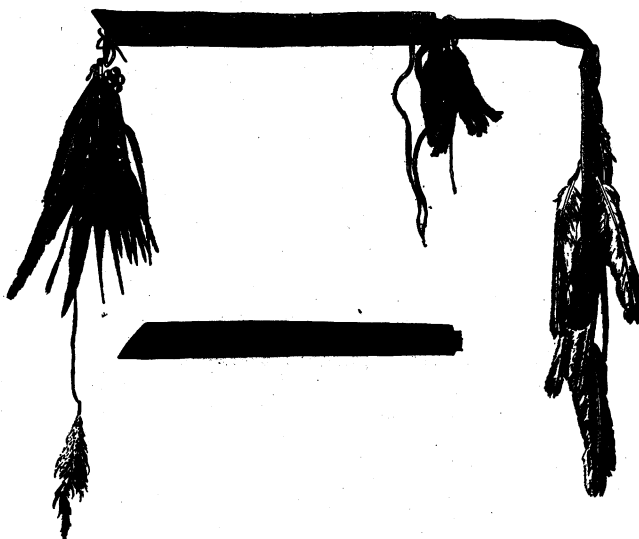
GIRL'S CEREMONIAL DRESS.





GIRL'S CEREMONIAL DRESS.





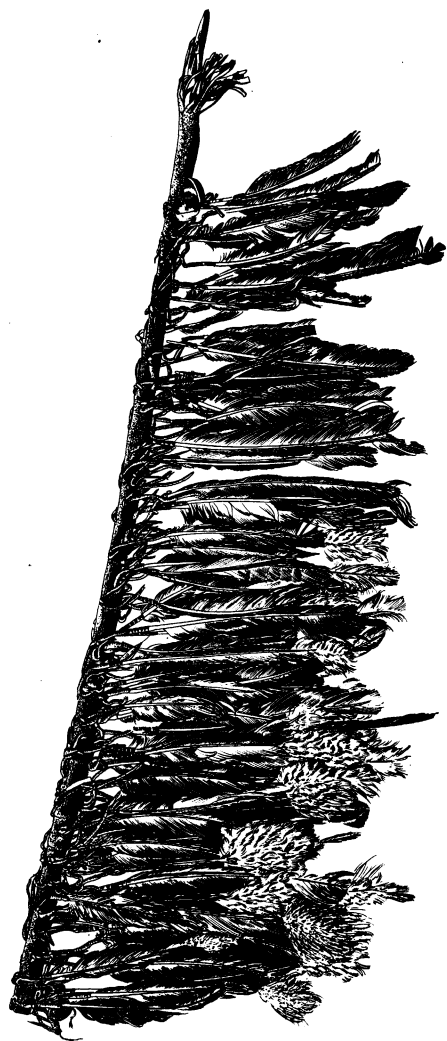
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CEREMONIAL WHIPS.

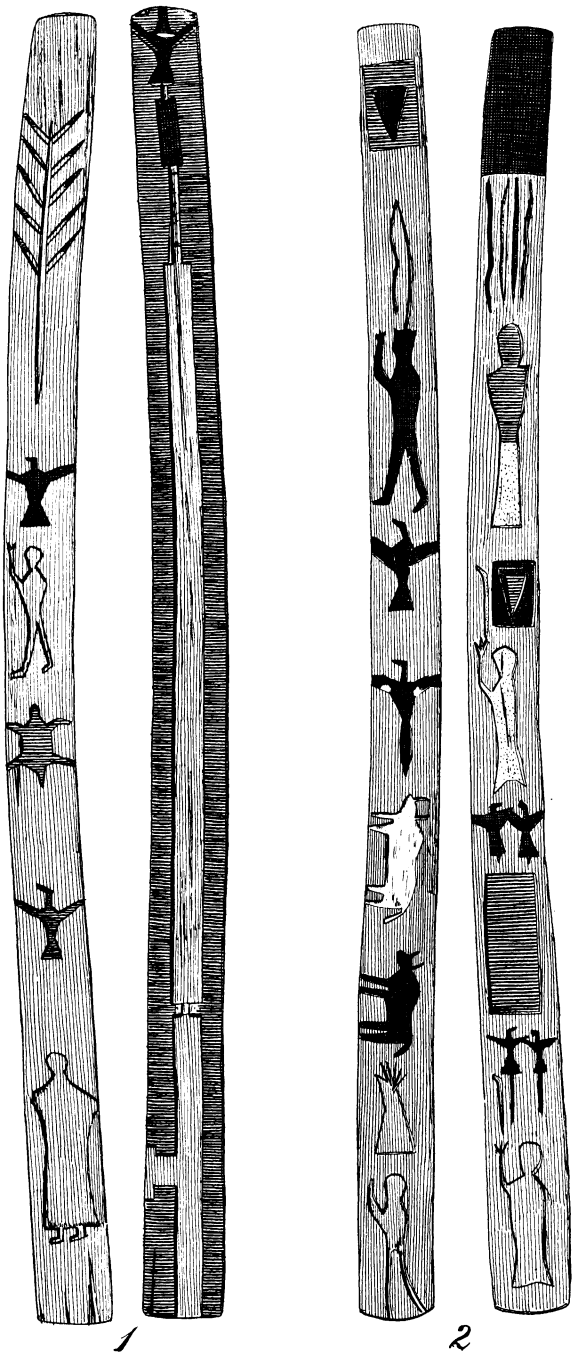




FEATHERED STAFF.

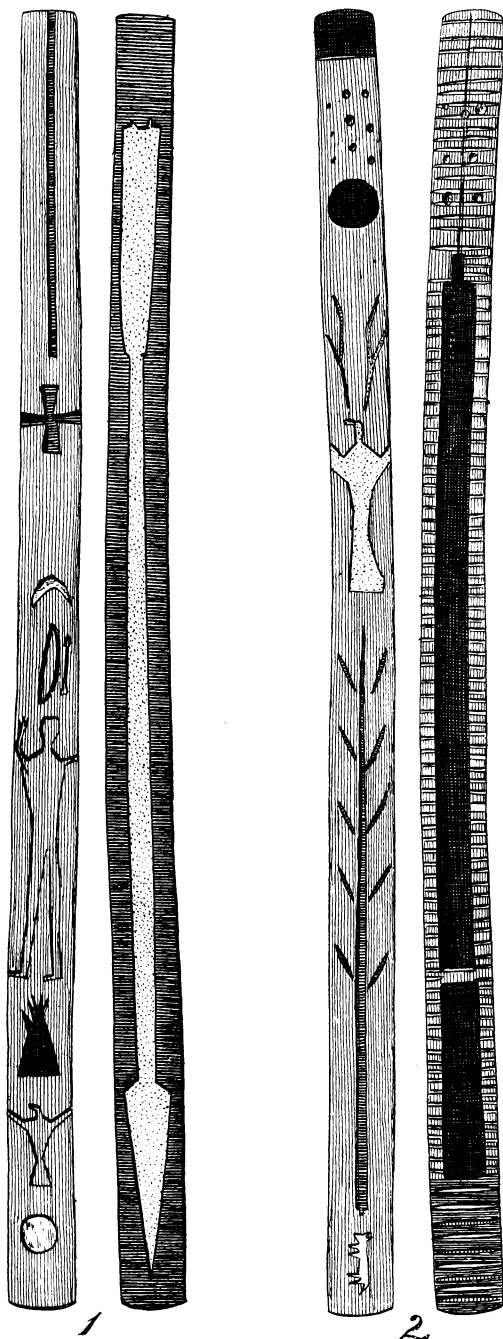






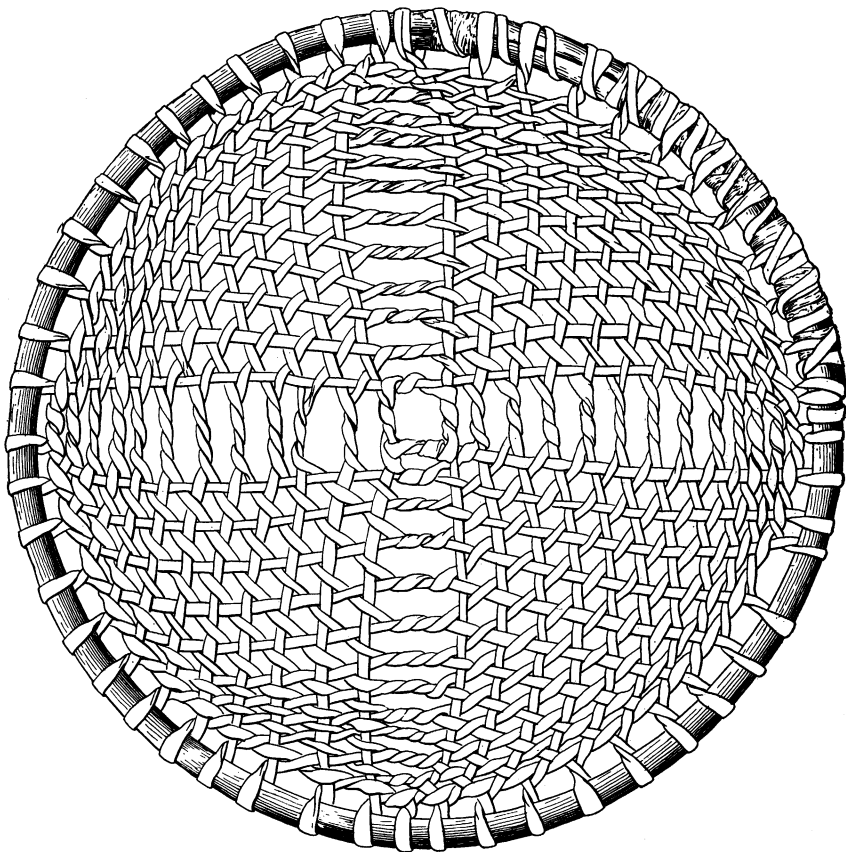
CARVED STICKS BELONGING TO THE SACRED-PIPE MODEL.





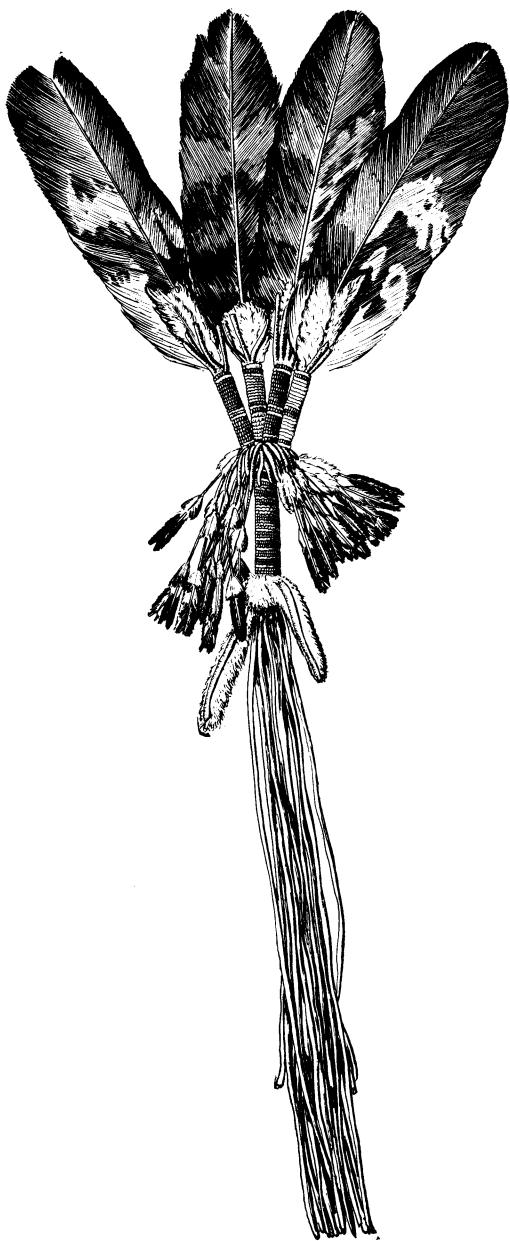
CARVED STICKS BELONGING TO THE SACRED-PIPE MODEL.





NETTED GAME-HOOP.





A PEYOTE FAN.







A PEYOTE AMULET.





BRACELET USED AS AN AMULET.





HEAD-DRESS.





AMULETS AND MEDICINE.







WAR CHARM.



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